FOURTH EDITION

INTERNAL AUDITING

ASSURANCE & ADVISORY SERVICES

URTON L. ANDERSON, PhD, CIA, CRMA, CGAP, CCEP

MICHAEL J. HEAD, CIA, CPA, CMA, CBA, CISA

SRIDHAR RAMAMOORTI, PhD, CIA, CPA, CFE, MAFF

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The Institute of Internal Auditors' (IIA's) International Professional Practices Framework (IPPF) comprises the full range of existing and developing practice guidance for the profession. The IPPF provides guidance to internal auditors globally and paves the way to world-class internal auditing.

The IIA and the Foundation work in partnership with researchers from around the globe who conduct valuable studies on critical issues affecting today's business world. Much of the content presented in their final reports is a result of Foundation-funded research and prepared as a service to the Foundation and the internal audit profession. Expressed opinions, interpretations, or points of view represent a consensus of the researchers and do not necessarily reflect or represent the official position or policies of The IIA or the Foundation.

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Case Study 3, "Performing a Blended Consulting Engagement, abridged version"

Students and instructors can access this material at the following address:
www.theiia.org/IAtextbook

PREFACE

Welcome to the fourth edition of this textbook. There are many important changes, some of which are based on updates that have been made to professional guidance such as The IIA's International Professional Practices Framework (IPPF) and the exposure draft of the Committee of Sponsoring Organizations of the Treadway Commission's (COSO's) *Enterprise Risk Management – Aligning Risk with Strategy and Performance.*

The authors' continuing goal, carried forward from previous editions of the textbook, is to provide students with the fundamental knowledge and a sense of the skills they will need to succeed as entry-level internal audit professionals. Accordingly, our primary target audience is undergraduate and graduate university students enrolled in introductory internal audit courses. We believe, however, that internal audit practitioners also will find the fourth edition of the textbook useful as a training and reference tool.

SIGNIFICANT CHANGES IN THE FOURTH EDITION

As indicated above, the fourth edition of the textbook includes several important changes:

- Chapter 1, "Introduction to Internal Auditing," introduces the concept of the internal audit function as a trusted advisor to the organization, which is carried throughout the other chapters as applicable. This chapter also introduces the changes to the IPPF that are discussed in detail in chapter 2.
- Chapter 2, "The International Professional Practices Framework: Authoritative Guidance for the Internal Audit Profession," provides details regarding the new mission for internal auditing and other updates to the IPPF, the new internal audit global competency model, and changes in committee structure as well as the updated process for setting guidance for the profession.
- Chapter 4, "Risk Management," has been updated to reflect the exposure draft of the new COSO framework, *Enterprise Risk Management – Aligning Risk with Strategy and Performance*, which is carried throughout the textbook.
- Chapter 6, "Internal Control," has been updated to reflect the *Guidance on Risk Management, Internal Control and Related Financial and Business Reporting* that supersedes *Internal Control: Revised Guide for Directors on the Combined Code* (known as the Turnbull Report) in Wales and the UK. It also incorporates the relevant concepts from the exposure draft of COSO's *Enterprise Risk Management – Aligning Risk with Strategy and Performance.*
- Chapter 7, "Information Technology Risks and Controls," includes increased coverage of emerging developments in technology, including a heightened focus on cybersecurity and the impact of associated risks to organizations.
- Chapter 8, "Risk of Fraud and Illegal Acts," pulls in the latest information and data from the 2016 COSO Fraud Risk Management Guide as well as the 2016 Report to the Nations global survey from the Association of Certified Fraud

Examiners, and reflects the newest guidance in the exposure draft of COSO's *Enterprise Risk Management – Aligning Risk with Strategy and Performance.*

- Chapter 9, "Managing the Internal Audit Function," now includes a section on creating a centralized professional practices group within the internal audit function and the many benefits and efficiencies that can be realized.
- Chapter 11, previously titled "Sampling," has been renamed "Data Analytics and Audit Sampling" to reflect the chapter's robust discussion of the beneficial use of data analytics by internal audit functions to provide assurance that is based on entire populations in a precise and efficient manner. The chapter introduces TeamMate Analytics while students and instructors retain access to the ACL and CaseWare IDEA tools that have always been available with the textbook.
- Chapter 15, "The Consulting Engagement," discusses how successful delivery of the wide variety of advisory services can position the internal audit activity as a trusted advisor within the organization and delineates the challenges that can make it difficult to achieve.
- The end-of-chapter material has been expanded to ensure coverage of each of the major concepts addressed in each chapter, including the new material in each.
- KnowledgeLeader, a resource provided by Protiviti, has been integrated throughout the textbook in the form of a relevant case at the end of each chapter that encourages students to do further research into the applicable topic and report on what they find, allowing them to flex their critical thinking muscles.
- The latest version of TeamMate+ audit management software is integrated throughout the applicable textbook chapters, and the process for accessing the software has been much improved. TeamMate-specific case studies have been updated to reflect the latest software enhancements and are embedded in the end-of-chapter material as applicable.
- Rather than including a CD historically packaged with the textbook, access to the ancillary materials will be facilitated via a companion website hosted by The IIA. This will allow students and instructors real-time access to the most current information and materials and provide a portal to partner sites for access to TeamMate software, KnowledgeLeader case material, and use of ACL and CaseWare IDEA software.

CONTENT AND ORGANIZATION OF THE TEXTBOOK

The textbook continues to include the following key components:

- Extensive coverage of governance, risk management, and internal control.
- A risk-based, process, and controls-focused internal audit approach.
- Integration of IT and fraud risks and controls.
- Alignment with the IPPF and Certified Internal Auditor (CIA) examination content specifications.
- Callouts of key terms in the margins of each chapter to reinforce key concepts .

Chapters 1 through 11, which are collectively referred to as Fundamental Internal Audit Concepts, cover topics that all internal auditors need to know and understand. Chapters 12 through 15, which are collectively referred to as Conducting Internal Audit Engagements, focus on the planning, performing, and communicating phases of internal audit assurance and consulting engagements.

The end-of-chapter materials include review questions, multiple-choice questions, discussion questions, application-oriented cases, KnowledgeLeader research cases, and, in applicable chapters, exercises intended to familiarize students with TeamMate, the most popular audit management software. Other than the TeamMate exercises, which are the creation of Wolters Kluwer, unless otherwise indicated, all end-of-chapter questions and cases are the original work of the authors or have been adapted from the CIA Model Exams published by The IIA in 1998, 2004, and 2015, or from CIA exams prior to The IIA's closure of the exams in 1997.

The Glossary contains the authors' definitions of key terms used throughout the textbook. The IIA's Code of Ethics and the *International Standards for the Professional Practice of Internal Auditing* are reproduced in appendix A and appendix B, respectively.

TEXTBOOK SUPPLEMENTS

The following supplemental materials can be accessed on the companion website of the textbook:

- **ACL and CaseWare IDEA Software.** Both ACL and CaseWare IDEA, the two predominant data analytics software programs used by internal auditors, can be accessed on the website. Instructors can decide individually the extent to which they want to give their students practical, hands-on experience with generalized audit software using ACL and/or CaseWare IDEA.
- **TeamMate Software, Demonstration Videos, and Exercises.** TeamMate, the most widely used audit management software, can be accessed on the website and integrated in the chapters to which the various software modules apply. Instructors can use the software, videos, and exercises to familiarize students with the various modules in the TeamMate suite.
- **Protiviti KnowledgeLeader.** Students and instructors have access to Protiviti's KnowledgeLeader. Case Studies at the end of each chapter direct students to the KnowledgeLeader site to research relevant guidance related to concepts in the chapters.
- **Case Studies.** The companion website contains four supplemental case studies that are intended to provide students with more in-depth, application-oriented coverage:
  - Case Study 1, "Auditing Entity-Level Controls."
  - Case Study 2, "Auditing the Compliance and Ethics Program."
  - Case Study 3, "Performing a Blended Consulting Engagement."
  - Case Study 3, "Performing a Blended Consulting Engagement, abridged version."

The following supplemental materials are available separately for instructors on the companion website:

- **Solutions Manual.** The Solutions Manual contains answers prepared by the textbook authors for the end-of-chapter questions and cases.

- **Textbook Exhibits.** Each of the textbook exhibits has been reproduced individually for instructors who want to use them separately as visual aids and/or handouts.
- **Slide Templates.** Slide templates have been prepared for each chapter. Instructors can use these templates as a starting point for preparing their personal sets of slides.
- **Illustrative Exams.** The illustrative exams prepared by the authors are intended to give instructors a head start on constructing exams best suited for their classes.
- **Internal Audit Project.** Two of the textbook authors, Urton Anderson and Mark Salamasick, describe how they have successfully integrated real-world internal audit projects into their Internal Auditing Education Partnership (IAEP) Program curricula.

ACKNOWLEDGMENTS

First and foremost, the authors thank Kurt Reding, who saw the need for a comprehensive internal auditing textbook and recruited the rest of us to execute on his vision. Under his leadership, the first three editions of this textbook benefitted from his passion for improving the profession through education. Kurt's very high standards and appreciation for the diversity of thought around the execution of internal auditing resulted in a textbook that we've all been proud to have contributed to and that we believe has positively impacted the educational landscape around internal auditing. Due to competing priorities, Kurt was not available to lead us through this fourth edition and his talents and enthusiasm were sorely missed. While he was not with us physically, the spirit of his vision was ever present and we worked hard to build on the previous editions to create this new edition that reflects the latest guidance on emerging topics while retaining Kurt's drive for excellence.

The authors would like to thank the organizations and individuals, including college instructors and students, who used the first, second, and/or third editions of the textbook.

We especially want to thank Deborah Kretchmar, CIA, Senior Vice President, Internal Audit, LPL Financial. In her role as a member of the Internal Audit Foundation's Board of Trustees and Trustee Champion of the textbook, Deborah thoroughly reviewed each updated chapter of the fourth edition and provided insightful comments that helped us produce a high-quality textbook that we believe will serve students well.

Additionally, we appreciate the efforts of Margaret Christ, PhD, CIA, Associate Professor of Accounting, University of Georgia, and Steve Goodson, CIA, CISA, CGAP, CCSA, CLEA, CRMA, Internal Audit Lecturer, McCombs School of Business, The University of Texas at Austin, for reviewing and providing valuable feedback on select chapters of this fourth edition.

Steve Mar, CISA, Lecturer in Information Technology at Seattle University and retired Information Technology Audit Director, generously contributed his time and technology expertise in reviewing chapter 7, "Information Technology Risks and Controls," resulting in a chapter that is comprehensive and reflects the very latest information available.

In addition, the authors would like to thank the following organizations and individuals for their contributions to the fourth edition of the textbook:

- The Internal Audit Foundation for sponsoring the writing of the textbook.
- The IIA–Chicago and IIA–Dallas Chapters for their sponsorship of this fourth edition.
- The IIA for permission to incorporate the International Professional Practices Framework (IPPF) and other materials, including questions from the Certified Internal Auditor Model Exams and from past CIA examinations.
- ACL Services Ltd. for contributing the education edition of ACL audit software that is provided on the companion textbook website.

- Audimation Services Inc. for contributing the CaseWare IDEA audit software that is provided on the companion textbook website.
- Michael Gowell, General Manager and Senior Vice President, TeamMate, and Michael Charney, Senior Director of Professional Services, TeamMate, of Wolters Kluwer for partnering with us to provide students who use this textbook with hands-on experience with TeamMate software.
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- Stephen Fuller, Senior Consultant, TeamMate, of Wolters Kluwer for creating the TeamMate case studies, exercises, and videos, and the TeamMate analytics exercise included in and accompanying the textbook. Stephen worked with the textbook team in two pilot projects with the universities to ensure easy adoption of TeamMate+ for Universities.
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- Protiviti, Lark Scheierman, Director, Marketing, and Katrina Opgenorth, KnowledgeLeader University Program Manager, for partnering with us to provide instructors and students who use this textbook with hands-on experience with the KnowledgeLeader University Center educational tool repository.
- The IIA – United Kingdom and Ireland, the IT Governance Institute, the Committee of Sponsoring Organizations of the Treadway Commission (COSO), Grant Thornton, and the American Institute of Certified Public Accountants (AICPA) for granting permission for use of materials throughout the textbook.
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- Lee Ann Campbell, Senior Publications Editor, Internal Audit Foundation, for editing the entire textbook, including the supplemental material provided on the companion website to the textbook.
- Debi Roth, Managing Director – Global Standards & Guidance, The IIA, for providing timely information on updates to IPPF guidance throughout the writing of this textbook.
- Faceout Studio for designing the textbook's interior and cover.

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Urton is EY Professor and Director of Von Allmen School of Accountancy at the University of Kentucky. Prior to joining the Von Allmen School, he was a member of the accounting faculty at the McCombs School of Business at the University of Texas at Austin. His research has addressed various issues in internal and external auditing and organizational governance—particularly compliance, enterprise risk management, and internal control. In addition to numerous articles, he has written four books, several of which have been translated into French, Spanish, Chinese, and Japanese.

Professor Anderson has been involved in the AAA Audit Section throughout his career, and also served as President of the Section (2009–2010). Urton also is active in The IIA. He has been Chair of The IIA's Board of Regents (2003–2007) and Chair of the Internal Auditing Standards Board (2002–2003 and 2007–2010). In 1997, he received The IIA's Leon R. Radde Educator of the Year Award. In 2006, The IIA recognized his outstanding contributions to the field of internal auditing by giving him the Bradford Cadmus Memorial Award. He served as Chair of the Internal Audit Foundation's Committee of Research and Education Advisors from 2011–2015 and is currently a member of the Foundation's Board of Trustees.

In March 2016, Urton was one of four internal audit leaders from business, government, and academia to make up the 2016 class of the American Hall of Distinguished Audit Practitioners. Established in 2011, the honor annually recognizes individuals who contributed significantly to the profession throughout their careers. Urton also serves on the Board of Directors for the Society of Corporate Compliance and Ethics/Health Care Compliance Association and served as its President from 2016–2017. From 2011-2012, Urton was an Academic Fellow in the Office of the Chief Accountant of the U.S. Securities and Exchange Commission.

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Mike is currently a lecturer in the Accounting Department at Texas A&M University in the Mays Business School. He also serves as a risk management, internal control, and operations consultant. Prior to joining Texas A&M University, Mike held the resident instructor position in the Accounting Department at Creighton University's Heider College of Business. He joined Creighton University in January

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Mike retired from TD Ameritrade in May 2013, where he served as the Chief Audit Executive. As Managing Director of Corporate Audit at TD Ameritrade, Mike was responsible for the coordination and delivery of risk-based and process-driven review, assurance, and advisory services specific to internal controls and risk management throughout TD Ameritrade. During his more than 36-year career, he served in various capacities, including Director of Internal Audit, Audit Manager, and Controller, for several companies and financial institutions. His experience includes developing and implementing comprehensive, risk-based internal audit functions, and serving as a strategic, financial, operational, and compliance control consultant to the financial services industry.

In addition to earning numerous professional designations—Certified Internal Auditor, Certified Public Accountant, Certified Management Accountant, Chartered Bank Auditor, and Certified Information Systems Auditor—Mike is a FINRA Registered General Securities Representative (Series 7), General Securities Principal (Series 24), and a Financial and Operations Principal (Series 27). He is an active member of The IIA. He also serves as an appointed member of the Public Company Accounting Oversight Board (PCAOB) Investor Advisory Group (IAG). In the past, Mike served as Vice Chair – Finance of the Executive Committee of The IIA's International Board and served on and chaired the Audit Committee of The IIA's International Board. Mike has also served as Chairman of the North American Advocacy Committee, a Trustee on the Internal Audit Foundation Board, a North American Board member, and a Midwestern Region District Advisor. Mike co-authored *Internal Auditing: Assurance & Consulting Services*, a textbook published by the Foundation in July 2007 with the second and third editions released in 2009 and 2013. He also co-wrote "Blended Engagements," published in *Internal Auditor* magazine, which earned the authors the 2010 Outstanding Contributor Award. In 2014, Mike was awarded the CAHILL Award for Excellence by Creighton University's Heider College of Business. In the Fall of 2015, Mike helped form the Creighton Student Center for the Public Trust and served as the faculty moderator until June 2016. Mike, who earned a BSBA degree at the University of Missouri – Columbia, is also a member of the American Institute of Certified Public Accountants, the Nebraska Society of CPAs, Missouri Society of CPAs, Information Systems Audit & Control Association, and Institute of Management Accountants.

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Sri has been an Associate Professor in the School of Accountancy and a Director of the Corporate Governance Center in the Michael J. Coles College of Business at Kennesaw State University for almost seven years. He will be joining the Department of Accounting faculty at the University of Dayton, Ohio, in Fall 2017. His broad research and teaching interests include corporate governance, risk management, ethics, financial and managerial accounting, external and internal auditing, international accounting, forensic accounting, and business valuation.

Sri earned a Bachelor of Commerce (BCom) degree from Bombay University, India, became professionally qualified as a Chartered Accountant in India, and worked for two years with EY in the Middle East before earning the MAcc and PhD degrees from The Ohio State University. After completing his PhD, Sri served on the accountancy faculty of the University of Illinois at Urbana-Champaign. A prolific contributor to governance, risk, and compliance (GRC) literature, he has published more than 35 research and professional articles. His co-authored book, *A.B.C.'s of Behavioral Forensics: Applying Psychology to Financial Fraud Prevention and Detection* (Ramamoorti et al., 2013, Wiley), won the 2015 Coles College Publication prize and has been presented to the FBI Academy. Among his IIA-funded, co-authored research monographs are *Research Opportunities in Internal Auditing*, *Using Neural Networks for Risk Assessment in Internal Auditing*, *Behavioral Dimensions of Internal Auditing*, *Promoting and Supporting Effective Organizational Governance: Internal Audit's Role*, and *CAE Strategic Relationships: Building Rapport with the Executive Suite,* which won the Internal Audit Foundation's Larry Sawyer Project of the Year Award in 2014. He has published several *Internal Auditor* articles.

Prior to returning to academia, Sri was a principal with Arthur Andersen & Co. at the Chicago World Headquarters, National EY Sarbanes-Oxley Advisor, and a corporate governance partner with Grant Thornton LLP in the firm's National Office. Subsequently, he was a principal for Infogix Advisory Services, leading the GRC professional services division of Infogix, Inc., based in Naperville, IL. He was a core member of the Grant Thornton authoring/development team for the 2009 COSO Guidance on *Monitoring Internal Control Systems,* and later for ISACA's 2010 guidance, *Monitoring Internal Control Systems and IT.*

In December 2016, Sri completed a three-year term on the prestigious Standing Advisory Group of the Public Company Accounting Oversight Board (PCAOB). He currently serves as a Trustee of the Financial Executives Research Foundation (FERF) and as a member of the Litigation Forensics Board of the National Association of Certified Valuators and Analysts (NACVA). Sri has been an active volunteer as the Chairman of the Academy for Government Accountability, a member of the Internal Audit Foundation's Board of Trustees, co-chair of the Foundation's Global Common Body of Knowledge (CBOK) 2010 study, and a member of The IIA's Global Ethics Committee. Over the last two decades, he has made professional presentations in 15 countries.

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Cris is the Solutions & Strategy Senior Audit Manager for TD Ameritrade. She is responsible for managing the processes, systems, and databases for the administration of the internal audit department. Additionally, she develops and delivers internal training and reviews and edits audit materials, including audit reports, meeting presentations, audit committee and risk meeting materials, and the Audit Manual. Cris also teaches English Composition, Critical Reasoning and Rhetoric, Professional Communication, Engaging the Short Story, and World Literature at Creighton University and Nebraska Methodist College.

In addition to co-authoring all four editions of *Internal Auditing: Assurance & Advisory Services*, Cris has served as the General Editor and project manager. She was also the General Editor of the sixth edition of *Sawyer's Internal Auditing*. Cris received the Outstanding Contributor Award for the article "Blended Engagements" that she co-authored with fellow authors Kurt Reding and Michael Head.

She is a member of The IIA as well as a FINRA Registered General Securities Representative (Series 7). She received both her BA and MA degrees in English/Creative Writing from Creighton University in Omaha, NE, where she held a Presidential Fellowship as a graduate student. Cris writes and presents on numerous topics.

MARK SALAMASICK, CIA, CISA, CRMA, CSP

Executive Director of Audit

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Mark is currently Executive Director of Audit at the University of Texas System. In this role, he assists in the oversight of the Academic Institution audit groups of the UT System. He also works in advancing progressive strategies and initiatives outlined for the internal audit enterprise across the UT System. Previous to this, he was the Director of the Center for Internal Auditing Excellence at the University of Texas at Dallas (UTD). Mark created the internal audit program and many of the courses in the program over the 12 years he led that program. He started the program in the Fall of 2003 with an extensive curriculum in internal auditing, technology, audit software, information security, corporate governance, and forensic accounting. He taught Internal Audit, Information Technology Audit and Risk Management, and Advanced Auditing.

He authored *Auditing Outsourced Functions: Risk Management in an Outsourced World* published by the Internal Audit Foundation in October 2012. He was the principal researcher on a project with the Foundation and Intel on PC Management Best Practices along with another publication, *Auditing Vendor Relationships*, both published in 2003. He was previously with Bank of America for more than 20 years. He worked within the Internal Audit Group for 18 years, serving as Senior Vice President and Director of Information Technology Audit with responsibility for various technology, financial, and operational audits. He was responsible for partnering on and auditing technology, information security, and business continuity. Before joining Bank of America, Mark was a senior consultant with Accenture (Andersen Consulting).

Mark currently serves on the Academic Relations Committee of IIA International. He previously served multiple terms on the Foundation's Board of Trustees and Committee of Research and Education Advisors. He received the 1994 IIA International Audit and Technology Award. In 2005, he was named Leon R. Radde Educator of the Year by The IIA. The University of Texas at Dallas created the endowed IT Audit Fellowship in his name in 2016.

He is a frequent conference speaker on emerging technology issues, internal audit practices, and the future direction of internal audit. He was on The IIA's Dallas Chapter's Board of Governors for 20 years. Mark holds a BS in Business Administration and an MBA from Central Michigan University, where he taught accounting and information systems as a graduate student and as a full-time faculty member.

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Paul is Vice President/Chief Audit Executive for Georgia-Pacific, LLC, a privately owned forest and consumer products company based in Atlanta, GA. He previously served as the Chief Audit Executive for three public companies: Mirant Corporation, an energy company based in Atlanta, GA; Aquila, Inc., an energy company based in Kansas City, MO; and Harcourt General's publishing operations based in Orlando, FL. His responsibilities included leading the global internal audit efforts at these companies, as well as consulting on each company's enterprise risk management (ERM), compliance, and internal controls programs. He has also served as International Audit Manager for PepsiCo, Senior Manager in Arthur Andersen's Business Risk Consulting practice, and Experienced Manager in Arthur Andersen's Financial Statement Assurance practice.

Paul is a frequent speaker on governance, risk management, and internal audit topics. In addition to co-authoring the previous editions of this textbook, he has published a book titled *Auditor's Risk Management Guide: Integrating Auditing and ERM*, currently in its eighth edition, and co-authored *Enterprise Risk Management: Achieving and Sustaining Success*, a book published by the Internal Audit Foundation. Paul is a past Chairman of the Board for The IIA and has served in other IIA officer and board roles. In 2012, Paul was recognized in *Treasury & Risk* magazine's list of 100 Most Influential People in Finance. He has also served on the COSO ERM Advisory Council for its recent update to the COSO ERM framework, the Standing Advisory Group of the Public Company Accounting Oversight Board (PCAOB), and as The IIA's representative on the Pathways Commission, which developed recommendations to enhance the future of accounting education in the United States.

CHAPTER 1

Introduction to Internal Auditing

LEARNING OBJECTIVES

- Understand the value proposition that stakeholders expect from the internal audit function.
- Obtain a basic understanding of internal auditing and the internal audit process.
- Understand the relationship between auditing and accounting.
- Distinguish between financial reporting assurance services provided by internal auditors and those provided by independent outside auditors.
- Become familiar with the internal audit profession and The IIA.
- Understand the competencies needed to excel as an internal auditor.
- Be aware of the various internal audit career opportunities it is possible to pursue.

Think about the term "internal auditing" for a moment. What pops into your mind? What does the term mean to you? For many people, the term has no particular significance, and for some, it may invoke negative thoughts. For example, many people have long held the view that auditing in general is merely a boring branch of accounting. To others, internal auditing conveys an even more negative connotation—after all, the only thing auditors do is check other peoples' work and report the mistakes they make, sort of like a police function. As the authors of this textbook, we hope to dispel these misperceptions about internal auditing.

The fact is that internal auditing is widely viewed as a prestigious, high-profile profession, the stature of which has never been higher than it is now. The demand for talented individuals at all levels of internal auditing far exceeds the supply. Chief audit executives (CAEs) of public companies commonly report directly to the audit committee of the board of directors and are viewed as peers among senior management executives. Worldwide membership in The IIA as of 2016 exceeded 185,000.

However, to survive and thrive, internal audit, like any other function within an organization, must justify its existence to its key stakeholders. In other words, the stakeholders must value the services the internal audit function has to offer. In recognition of this fact, The IIA formed a task force in 2008 "to explore and develop a clear and concise description of internal audit's value proposition..." In 2010, the IIA Global Board of Directors, The IIA's governing body, endorsed the outcomes of the task force's work. A visual depiction of internal audit's value proposition, as set forth by The IIA, is presented in exhibit 1-1. The three components of the value proposition are defined below:

- **Assurance = Governance, Risk, and Control**. Internal audit provides assurance on the organization's governance, risk management, and control processes to help the organization achieve its strategic, operational, financial, and compliance objectives.
- **Insight = Catalyst, Analyses, and Assessments**. Internal audit is a catalyst for improving an organization's effectiveness and efficiency by providing insight and recommendations based on analyses and assessments of data and business process.
- **Objectivity = Integrity, Accountability, and Independence**. With commitment to integrity and accountability, internal audit provides value to governing bodies and senior management as an objective source of independent advice.[1]

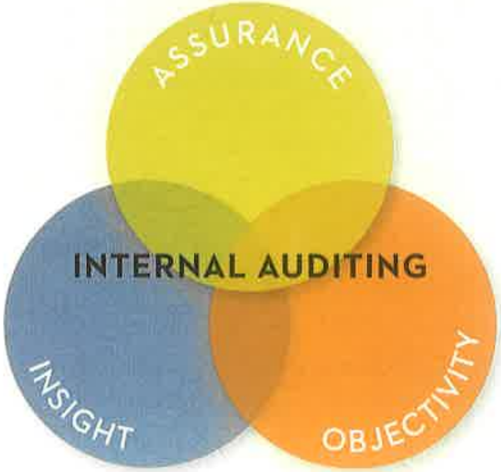
Internal Auditing

An independent, objective assurance and consulting activity designed to add value and improve an organization's operations.

Add Value

Value is provided by improving opportunities to achieve organizational objectives, identifying operational improvement, and/or reducing risk exposure through both assurance and consulting services.

EXHIBIT 1-1
THE VALUE PROPOSITION



Internal Auditing = Assurance, Insight, and Objectivity

Governing bodies and senior management rely on internal auditing for objective assurance and insight on the effectiveness and efficiency of governance, risk management, and internal control processes.

Source: Miller, Patty, and Tara Smith, *Insight: Delivering Value to Stakeholders* (Lake Mary, FL: The Institute of Internal Auditors, 2011), 14.

This value proposition clearly articulates why internal auditing is important. In the next section of this introductory chapter, we walk through the definition of internal auditing and introduce readers to the internal audit process. We next clarify the relationship between auditing and accounting and distinguish the financial reporting assurance services provided by internal auditors from those provided by independent outside auditors. We then provide an overview of the internal audit profession and The IIA. We conclude the chapter by discussing the competencies needed to excel as an internal auditor and the various internal audit opportunities that interested, competent individuals can pursue.

DEFINITION OF INTERNAL AUDITING

The IIA's Board of Directors adopted the current definition of internal auditing in 1999:

> *Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.*[2]

The Definition of Internal Auditing states the fundamental purposes, nature, and scope of internal auditing. The key components of this definition are listed here and discussed in turn below:

- Helping the organization accomplish its objectives.
- Evaluating and improving the effectiveness of risk management, control, and governance processes.
- Assurance and consulting activity designed to add value and improve operations.
- Independence and objectivity.
- A systematic and disciplined approach (specifically, the engagement process).

Helping the Organization Accomplish Its Objectives

An organization's objectives define what the organization wants to achieve, and its ongoing success depends on the accomplishment of its objectives. At the highest level, these objectives are reflected in the organization's mission and vision statements. The mission statement expresses, in broad terms, what the organization wants to achieve today. The vision statement conveys what the organization aspires to achieve in the future.

There is no single right way to categorize business objectives. This textbook uses the following categorization:

- **Strategic objectives** are those goals that management sets specifically related to stakeholder interests. Throughout this textbook, the term *objectives* will be used when discussing what an organization wants to achieve and the term *strategy* when discussing the way management intends to achieve those objectives.
- **Operations objectives** pertain to the effectiveness and efficiency of the entity's operations, including operational and financial performance goals, and safeguarding resources against loss.[3]
- **Reporting objectives** pertain to internal and external financial and nonfinancial reporting and may encompass reliability, timeliness, transparency, or other terms as set forth by regulators, standard setters, or the entity's policies.[4]
- **Compliance objectives** pertain to adherence to laws and regulations to which the entity is subject.[5]

EXHIBIT 1-2 ILLUSTRATIVE BUSINESS AND AUDIT ENGAGEMENT OBJECTIVES

		Business Objectives	Audit Engagement Objectives
BUSINESS OBJECTIVES	Strategic	Grow the organization's market share by acquiring complementary businesses.	Ensure that the information management uses to decide whether to acquire Company X is accurate, complete, and valid.
	Operations	Ship all orders no later than 48 hours after receiving the orders.	Determine whether orders are, in fact, being shipped within 48 hours of receipt.
	Reporting	Record only valid sales transactions.	Verify the design adequacy and operating effectiveness of control activities put in place to ensure that recorded sales actually occurred (in other words, recorded sales reflect the transfer of ownership on goods shipped to customers).
	Compliance	Comply with Occupational Safety and Health Administration (OSHA) regulations.	Determine that policies and procedures established to ensure compliance with OSHA regulations are well understood, documented, and communicated.

Understandable and measurable business objectives represent achievement targets and, accordingly, establish parameters for evaluating actual achievements over time. From an internal auditor's perspective, business objectives provide a foundation for defining engagement objectives (in other words, what the internal auditor wants to achieve). The direct link between business objectives and internal audit engagement objectives sets the stage for internal auditors to help the organization achieve its objectives. This is an important concept that will be emphasized throughout the text. Exhibit 1-2 illustrates a set of business objectives and corresponding internal audit engagement objectives.

Objectives

What an organization wants to achieve.

Evaluating and Improving the Effectiveness of Risk Management, Control, and Governance Processes

An organization cannot achieve its objectives and sustain success without effective risk management, control, and governance processes. These processes are complex and interrelated; an in-depth discussion of them at this point would be premature. They are covered extensively in later chapters.

Simple definitions are provided here to facilitate thinking about the various roles internal auditors might play in evaluating and improving these processes. Governance provides a good starting point because it is generally viewed as the broadest of the three. *Governance* is the *process conducted by the board of directors to authorize, direct, and oversee management toward the achievement of the organization's objectives.*

Risk management, which is closely interlinked with governance, is the *process conducted by management to understand and deal with uncertainties (risks and opportunities) that could affect the organization's ability to achieve its objectives.* Hereafter, *risk* is used when referring to the possibility that an event will occur and negatively affect the achievement of objectives (for example, employee fraud) and *opportunity* is used when referring to the possibility that an event will occur and positively affect the achievement of objectives (for example, introducing a new product).

Control, which is imbedded in risk management, is the *process conducted by management to mitigate risks to acceptable levels.*

All three processes focus on the achievement of the organization's objectives. Whereas the board of directors is responsible for conducting the governance process, management is responsible for conducting the risk management and control processes. The term *conducting* here means guiding or leading the process as opposed to unilaterally performing or completing the steps in the process. The board and management need each other to effectively implement governance, risk management, and control. They also need the internal audit function, which plays a prominent role in evaluating and improving these processes. However, the internal audit function's responsibility stops well short of actually guiding or leading governance, risk management, and control. Chapter 3, "Governance," chapter 4, "Risk Management," and chapter 6, "Internal Control," discuss in detail the internal audit function's responsibilities in these areas.

Assurance and Consulting Activity Designed to Add Value and Improve Operations

Assurance and consulting engagements differ in three respects: the primary purpose of the engagement, who determines the nature and scope of the engagement, and the parties involved. The terms used to refer to these parties vary widely. Hereafter, *auditee* is used to denote the people subject to assessment in an assurance engagement and *customer* is used to denote the people seeking services in a consulting engagement.

The primary purpose of internal assurance services is to assess evidence relevant to subject matter of interest to someone and provide conclusions regarding the subject matter. The internal audit function determines the nature and scope of assurance engagements, which generally involve three parties: the *auditee* directly involved with the subject matter of interest, the *internal auditor* making the assessment and providing the conclusion, and the *user* relying on the internal auditor's assessment of evidence and conclusion.

The primary purpose of internal consulting services is to provide advice and other assistance, generally at the specific request of engagement customers. The customer and the internal audit function mutually agree on the nature and scope of consulting engagements, which generally involve only two parties: the *customer* seeking and receiving the advice, and the *internal auditor* offering and providing the advice.

Independence and Objectivity

The IIA's Code of Ethics and *International Standards for the Professional Practice of Internal Auditing*, both of which will be discussed in greater detail later in this chapter and in chapter 2, "The International Professional Practices Framework: Authoritative Guidance for the Internal Audit Profession," emphasize the criticality of independence and objectivity to the practice of internal auditing. Independence refers to the organizational status of the internal audit function. Objectivity refers to the mental attitude of individual internal auditors. Core principle number 3 of the Core Principles for the Professional Practice of Internal Auditing underscores this, stating that the internal audit function "is objective and free from undue influence (independent)."[6]

Independence

The freedom from conditions that threaten objectivity or the appearance of objectivity. Such threats to objectivity must be managed at the individual auditor, engagement, functional, and organizational levels.

For the internal audit function to be independent, the CAE must report to a level within the organization that has sufficient authority to ensure broad engagement coverage, due consideration of engagement outcomes, and appropriate responses to those outcomes. While the CAE often reports administratively to the organization's CEO, The IIA recommends that the CAE report functionally to the organization's board of directors (Implementation Guide 1110).

Objectivity

An unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they have an honest belief in their work product and that no significant quality compromises are made. Objectivity requires internal auditors not to subordinate their judgment on audit matters to that of others.

Objectivity means that an auditor is able to make impartial, unbiased judgments. To ensure objectivity, internal auditors should not involve themselves in day-to-day operations, make management decisions, or otherwise put themselves in situations that result in actual or potential conflicts of interest. For example, if an individual moves into the internal audit function from another area of the organization, the internal auditor may not provide assurance services to that area for one year (Standard 1130.A1-1). The reasoning behind this policy is that the internal auditor would be put in a position of auditing his or her own work. Chapter 2 goes into greater depth on the subjects of independence and objectivity.

A Systematic and Disciplined Approach: The Engagement Process

To truly add value and improve operations, internal assurance and consulting engagements must be performed in a systematic and disciplined manner. The three fundamental phases in the internal audit engagement process are planning the engagement, performing the engagement, and communicating engagement outcomes. These three phases are introduced in chapter 12, "Introduction to the Engagement Process," and covered in depth in chapter 13, "Conducting the Assurance Engagement," chapter 14, "Communicating Assurance Engagement Outcomes and Performing Follow-Up Procedures," and chapter 15, "The Consulting Engagement." However, a brief overview is provided here.

Planning the engagement involves, among other activities:

- **Obtaining an understanding of the auditee or customer.** An internal auditor cannot provide value-adding assurance or consulting services to an auditee or customer that is not well understood. The internal auditor needs to understand the auditee's or customer's business objectives and the risks that threaten the achievement of those objectives. Other aspects of the auditee or customer that the internal auditor must understand include, for example, the auditee's or customer's personnel, resources, and operations.

- **Setting the engagement objectives.** Because the overall purpose of internal assurance and consulting services is to help the organization achieve its objectives, the internal auditor will use the auditee's or customer's business objectives as a foundation for defining the desired outcomes of a specific engagement.
- **Determining the required evidence.** The internal auditor must design the engagement to obtain sufficient appropriate evidence to achieve the engagement objectives.
- **Deciding the nature, timing, and extent of the audit tests.** These decisions will influence the internal auditor's testing approach that is necessary to gather the required evidence.

Engagement

A specific internal audit assignment or project that includes multiple tasks or activities designed to accomplish a specific set of objectives. See also Assurance Services and Consulting Services.

Performing the engagement involves the application of specific audit procedures. Procedures include, for example, making inquiries, observing operations, inspecting documents, and analyzing the reasonableness of information. A second important aspect of gathering evidence is documenting the procedures performed and the results of performing the procedures.

Evaluating the evidence gathered during an assurance engagement involves reaching logical conclusions based on the evidence. For example, an internal auditor might reach the conclusion that controls over sales transactions are effective. Evaluating the evidence gathered during a consulting engagement involves formulating practical advice based on the evidence. For example, an internal auditor might advise the customer that specific application controls need to be built into a new computerized information system.

Communicating outcomes is a critical component of all internal assurance and consulting engagements. Regardless of the content or form of the communications, which may vary, communications of engagement outcomes "must be accurate, objective, clear, concise, constructive, complete, and timely" (Standard 2420: Quality of Communications).

THE RELATIONSHIP BETWEEN AUDITING AND ACCOUNTING

Students beginning their first auditing course have a tendency to assume that auditing is a subset of accounting. Although such an assumption is understandable, it is not correct. Exhibit 1-3 contains a quote from *The Philosophy of Auditing* that explains the difference between auditing and accounting.

Although the context of this quote is the audit of financial statements conducted by an independent outside auditor, the ideas expressed are just as relevant to internal assurance and consulting services. Internal assurance and consulting services are analytical and investigative; they are based on logic, which involves reasoning and drawing inferences. Internal auditors use logic when they reach conclusions or formulate advice based on evidence they gather and evaluate. The quality of internal auditors' conclusions or advice depends on their ability to gather and evaluate sufficient appropriate evidence.

EXHIBIT 1-3
RELATIONSHIP BETWEEN AUDITING AND ACCOUNTING

"The relationship of auditing to accounting is close, yet their natures are very different; they are business associates, not parent and child. Accounting includes the collection, classification, summarization, and communication of financial data; it involves the measurement and communication of business events and conditions as they affect and represent a given enterprise or other entity. The task of accounting is to reduce a tremendous mass of detailed information to manageable and understandable proportions. Auditing does none of these things. Auditing must consider business events and conditions too, but it does not have the task of measuring or communicating them. Its task is to review the measurements and communications of accounting for propriety. Auditing is analytical, not constructive; it is critical, investigative, concerned with the basis for accounting measurements and assertions. Auditing emphasizes proof, the support for financial statements and data. Thus, auditing has its principal roots, not in accounting, which it reviews, but in logic on which it leans heavily for ideas and methods."

Source: Mautz, R. K., and Hussein A. Sharaf, *The Philosophy of Auditing* (Sarasota, FL: American Accounting Association, 1961), 14.

FINANCIAL REPORTING ASSURANCE SERVICES: EXTERNAL VERSUS INTERNAL

Publicly traded companies in many countries are required by law or the requirements of the stock exchange on which they trade to have their annual financial statements audited by an independent outside auditor, for example, a chartered accounting (CA) or certified public accounting (CPA) firm. A financial statement audit is a form of assurance service in which the firm issues a written attestation report that expresses an opinion about whether the financial statements are fairly stated in accordance with Generally Accepted Accounting Principles (GAAP). Many privately held companies, government organizations, and not-for-profit organizations also have annual financial statement audits.

COSO

The Committee of Sponsoring Organizations of the Treadway Commission.

The U.S. Sarbanes-Oxley Act of 2002 requires a U.S. public company's independent outside auditor (frequently referred to as the external auditor) to also attest to the effectiveness of the company's internal control over financial reporting as of the balance sheet date. The CPA firm's opinion on internal control over financial reporting must be based on a recognized framework such as *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The COSO framework, as it is often called, and other internal control frameworks are discussed in detail in chapter 6. Both the CPA firm's financial statement audit report and the firm's report on the effectiveness of internal control over financial reporting are public documents—they are included in the company's annual report and submitted to the U.S. Securities and Exchange Commission (SEC). This requirement is not restricted to the United States. Many other countries have similar financial reporting laws with similar requirements.

Independent outside audit firms provide their financial reporting assurance services primarily for the benefit of third parties. Third parties rely on a firm's independent attestations when making financial decisions about the organization. The independent attestations provide credibility to the information being used by the third-party decision-makers and, accordingly, increase the users' confidence regarding the accuracy, completeness, and validity of the information upon which they base their decisions.

Internal auditors also provide financial reporting assurance services. The primary difference between internal and external financial reporting assurance services is the audience. Internal auditors provide their financial reporting assurance services primarily for the benefit of management and the board of directors. For example, Sarbanes-Oxley requires the CEO and chief financial officer (CFO) of U.S. public companies to certify the company's financial statements as part of their quarterly and annual filings. It also requires management to assess and report on the effectiveness of internal control over financial reporting. Management relies on the financial reporting assurance services provided by the company's internal audit function to provide them with confidence regarding the truthfulness of their financial reporting assertions.

THE INTERNAL AUDIT PROFESSION

Modern Internal Auditing: A Dynamic Profession in High Demand

> *"The profession of auditing in general, and internal auditing in particular, is ancient."*[7]

Although historians have traced the history of internal auditing to centuries B.C., many people associate the genesis of modern internal auditing with the establishment of The IIA in 1941. At its inception, The IIA was a national organization with 24 charter members.[8]

Both The IIA and the internal audit profession have evolved dramatically since then. A timeline of selected IIA milestones is presented in exhibit 1-4. Two items that stand out in the timeline are the phenomenal growth of The IIA, especially during the last 30 years, and its globalization. IIA members now reside in more than 170 countries and territories, with more than 50 percent of the membership residing outside North America.[9] Internal auditing is now a truly global profession and the demand for internal audit services continues to grow.

A number of interrelated circumstances and events have fueled the dramatic increase in demand for internal audit services over the past 30 years. The business world during this time has changed dramatically. Examples of these changes include globalization, increasingly complex corporate structures, e-commerce and other technological advances, and a global economic downturn. Simultaneously, the business world has experienced a rash of devastating corporate scandals, which have precipitated a groundswell of new laws and regulations and professional guidance. These forces, in combination, continue to generate an ever-widening array of risks that corporate executives must understand and address. As a result, internal auditors are increasingly being called upon to help organizations strengthen their corporate governance, risk management, and control processes.

The Nature and Scope of Modern Internal Audit Services

The overarching objective of the internal audit function is to help an organization achieve its business objectives. Consequently, the targets of internal audit attention may include:

- Operational effectiveness and efficiency of business processes.
- Reliability of information systems and the quality of the decision-making information produced by those systems.
- Safeguarding assets against loss, including losses resulting from management and employee fraud.
- Compliance with organization policies, contracts, laws, and regulations.

"Governing bodies and senior management rely on Internal Auditing for objective assurance and insight on the effectiveness and efficiency of governance, risk management, and internal control processes."[10] The internal audit function helps the organization achieve its business objectives by evaluating and improving the effectiveness of governance, risk management, and control processes and by providing

EXHIBIT 1-4
TIMELINE OF SELECTED IIA MILESTONES

1941	The Institute of Internal Auditors is established. IIA membership totals 24.
1947	The *Statement of Responsibilities of the Internal Auditor* is issued.
1948	The first chapters outside North America are formed in London and Manila.
1953	"Progress Through Sharing" is adopted as The IIA's official motto.
1957	The *Statement of Responsibilities of the Internal Auditor* is revised to include more responsibility for operational areas.
1968	The IIA Code of Ethics is approved.
1973	The first Board of Regents is appointed. The Certified Internal Auditor (CIA®) program is established.
1976	The Foundation of Auditability, Research, and Education (FARE) is founded; the name is later changed to The IIA Research Foundation.
1978	The *Standards for the Professional Practice of Internal Auditing* is approved.
1979	The National Institute Agreement is approved; five national institutes are established.
1980	IIA membership totals 21,549.
1984	The *Quality Assurance Review Manual* is published. A pilot school is established at Louisiana State University. The first *Statement on Internal Auditing Standards* (SIAS) is published.
1986	The target school program is started.
1988	An IIA National Institute is established in The People's Republic of China.
1989	The United Nations grants consultative status to The IIA.
1990	The IIA elects A.J. Hans Spoel as the first chairman from outside North America.

(continued next page)

EXHIBIT 1-4
TIMELINE OF SELECTED IIA MILESTONES *(cont.)*

1995	The IIA becomes an official member body of the American National Standards Institute (ANSI) and the sole United States representative to the International Standards Organization (ISO).
1996	*Accounting Today* names IIA President William G. Bishop III, CIA, as one of the "top 100 most influential people in accounting." The IIA begins to aggressively promote the CIA program in Europe, Asia, the Middle East, and South America.
1998	The first all-objective CIA exam is offered with a record-breaking 5,165 candidates sitting for one or more parts.
1999	The new definition of internal auditing is introduced. The 25th anniversary of the CIA designation is celebrated.
2000	The new *Standards* is introduced. IIA membership totals 68,985.
2002	The *Standards* becomes mandatory guidance for all IIA members and CIAs.
2003	The new IIA Professional Practices Framework is issued.
2006	IIA membership exceeds 120,000.
2007	To continue to use the statement "conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing*," internal audit functions that existed as of January 1, 2002, must have an external quality assessment completed by January 1, 2007.
2008	Computer-based testing is introduced for all professional examinations administered by The IIA.
2009	The International Professional Practices Framework is issued, which specified mandatory guidance (Definition of Internal Auditing, Code of Ethics, and the *International Standards for the Professional Practice of Internal Auditing*) and strongly recommended guidance (Practice Advisories, Position Papers, and Practice Guides).
2010	The IIA develops a social media presence on Twitter, Facebook, and LinkedIn. Additionally, The IIA's Audit Executive Center, a conveniently accessible suite of information, resources, and services that empowers CAEs to be more successful, is launched.
2011	The IIA launches its own social media channel, a new video-sharing website—www.auditchannel.tv. The Audit Channel enables internal audit professionals to view, post, and comment on short videos that address the topics of greatest interest to the profession. Currently, the site features videos in English, Spanish, French, Japanese, and Chinese.
2012	The IIA expands the number of languages in which internal auditors can take the CIA exam to 20.
2013	The Florida Magazine Association names *Internal Auditor* magazine "2013 Magazine of the Year."
2015	The IIA launches the Financial Services Audit Center. *Internal Auditor* magazine wins awards for general excellence and web publishing at the 35th Annual EXCEL Awards Gala in Washington, D.C.
2016	The IIA launches the Environmental, Health & Safety Audit Center. The IIA celebrates 75 years of advancing the internal audit profession.

Source: www.theiia.org.

insight through consulting services. Evaluating and improving these processes propels the internal audit function into virtually all areas of the organization, including, for example, production of goods and services, financial management, human resources, research and development, logistics, and IT. The stakeholders served by the internal audit function include the board of directors, management, employees, and interested parties outside the organization.

Internal auditors provide insight by using a wide variety of procedures to test the design adequacy and operating effectiveness of the organization's governance, risk management, and control processes. These procedures include:

- Inquiring of managers and employees.
- Observing activities.
- Inspecting resources and documents.
- Reperforming control activities.
- Performing trend and ratio analysis.
- Performing data analysis using computer-assisted audit techniques.
- Gathering corroborating information from independent third parties.
- Performing direct tests of events and transactions.

Internal auditors also provide insight through a variety of consulting activities, including:

- Advisory services designed to provide guidance on effective governance, risk management, and control processes.
- Facilitative services through which internal auditors facilitate exercises designed to encourage sound governance, risk management, and control processes.
- Training on current and emerging governance, risk management, and control process concepts.

The Professionals Who Perform Internal Audit Services

Providers of internal audit services are employed by all types of organizations: public and private companies; local, state, and federal government agencies; and nonprofit entities. Until the 1990s, these services were provided exclusively "in-house," in other words, by employees of the organizations employing them. This is no longer the case. Some organizations are choosing to outsource their internal audit functions, either fully or partially, to external service providers. External providers of internal audit services include public accounting firms and other third-party vendors. The most common form of outsourcing is referred to as "co-sourcing." Co-sourcing means that an organization is supplementing its in-house internal audit function to some extent via the services of third-party vendors. Common situations in which an organization will co-source its internal audit function with a third-party service provider include circumstances in which the third-party vendor has specialized internal audit knowledge and skills that the organization does not have in-house and circumstances in which the organization has insufficient in-house internal audit resources to fully complete its planned engagements. Chapter 9, "Managing the Internal Audit Function," goes into more detail regarding co-sourcing.

THE INSTITUTE OF INTERNAL AUDITORS

The IIA, headquartered in Lake Mary, Florida, is recognized around the world as "the internal audit profession's global voice, standard-setter, and resource for professional development and certification."[11] The IIA's mission is presented in exhibit 1-5.

The IIA Leadership Structure

The IIA headquarters' executive leadership team is headed by the president and CEO. Hundreds of volunteers, including The IIA's Global Board of Directors, also provide IIA leadership.

The 38-member Global Board of Directors oversees the affairs of The IIA. The board's Executive Committee comprises the chairman of the board, the senior vice chairman, five vice chairmen, a secretary, and the two most recent former chairmen of the board. The board also includes the North American Board, which holds specific authority and oversight of North American activities, directors-at-large, ex-officio directors, institute directors, and The IIA president as an ex-officio member.[12]

The IIA's Motto

Progress Through Sharing

EXHIBIT 1-5
THE IIA'S MISSION

Mission

The Mission of The Institute of Internal Auditors is to provide dynamic leadership for the global profession of internal auditing. Activities in support of this mission will include, but not be limited to:

- Advocating and promoting the value internal audit professionals add to their organizations.
- Providing comprehensive professional education and development opportunities, standards and other professional practice guidance, and certification programs.
- Researching, disseminating, and promoting knowledge concerning internal auditing and its appropriate role in control, risk management, and governance to practitioners and stakeholders.
- Educating practitioners and other relevant audiences on best practices in internal auditing.
- Bringing together internal auditors from all countries to share information and experiences.

Source: www.theiia.org.

Diversity and Inclusion

The IIA is committed to creating an environment of inclusion that values diversity. Its diversity and inclusion mission is "to build a vibrant and diverse association for all members, volunteers, and employees by embracing their diverse talents, opinions, experiences, backgrounds; and foster inclusion that invites collaboration, fairness, respect, and innovation, enabling everyone to participate and contribute to their full potential."[13]

Professional Guidance

Professional guidance provided by The IIA is embodied in the International Professional Practices Framework (IPPF). The following is a brief introduction to the IPPF. It is described in detail in chapter 2.

The IPPF supports the mission of internal audit, which is "to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight."[14] Internal auditors should leverage the IPPF in its entirety to deliver on this mission within their respective organizations. The IPPF comprises two categories of guidance:

IPPF

International Professional Practices Framework, which consists of both *mandatory* and *recommended* guidance.

Category 1: Mandatory Guidance. Conformance with the principles set forth in the mandatory guidance is required and essential for the professional practice of internal auditing. The mandatory guidance is developed following an established due diligence process, which includes a period of public exposure for stakeholder input. The mandatory elements of the IPPF are:

- The Core Principles for the Professional Practice of Internal Auditing
- The Code of Ethics
- The *Standards*
- The Definition of Internal Auditing[15]

Category 2: Recommended Guidance. The recommended guidance is endorsed by The IIA through a formal approval process. It describes practices for effective implementation of The IIA's Core Principles, Definition of Internal Auditing, Code of Ethics, and *Standards*. The recommended elements of the IPPF are Implementation Guidance and Supplemental Guidance.[16] More detailed information about the IPPF and the other guidance resources provided by The IIA can be found on its website (www.theiia.org).

Professional Certifications

The IIA offers several professional certifications that allow internal auditors to demonstrate their knowledge, acumen, and leadership ability in three areas: industry, competency, and leadership. These certifications help internal auditors progress their career by:

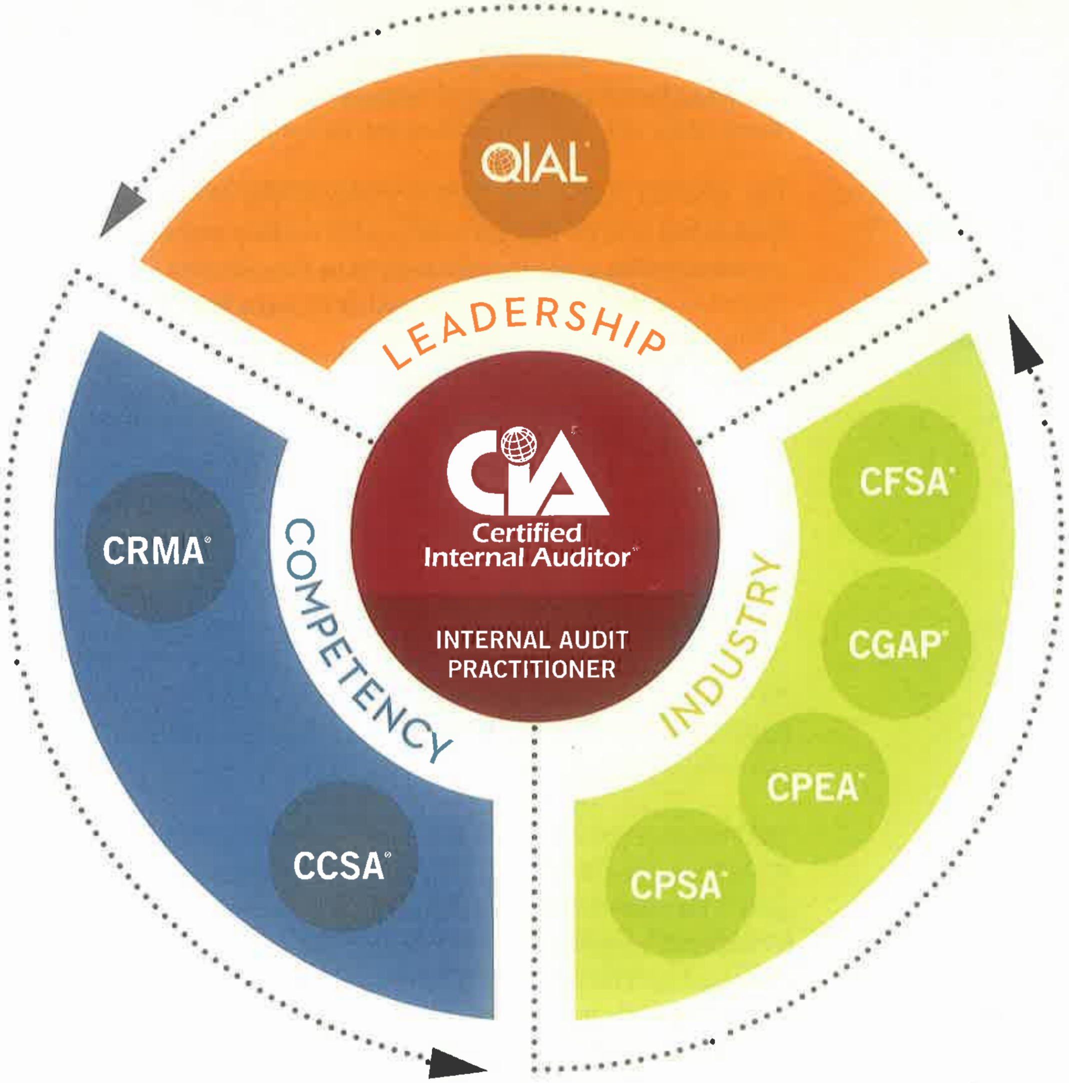
- Enhancing skills and knowledge of internal auditors.
- Helping internal auditors gain credibility and respect in the field.
- Increasing the earning potential of internal auditors.
- Allowing internal auditors to demonstrate an understanding of and commitment to the practice of internal auditing.

Certified Internal Auditor (CIA)

The premier certification sponsored by The IIA; the only globally accepted certification for internal auditors.

The premier certification sponsored by The IIA is the Certified Internal Auditor (CIA), the only globally accepted certification for internal auditors. The CIA examination tests a candidate's expertise in three parts: Internal Audit Basics; Internal Audit Practice; and Internal Audit Knowledge Elements. In addition to passing the CIA examination, candidates must have a minimum of two years of internal audit experience or its equivalent to become a CIA. New and rotational internal auditors can obtain the Internal Audit Practitioner designation by passing the first two parts of the CIA exam. The CIA transcends all three areas as depicted in exhibit 1-6.[17]

EXHIBIT 1-6
IIA GLOBAL CERTIFICATIONS AND QUALIFICATIONS



Source: www.theiia org

In the area of competency, The IIA sponsors two specialty certification programs: Certification in Control Self-Assessment (CCSA) and Certification in Risk Management Assurance (CRMA). Industry certifications include Certified Government Auditing Professional (CGAP), Certified Financial Services Auditor (CFSA), Certified Professional Environmental Auditor (CPEA), and Certified Process Safety Auditor (CPSA). The Qualification in Internal Audit Leadership (QIAL) is the certification for leaders working to ascend to the level of CAE in their organizations. Detailed information about each of the certification programs can be found on The IIA's website.

Other professional organizations also sponsor certification programs relevant to internal auditors. For example, ISACA (formerly known as the Information Systems Audit and Control Association) sponsors the Certified Information Systems Auditor (CISA) program, and the Association of Certified Fraud Examiners sponsors the Certified Fraud Examiner (CFE) program.

Research and Educational Products and Services

The IIA is widely known as the chief educator and global leader in professional development for the profession of internal auditing. The wide variety of research and educational products and services offered by The IIA are briefly described below. More detailed information can be found on The IIA's website.

Internal Audit Foundation

Established in 1976, its mission is "to shape, expand, and advance knowledge of internal auditing by developing and disseminating timely, relevant information and insights that address the needs of our stakeholders globally."

The Internal Audit Foundation, formerly The IIA Research Foundation, was established in 1976. It exists to help audit leaders, practitioners, students, and academics experience continuous growth in their careers to propel them to become respected as trusted advisers as well as thought leaders within the industry. The following components facilitate this:

- **Mission**: To shape, expand, and advance knowledge of internal auditing by developing and disseminating timely, relevant information and insights that address the needs of our stakeholders globally.
- **Vision**: To be a vital resource for impactful internal audit and related stakeholder research, educational materials, and practice insights.
- **Strategy**: To consistently set the standard for helping practitioners and academics achieve excellence in the internal audit profession.[18]

The Foundation sponsors research projects and publishes research reports. The Foundation's Bookstore offers hundreds of educational products, including books and videos, covering topics of interest to internal audit professionals.

The IIA's Global Audit Information Network (GAIN) Benchmarking Services and Flash Surveys enable internal audit functions to share information and learn from each other. *Internal Auditor*, The IIA's bi-monthly magazine, publishes articles of widespread interest to internal auditors around the world. Numerous newsletters published by The IIA also cover topics of interest to internal auditors, including topics of specific interest to CAEs and to various internal audit industry and specialty groups such as financial services, gaming, and IT auditing.

Professional development opportunities offered by The IIA include meetings, seminars, and conferences as well as technology-based training, books, and webcasts. The premier IIA conference is the annual International Conference, which attracts thousands of internal auditors from around the world. Other IIA opportunities include industry-specific conferences such as the Financial Services Conference and the Government Auditing Conference, specialty opportunities such as the General Audit Management Conference, which is targeted toward CAEs, and district and regional conferences.

Internal Auditing Education Partnership (IAEP)

Sponsored by The IIA, the IAEP program provides an internal audit curriculum in approved colleges and universities.

The IIA, through its Academic Relations Committee, also promotes and supports internal audit education around the world. The Internal Auditing Education Partnership (IAEP) program is designed to support universities and colleges that have made formal commitments to offer internal audit education. The level of support provided by The IIA to a particular school is directly related to the level of development of the internal audit program at that school.

COMPETENCIES NEEDED TO EXCEL AS AN INTERNAL AUDITOR

If internal auditors are to be trusted advisers to the organizations they serve, they must embody the five Cs, character traits that are required for success in the internal audit profession:

- Competence—the skills and knowledge required to provide assurance and advisory services that add value.
- Credibility—the ability to inspire trust based on consistent competence and integrity.
- Connectivity—the ability to understand the needs of each of the stakeholders individually within the greater whole of the organization.
- Communication—instituting methods of relaying information (orally and in multiple written forms) and listening to the individuals served.
- Courage—the personal fortitude to remain independent and objective and to stand by the results of the engagements conducted.[19]

Reflecting back on the definition and description of internal auditing presented earlier in this chapter, what else must individuals know to achieve success as internal auditors? What must they be able to do? Are there certain personal characteristics that are indicative of success? The good news is that there is no single right answer to these questions; different people with different competency profiles can achieve success as internal auditors. Moreover, the competencies needed to succeed are not unique to internal auditing.

There are, however, certain competencies that tend to be common among successful internal auditors. Some of these competencies are inherent personal qualities. Others are knowledge and skills that can be learned and developed. An understanding of these competencies provides information with which an informed decision can be made about internal auditing as a desirable vocation.

Inherent Personal Qualities

> *"The practitioners must be 'state of the art' in more than financial management. They will often be asked to act with courage and challenge the prevailing ethos of the organization in which they serve. Their chief value to stakeholders in all sectors is their tireless search for truth, their ability to explain truth to people that matter, and their courage to tell the truth no matter the risk."*
>
> —Basil Pflumm, Former Vice President,
> Research and Professional Practices, The IIA[20]

Different people have different inherent personal qualities or characteristics. For example, some people are by nature more introverted (shy and reserved), while others are more extroverted (outgoing and sociable). Personal qualities that are common among successful internal auditors at all levels include:

Integrity. Integrity is not an option for internal auditors; they must have it. People with integrity build trust, which in turn establishes the foundation for reliance on what they say and do. Users of internal audit work products rely on internal auditors' professional judgments to make important business decisions. These stakeholders must have confidence that internal auditors are trustworthy.

Passion. It is virtually impossible to be very good at something you do not really like to do. Successful internal auditors have a deep interest in, and intense enthusiasm for, their work. Some show this passion more than others, but long-term success cannot be achieved or sustained without this passion.

Work ethic. Success in business requires the ability to consistently meet the quality, cost, and timing expectations of "customers." But this success does not come without hard work. The same applies to successful internal auditors, who must not only work hard but also work smart. They get the right things done the right way at the right time.

Curiosity. The information needed to make judgments during internal audit engagements may not always be obvious. Thus, successful internal auditors must be inquisitive and go beyond asking "checklist" type questions. They may need to ask more probing questions to gain the necessary understanding of how things work and why they work the way they do.

Creativity. Most internal auditors like to solve problems. However, the solutions to many problems are not always obvious. Therefore, successful internal auditors must be creative and "think outside the box" to generate the types of ideas valued by management and other stakeholders.

Initiative. Successful internal auditors are self-starters. They voluntarily seek out and pursue opportunities to add value and want to play the role of change agent within their organizations.

Flexibility. Change is the only constant in today's business world. Successful organizations continuously adapt to change, and change brings new risks that must be managed. Successful internal auditors embrace change; they adapt quickly to new situations and challenges.

The characteristics described above are illustrative of the inherent personal qualities that are required to succeed as an internal auditor. Does this mean that someone lacking one or more of these traits is destined to fail as an internal auditor? Not necessarily. Integrity is imperative and it would be foolish for anyone to pursue a vocation they really do not believe in or to which they are not fully committed. The other qualities can be exercised—they can be strengthened, if desired. However, it is important to recognize and understand how each of these qualities enables internal auditors to be successful. For those seeking long-term success, most of these qualities will be necessary.

Knowledge, Skills, and Credentials

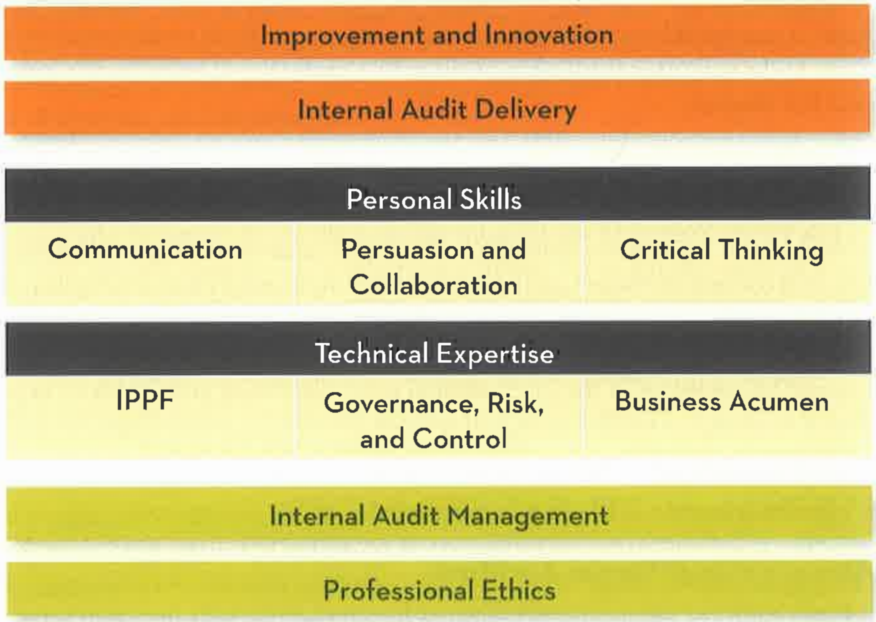
The IIA's *Standards* requires internal auditors to perform their assurance and consulting engagements with proficiency, which means they must possess the knowledge and skills needed to fulfill their responsibilities (Standard 1210). What knowledge and skills are needed to succeed as an internal auditor? The answer to this question depends, to a certain extent, on the current stage in a person's career and the responsibilities they are undertaking. Those planning to pursue a long-term career in internal auditing will need to continuously advance their knowledge and skills. For example, an internal auditor will be expected to know and do things as an in-charge auditor with four years of experience that would not be expected of someone directly out of school. Accordingly, one of the most important skills to begin developing while in school is learning how to learn—internal auditors continue to learn throughout their careers.

Proficiency

Internal auditors must possess the knowledge, skills, and other competencies needed to perform their individual responsibilities. The internal audit activity collectively must possess or obtain the knowledge, skills, and other competencies needed to perform its responsibilities. (Standard 1210)

Nobody is an expert internal auditor when they graduate from college. Internal auditing, like any other profession, is learned primarily by doing; in other words, through on-the-job experience. It is like learning how to drive a car. It is impossible to learn how to drive merely by reading about it, listening to someone talk about it, or watching someone else drive. It must be experienced—it is necessary to get in a car and practice, preferably under the supervision of a well-qualified instructor. Such is the case with internal auditing—it is learned by doing it under the watchful eyes of experienced supervisors and mentors.

EXHIBIT 1-7
GLOBAL INTERNAL AUDIT COMPETENCY FRAMEWORK STRUCTURE



Source: www theiia.org.

Recognizing that internal auditors need a wide variety of competencies, The IIA developed a Global Internal Audit Competency Framework. This framework can help individual internal auditors and internal audit functions assess their current competency levels and identify areas for improvement. The framework outlines the 10 core competencies recommended for each broad job level, namely internal audit staff, internal audit management, and the CAE. Each competency is supported by a list of more detailed competencies that further define the core competency statement. While the core competencies have been defined individually, it should be understood that there are connections and interdependencies between all of the competencies. The Global Internal Audit Competency Framework will be discussed in greater detail in chapter 2. Exhibit 1-7 depicts the structure of the Global Internal Audit Competency Framework and how the core competencies relate to each other.

The credentials students attain and report on their résumés will reflect the knowledge and skills they have obtained. The completion of a degree with a good grade point average displays mastery of a field of study. Working while in school or actively participating in extracurricular activities shows the ability to multitask successfully. Scholarships and other awards signify respect for a student's achievements. Completion of an internship demonstrates the ability to apply what has been learned. Serving as an officer in a student organization signifies motivation and the ability to lead. Completing the CIA examination before graduation demonstrates not only competency in internal auditing and related subjects but also motivation to succeed.

Progression from a staff internal auditor to an experienced in-charge internal auditor indicates a readiness to coach and share expertise with subordinates, make presentations and facilitate meetings, communicate persuasively with all levels of people, build rapport and lasting relationships with auditees and customers, and proactively stimulate change. Credentials to accrue during this stage of an internal audit career may include, for example, a track record of engagement successes, testimonials from auditees and customers (being recognized as a "go to" person), a master of business administration degree, multiple professional certifications, and a volunteer leadership position in a professional organization such as a local IIA chapter.

Internal audit professionals who continue to develop their management and leadership skills can progress into internal audit management. These individuals must be able to coach and mentor subordinates, adeptly address strategic management issues, and command respect among senior executives and professional colleagues. As an individual gains a reputation as an internal audit thought leader, he or she will likely be called upon to share his or her expertise by doing such things as serving as an IIA volunteer at the international level, delivering presentations at professional meetings or conferences, and writing articles for professional journals.

INTERNAL AUDIT CAREER PATHS

Pathways Into Internal Auditing

Until very recently, most internal auditors began their careers in public accounting. Accounting graduates would start out as financial statement auditors in public accounting and, after gaining experience, move into internal audit positions, oftentimes with former clients. While this is still a recognized pathway into internal auditing, it is by no means the only one.

Hiring internal auditors directly out of school has become much more common in recent years. Public and private companies, governmental entities, not-for-profit organizations, and firms providing internal audit services are increasingly recruiting internal auditors directly out of colleges and universities. Schools that have established internal audit programs endorsed by The IIA are growing in number and popularity among recruiters. Top-tier students with degrees in accounting, information systems, and other business and nonbusiness fields from these and other schools are in high demand. Students who have completed one or more internal audit-related internships are in especially high demand because of the real-world experience they have gained.

Some organizations consider internal auditing to be an important component of their management trainee programs because it offers management candidates a unique opportunity to gain relevant governance, risk management, and control expertise across many areas of the organization. In these organizations, prospective managers from different areas of the organization are required to spend a certain amount of time in the internal audit function as a prerequisite to moving upward into management.

Pathways Out of Internal Auditing

The majority of people who work in internal auditing do not spend their entire careers there. As indicated above, experience in an internal audit function serves as an excellent training ground for aspiring business executives. Many internal auditors use the expertise they gain in internal auditing as a stepping stone into financial or nonfinancial management positions, either in the organization they have been working for or another organization.

Moving from internal auditing into a position with a professional services firm that provides internal assurance and consulting services was virtually unheard of a few years ago. This is now a viable opportunity, especially for individuals with specialized, highly valued expertise in a particular industry (for example, energy or banking) or subject matter (for example, information systems or fraud prevention, deterrence, and detection).

Careers in Internal Auditing

Some people, however, do choose to make internal auditing their career and even they have options. One option is to progress upward through the ranks of a single organization's internal audit function into internal audit management. Another option is to stay in internal auditing but advance up the ladder toward internal audit management, moving from one organization to another. A third option is to move upward through the various levels in a professional services firm that provides internal assurance and consulting services.

CAE

The chief audit executive is a senior position within the organization responsible for internal audit activities.

The ultimate destination of a career internal auditor in an organization is CAE. CAEs are highly respected within their organizations, often holding senior executive positions. They interact with the highest levels of senior management and the board of directors. They commonly report functionally to the audit committee of the board of directors and administratively to a senior executive such as the CEO or CFO. Chapter 9 comprehensively addresses the roles and responsibilities of the CAE.

In a firm that provides internal audit services to many organizations, an internal auditor can rise to the level of a partner or comparably prestigious position. Unlike CAEs in an organization, they interact with and report to senior executives and boards of directors of several organizations.

Regardless of the career path chosen, present-day internal auditors have many more career opportunities than they did just a few years ago. Internal auditors who develop a wide range of skills and gain experience in different areas will be in a good position to pursue a wide variety of career options.

SUMMARY

This chapter set forth internal auditing as a prominent profession with a clear value proposition for its key stakeholders. Internal auditing was defined and the internal audit process was introduced. The difference between auditing and accounting and the difference between the financial reporting assurance services internal auditors provide and those that public accountants provide were covered. Readers were provided an overview of the internal audit profession and The IIA. Finally, the competencies needed to excel as an internal auditor and the various internal audit career paths that are available were outlined.

This textbook covers both the concepts that are necessary to understand internal auditing as well as the steps to conduct internal audit engagements. The first 11 chapters are part of the Fundamental Internal Audit Concepts section of the textbook. These chapters cover just that—fundamental internal audit concepts that internal auditors need to know and understand. A firm grasp of these concepts is necessary, but not sufficient, to understand internal auditing. The last four chapters are part of the Conducting Internal Audit Engagements section of the textbook. These chapters focus on the steps necessary to plan, perform, and communicate results of assurance and consulting engagements. Finally, the case studies that accompany the textbook can be used to practice and reinforce the concepts and steps provided throughout the textbook.

REVIEW QUESTIONS

1. What are the three components of the internal audit value proposition set forth by The IIA?

2. How does The IIA define internal auditing?

3. What are the four categories of business objectives discussed in this chapter?

4. What are the definitions of governance, risk management, and control provided in this chapter?

5. What is the difference between internal assurance services and internal consulting services?

6. What is the difference between independence and objectivity as they pertain to internal auditors?

7. What are the three fundamental phases in the internal audit engagement process?

8. What is the relationship between auditing and accounting?

9. What is the primary difference between internal and external financial reporting assurance services?

10. What are some of the factors that have fueled the dramatic increase in demand for internal audit services over the past 30 years?

11. What types of procedures might an internal auditor use to test the design adequacy and operating effectiveness of governance, risk management, and control processes?

12. What is co-sourcing? Why might an organization choose to co-source its internal audit function?

13. How is The IIA's leadership organization structured?

14. What are the two categories of guidance included in the IPPF?

15. What are the three parts of the CIA exam?

16. What is the major objective of the Internal Audit Foundation?

17. What are the character traits, known as the 5 Cs, that are required for success in the internal audit profession?

18. What are the seven inherent personal qualities listed in the chapter that are common among successful internal auditors?

19. Why is it imperative that internal auditors have integrity?

20. How many core competencies are included in The IIA's Global Internal Auditor Competency Framework and for what general job levels are they recommended?

21. What are the three common ways individuals enter the internal audit profession?

22. Do most people who work in internal auditing spend their entire careers there? Explain.

23. What options does an individual have if he or she chooses to be a career internal auditor?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. Which of the following are components of the definition of internal auditing?

   a. Independence and objectivity.
   b. A systematic and disciplined approach.
   c. Helping the organization accomplish its objectives.
   d. All of the above.

2. Assurance, Insight, and Objectivity comprise:

   a. The mission of internal auditing.
   b. The three lines of defense model.
   c. The objectives of internal auditing.
   d. The value proposition.

3. Independent outside auditors provide financial reporting assurance services primarily for:

   a. The benefit of third parties.
   b. Management.
   c. Board of directors.
   d. The CEO.

4. AVF Company's new CFO has asked the company's CAE to meet with him to discuss the role of the internal audit function. The CAE should inform the CFO that the overall responsibility of internal audit is to:

   a. Serve as an independent assurance and consulting activity designed to add value and improve the company's operations.
   b. Assess the company's methods for safeguarding its assets and, as appropriate, verify the existence of the assets.
   c. Review the integrity of financial and operating information and the methods used to accumulate and report information.
   d. Determine whether the company's system of internal controls provides reasonable assurance that information is effectively and efficiently communicated to management.

5. Which of the following statements is not true about business objectives?

   a. Business objectives represent targets of performance.
   b. Establishing meaningful business objectives is a prerequisite to effective internal control.
   c. Establishing meaningful business objectives is a key component of the management process.
   d. Business objectives are management's means of employing resources and assigning responsibilities.

6. Within the context of internal auditing, assurance services are best defined as:

   a. Objective examinations of evidence for the purpose of providing independent assessments.
   b. Advisory services intended to add value and improve an organization's operations.
   c. Professional activities that measure and communicate financial and business data.
   d. Objective evaluations of compliance with policies, plans, procedures, laws, and regulations.

7. Which of the following is mandatory guidance within the IPPF?

   a. Implementation guidance.
   b. Supplemental guidance.
   c. The value proposition.
   d. The core principles.

8. Which of the following is recommended guidance within the IPPF?

   a. The Definition of Internal Auditing.
   b. The *Standards*.
   c. Supplemental guidance.
   d. None of the above.

MULTIPLE-CHOICE QUESTIONS

9. The Internal Audit Foundation exists to help audit leaders, practitioners, students, and academics experience continuous growth in their careers to propel them to become:

   a. Strong assurance providers.

   b. Trusted advisors.

   c. Independent outside auditors.

   d. CAEs.

10. Which of the following is one of the 5 Cs essential to success as an internal auditor?

    a. Courage.

    b. Consistency.

    c. Collaboration.

    d. Candidness.

11. Which of the following is a framework that can help individual internal auditors and internal audit functions assess their current competency levels and identify areas for improvement?

    a. *Internal Control – Integrated Framework.*

    b. International Professional Practices Framework.

    c. The Global Internal Auditor Competency Framework.

    d. Enterprise Risk Management Framework.

12. Internal auditors must have competent interpersonal skills. Which of the following does not represent an attribute of interpersonal skills?

    a. Communication.

    b. Leadership.

    c. Project management.

    d. Team capabilities.

13. While planning an internal audit, the internal auditor obtains knowledge about the auditee to, among other things:

    a. Develop an attitude of professional skepticism about management's assertions.

    b. Develop an understanding of the auditee's objectives and risks.

    c. Make constructive suggestions to management concerning internal control improvements.

    d. Evaluate whether misstatements in the auditee's performance reports should be communicated to senior management and the audit committee.

14. Which of the following is the premier certification sponsored by The IIA?

    a. Certification in Control Self-Assessment.

    b. Certified Internal Auditor.

    c. Certification in Risk Management Assessment.

    d. Certified Information Systems Auditor.

15. Which of the following is the ultimate position of a career internal auditor?

    a. CEO.

    b. CFO.

    c. CRO.

    d. CAE.

DISCUSSION QUESTIONS

1. Define "value proposition." Explain why it is important for internal auditors to have a value proposition. Describe the three components of the internal audit value proposition set forth by The IIA.

2. Describe the relationship between objectives and strategies. What is your foremost objective as a student in this course? Explain your strategy for achieving this objective.

3. Ina Icandoit has an 8:00 a.m. class each day. The professor has instilled in the students the importance of getting to class on time, so Ina has made this one of her objectives for the semester. What risks threaten the achievement of Ina's objective? What controls can Ina implement to mitigate these risks?

4. Prim Rose owns five flower shops in the suburbs of a large Midwestern city. Each shop is managed by a different person. One of the tests Prim performs to monitor the performance of his shops is a simple trend analysis of month-to-month sales for each shop. Assume that Prim's analysis of the reported sales performance for his flower shop on Iris Street shows that monthly sales remained relatively consistent from January through June. Should Prim be pleased or concerned about the sales performance report for the shop on Iris Street over this six-month period? Explain.

5. Discuss:

   a. The inherent personal qualities common among successful internal auditors.

   b. The knowledge, skills, and credentials entry-level internal auditors are expected to possess.

   c. Additional knowledge, skills, and credentials in-charge internal auditors might be expected to possess.

   d. Additional knowledge, skills, and credentials CAEs might be expected to possess.

CASES

CASE 1

Visit The IIA's website (www.theiia.org). Locate, read, and prepare to discuss the following items:

A. Frequently asked questions about internal auditing:

1. How do internal and external auditors differ and how should they relate?
2. How does internal audit maintain its independence and objectivity?
3. Is it mandatory to have an internal audit activity?
4. What are the critical skills and attributes of a CAE?
5. What are the skillsets and staffing needs of an internal audit activity?
6. What is internal audit's role in preventing, detecting, and investigating fraud?
7. What services can the internal auditors provide for the audit committee?
8. What should be the reporting lines for the CAE?
9. What standards guide the work of internal audit professionals?
10. Why should an organization have an audit committee?

B. The content outlines for the three parts of the CIA exam.

CASE 2

TeamMate Practice Case: Introduction

TeamMate® Audit Management System, the world's premiere audit management system, is used by more than 100,000 auditors and 2,500 organizations worldwide. TeamMate offers an ecosystem of audit management tools, of which TeamMate+ offers a complete end-to-end solution covering:

- A risk assessment tool that enables internal auditors to assess strategic risks across their organization and develop a risk-based audit plan.
- A complete internal audit documentation approach that integrates with Microsoft Word, Excel, and Adobe PDF for extensive workpaper coverage.
- Time recording and reporting that accounts for internal auditors' full day related internal audit tasks as well as time spent on other activities.
- Issue tracking of outstanding internal audit engagement work.
- Reporting and trending of audit plans, engagements, issues, and other areas of internal audit data necessary to monitor the performance of the engagement team and the organization, and provide insights into future trends.

Readers of *Internal Auditing: Assurance & Advisory Services* will be provided opportunities to learn about TeamMate+ via a series of four case exercises. The exercises and the chapters to which they pertain are listed below:

- **Exercise 1: Assessment**—chapter 5, "Business Processes and Risks."
- **Exercise 2: Project and Internal Controls**—chapter 6, "Internal Control."
- **Exercise 3: Project and the Audit Engagement Process**—chapter 12, "Introduction to the Engagement Process."
- **Exercise 4: Issue Tracking**—chapter 14, "Communicating Assurance Engagement Outcomes and Performing Follow-Up Procedures."

Each case exercise will be introduced in the Cases section of the pertinent chapters and will be dependent upon the work performed in the previous exercise.

Read the Introduction in the TeamMate Practice Case - Introduction and familiarize yourself with the organization.

CASE 3

KnowledgeLeader Practice Case: Introduction

Each case exercise will be introduced in the Cases section of the pertinent chapter(s) in the textbook. The related KnowledgeLeader resources for each case can be found on KnowledgeLeader's University Center at https://www.KnowledgeLeader.com/University.

KnowledgeLeader is a subscription-based website that provides audit programs, checklists, tools, resources, and best practices to help busy professionals save time and stay on top of business and technology risks.

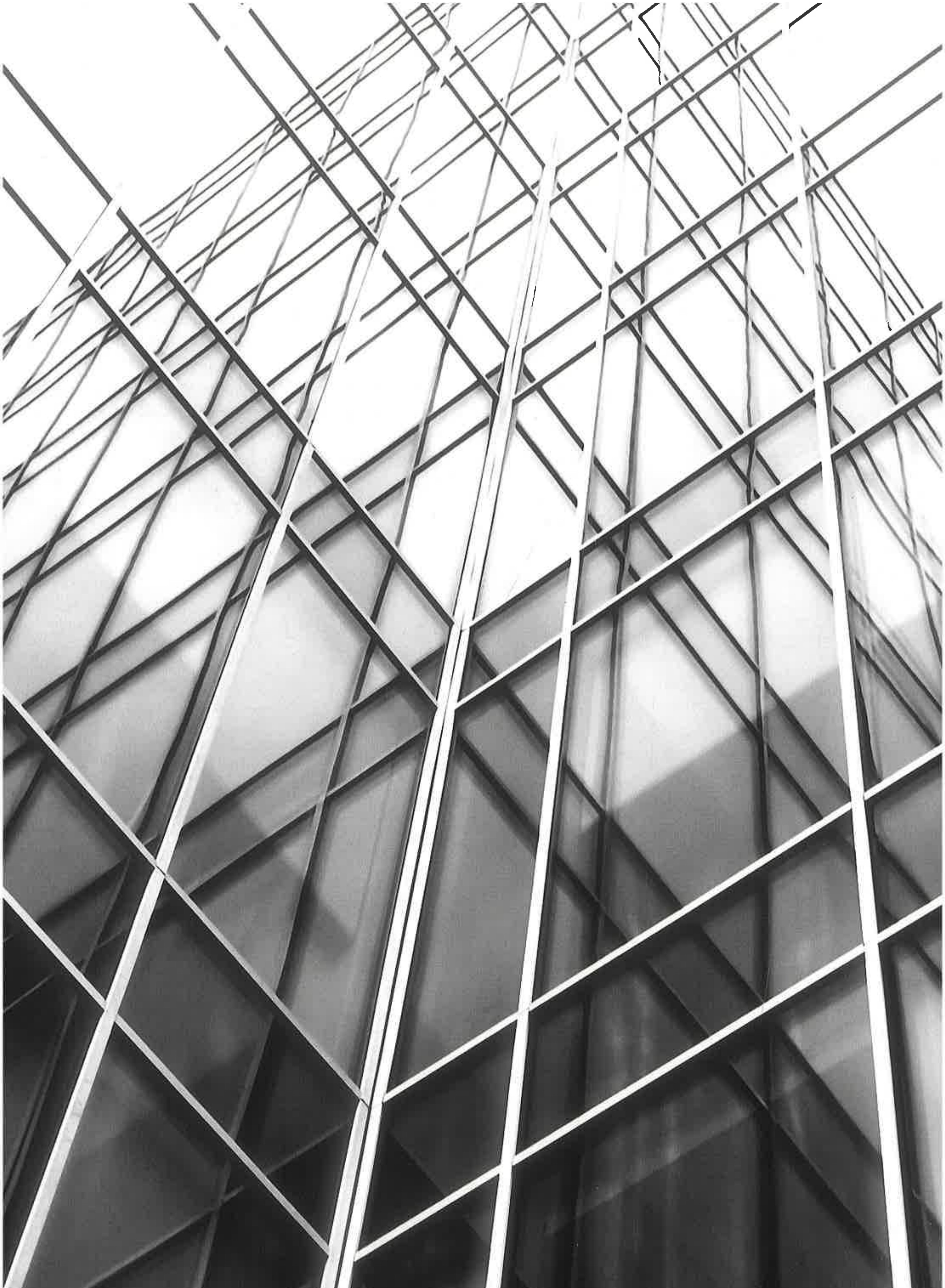
CASES

Protiviti offers professors and their students the opportunity to use the resources available on KnowledgeLeader to broaden their curriculum and help students further their studies in internal auditing, IT auditing, and accounting.

Student Instructions

For this course, students will receive a link and confirmation number from their professors to activate their accounts on KnowledgeLeader. Please note: username and password information must be kept confidential; the user may not republish, license, sell, copy, or display any portion of the service elsewhere, except within the context of appropriately attributed academic coursework.

Please contact the course instructor with any questions.



CHAPTER 2

The International Professional Practices Framework: Authoritative Guidance for the Internal Audit Profession

LEARNING OBJECTIVES

- Know the history behind the current professional guidance for the practice of internal auditing.
- Describe the structure of the International Professional Practices Framework (IPPF) and the categories of authoritative guidance it provides.
- Understand the relationship between the mission of internal auditing and the elements of the IPPF.
- Understand the mandatory IPPF guidance: the Core Principles for the Professional Practice of Internal Auditing, the Definition of Internal Auditing, the Code of Ethics, and the *International Standards for the Professional Practice of Internal Auditing.*
- Understand the recommended IPPF guidance: Implementation Guidance and Supplemental Guidance.
- Describe how the IPPF is kept current.
- Understand how the authoritative guidance promulgated by other professional organizations affects the practice of internal auditing.

The stature and reputation of any profession can be measured, to a large extent, by the rigor of its ethics and practice standards. This is true for the medical, engineering, law, public accounting, and other professions. It also is true for the internal audit profession.

This chapter explains how authoritative guidance from The IIA answers questions such as:

- What do those providing internal audit services aspire to accomplish within an organization?
- What should the stakeholders of internal audit services expect from internal audit professionals?
- What makes an internal audit function successful?
- What does it take to be a good internal auditor?
- What are the responsibilities of the chief audit executive (CAE)?
- How do the board and senior management evaluate internal audit services?
- In sum, how does the internal audit function add value to the organization?

The mission of internal auditing introduced in chapter 1, "Introduction to Internal Auditing," states that the fundamental purpose of internal audit in an organization is "to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight." Internal auditors provide these professional services to a diverse set of organizations ranging from publicly traded and private companies to government and not-for-profit entities. Within these organizations, internal auditors serve a number of stakeholders, each with their own needs and demands. These stakeholders include internal parties such as the organization's board of directors (particularly the audit committee), senior management, financial and operating managers, and external parties such as investors, creditors, regulators, suppliers, and customers. This chapter explains how the internal audit profession's authoritative guidance enables internal audit professionals to achieve its mission and deliver value-adding services that meet the needs of this wide array of stakeholders.

The chapter begins with an historical overview of how the guidance for the professional practice of internal auditing has evolved since the inception of The IIA in 1941. The IIA's IPPF, which reflects the global nature of the internal audit profession, is then introduced. The mandatory guidance and the recommended guidance contained in the IPPF are then discussed in detail. This is followed by a description of how authoritative guidance for the profession of internal auditing is developed and issued. The chapter concludes with an explanation of how the authoritative guidance promulgated by other professional organizations affects the practice of internal auditing.

THE HISTORY OF GUIDANCE SETTING FOR THE INTERNAL AUDIT PROFESSION

The practice of internal auditing has been developing over a long period of time. As organizations grew in size and complexity and developed geographically dispersed operations, senior management could no longer personally observe operations for which they were responsible nor have sufficient direct contact with people reporting to them. This distancing of senior management from the operations for which they were responsible created a need for other people in the organization to assist them by examining the operations and providing reports based on those examinations. These people began performing internal audit-type activities to provide this assistance. Over time these activities became more formalized and, with the founding of The IIA, the practice of internal auditing began evolving into a profession. Consensus among practitioners about the role of the internal audit function and the basic concepts and practices of internal auditing began to emerge.

The development of guidance for the profession of internal auditing began shortly after the formation of The IIA. The first formal guidance, the *Statement of Responsibilities of the Internal Auditor* (*Statement of Responsibilities*), was issued in 1947. This short document defined the objectives and scope of internal auditing. As the profession evolved, the broadening of its scope was reflected in subsequent revisions. For instance, the scope of internal audit activities covered in the original 1947 *Statement of Responsibilities* was restricted primarily to financial matters, but by 1957 the scope had been broadened to include operations as well.[1] The scope of internal audit activities continued to expand as the profession evolved over the years and the *Statement of Responsibilities* was revised accordingly in 1971, 1976, 1981, and 1990.

In 1968, The IIA provided ethical guidance for its members with the issuance of a Code of Ethics. The code consisted of eight articles, the basic principles of which are still found in the current code. With the publication of the Common Body of Knowledge (CBOK) in 1972 and implementation of the Certified Internal Auditor (CIA) certification program in 1973, The IIA provided additional professional guidance on the necessary competencies (that is, knowledge and skills) for internal audit practitioners. In 1978, The IIA issued the *Standards for the Professional Practice of Internal Auditing*. These standards consisted of five general and 25 specific guidelines for how the internal audit function should be managed and how audit engagements should be performed. The standards were widely adopted and translated into a number of different languages. They also were incorporated into the laws and regulations of various government entities.

The 1978 *Standards* proved to be sufficiently robust to accommodate the evolving profession, remaining relatively unchanged for the next 20 years. However, The IIA provided a large amount of additional guidance to facilitate the interpretation of these standards. This additional guidance included:

- Guidelines that accompanied the 1978 *Standards*.
- Professional Standards Practice Releases providing responses to frequently asked questions.
- Position papers.
- Research studies.

By the end of the 1990s, the levels of authority among the various forms of guidance were no longer clear and instances of conflicting guidance began to occur.

Moreover, the landscape of the internal audit profession began changing in the 1980s. The use of risk assessment as a method of allocating internal audit resources (that is, risk-based auditing) rapidly gained popularity. In the 1990s, many organizations began outsourcing internal audit activities to external service providers.

The time allocated to traditional internal audit services decreased, while the time allocated to the effectiveness and efficiency of operations increased. Nontraditional internal audit services such as control self-assessment programs, proactive training on internal control, participation as advisors in system implementation projects, and other consulting activities consumed a growing proportion of the internal audit resources. The 1978 *Standards* did not adequately address these emerging issues.

Recognizing the important role that the *Statement of Responsibilities*, the Code of Ethics, and particularly, the 1978 *Standards* had played in advancing the now global internal audit profession, The IIA established a Guidance Task Force in 1997 to consider the needs and mechanisms for providing guidance to the profession in the future. After more than a year of study, the Guidance Task Force issued its report—*A Vision for the Future: Professional Practices Framework for Internal Auditing*. This report proposed a new definition of internal auditing to replace the one found in the *Statement of Responsibilities* and a new structure for providing relevant and timely guidance to the profession. The proposed definition and structure were approved in 1999. Implementation began with the revision of the Code of Ethics in 2000 and the completion of the *Standards* in 2002.

By 2006, the *Standards* had become recognized globally, with authorized translations in 32 languages. Moreover, the number of countries and jurisdictions around the world incorporating the *Standards* into laws and regulations continues to increase. With the increased recognition and stature of The IIA's professional guidance, IIA leadership saw the need to ensure that its authoritative guidance was clear, current, relevant, and internationally consistent. The guidance-setting process also needed to be sufficiently responsive to the needs of the profession and suitably transparent to the profession's stakeholders. A task force and steering committee were established to review the existing guidance structure and the process for developing, reviewing, and issuing guidance. The review resulted in a new International Professional Practices Framework (IPPF) and a reengineering of the guidance-setting process. A new group, the IPPF Oversight Council, composed predominately of outside stakeholders, also was created to oversee establishment of authoritative guidance.

In the aftermath of the global financial crisis in 2007 and 2008, expectations have risen regarding the role of internal audit in organizational governance, particularly among financial institution regulators around the globe. The risk landscape as well as internal audit's role had evolved significantly since 1999 when the IPPF was launched. In 2013, The IIA's Global Board set up a task force to undertake a relook at the IPPF guidance framework to make sure the framework could provide the guidance to meet new expectations for the profession and enable practitioners to be courageous and forward-looking in their work.[2] The current IPPF, implemented in 2015, is the result of the work of this task force.

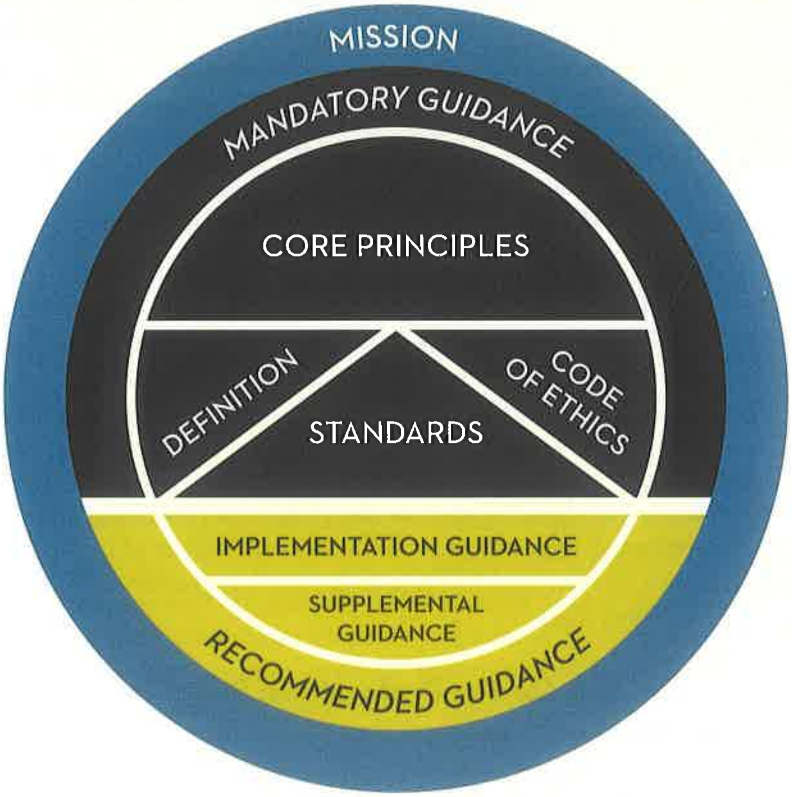
THE INTERNATIONAL PROFESSIONAL PRACTICES FRAMEWORK

The IIA's depiction of the IPPF components is presented in exhibit 2-1. The IPPF is the only globally recognized guidance for the internal audit profession and contains what are considered the essential elements for the delivery of internal audit services. These elements include the underlying fundamental principles for providing effective internal audit services, the attributes of the individual internal auditor, the characteristics of the function providing these services, the nature of internal audit activities, and associated performance criteria. Thus, the IPPF provides guidance to the profession and sets expectations for its stakeholders regarding the performance of internal audit services.

International Professional Practices Framework (IPPF)

The only globally recognized guidance for the internal audit profession.

EXHIBIT 2-1
THE INTERNATIONAL PROFESSIONAL PRACTICES FRAMEWORK



Source: www.global.theiia.org.

The components of the IPPF include both mandatory guidance (the Core Principles, the Code of Ethics, the *Standards*, and the Definition of Internal Auditing) and recommended guidance (Implementation Guidance and Supplemental Guidance). Conformance with the mandatory guidance is considered essential. This guidance is developed following a rigorous due process, including a period of public exposure. Recommended guidance describes practices supporting effective implementation of the principles found in the mandatory guidance. The IIA endorses and strongly encourages conformance with the recommended guidance, but it recognizes that there may be other, equally effective practices. While there is a formal approval for the recommended guidance, the process for developing it is less protracted and prescribed and more timely since the non-mandatory nature of this guidance makes extensive exposure for stakeholder comment less critical.

The IPPF encompasses the full range of internal audit guidance promulgated by The IIA and makes it easily accessible to internal audit professionals globally. It provides the foundation for internal audit functions to fulfill their role and effectively meet their responsibilities. The IPPF reflects the global nature of the internal audit profession and has achieved worldwide acceptance with approved translations of the Core Principles, the Definition of Internal Auditing, the Code of Ethics, and the *Standards* into more than 30 languages.

MANDATORY GUIDANCE

The mission of internal audit articulates what internal audit functions seek to achieve for the organizations they serve. Namely,

> *To enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight.*

First, the mission makes it clear that internal audit activities must be directed at increasing the organization's value (such as identification of improved process efficiencies) or at protecting it (such as identifying areas where risks are not adequately being addressed). Second, that there are three general types of activities that comprise the services internal audit provides:

- Risk-based and objective assurance,
- Risk-based and objective advice, and
- Risk-based and objective insight.

The mandatory elements of the IPPF specify the essential organizational structure, relationships, and characteristics of the work units providing internal audit services, the attributes, competencies and behavioral norms of those delivering these services, and the essential features of the services themselves and the processes used to perform them.

The Core Principles for the Professional Practice of Internal Auditing

The Core Principles articulate the key elements that describe internal audit effectiveness with respect to the aspiration set forth in the mission statement. As principles, they serve as fundamental propositions that form the basis for the Code of Ethics and the *Standards* as well as the other guidance that make up the IPPF. The 10 Core Principles are presented in exhibit 2-2.

In some cases, the Principles apply to the individual audit professional (Demonstrates integrity), in others they apply to the audit function (Aligns with the strategies, objectives, and risks of the organization), and in yet others they apply to both (Demonstrates competence and due professional care). Taken as a whole, the Principles articulate internal audit effectiveness. While how a particular internal audit function demonstrates achievement of these Principles may vary considerably from organization to organization, for the internal audit function to be considered effective, each of the Principles needs to be present and successfully operating. Failure to achieve any of the Principles implies that the audit function was not as effective in achieving its mission as it could be.

EXHIBIT 2-2
CORE PRINCIPLES FOR THE PROFESSIONAL PRACTICE OF INTERNAL AUDITING

- Demonstrates integrity.
- Demonstrates competence and due professional care.
- Is objective and free from undue influence (independent).
- Aligns with the strategies, objectives, and risks of the organization.
- Is appropriately positioned and adequately resourced.
- Demonstrates quality and continuous improvement.
- Communicates effectively.
- Provides risk-based assurance.
- Is insightful, proactive, and future-focused.
- Promotes organizational improvement.

The Definition

The IPPF provides the following Definition of Internal Auditing:

> *Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.*

The definition differs from the mission statement in that the mission statement states what the profession and the internal audit function strives to achieve whereas the definition describes what internal audit is. As in the mission, the definition recognizes that the ultimate goal of the internal audit profession as a whole, and individual internal audit functions in particular, is to add value to the organization by providing assurance and consulting services. Specifically, these services provide value through the evaluation and improvement of the effectiveness of the organization's risk management, control, and governance processes. Of course, adding value is not an option in most organizations. Management expects and demands all functions in the organization to create visible value. By explicitly stating that the internal audit function is "designed to add value and improve" these processes, the definition underscores the profession's commitment to serving the needs of the organization.

However, because the nature of internal audit services is such that they do not impact the organization's bottom line as directly as the activities of other organizational functions, it is important for internal auditors to be able to clearly articulate to management and other stakeholders how the internal audit function adds value. As discussed in chapter 1, to help explain this, The IIA has developed an illustration to convey the internal audit value proposition (exhibit 1-1). This illustration succinctly depicts how the concepts contained in the definition combine to create value.

The definition's reference to independence and objectivity and the systematic, disciplined approach provides the foundation for performing internal audit services. These elements are discussed further in the remaining components of the IPPF.

The Code of Ethics

The purpose of the Code of Ethics is to promote an ethical culture in the internal audit profession. The Code of Ethics consists of two components: the Principles of the Code (not to be confused with the 10 Core Principles, although there is overlap) and the Rules of Conduct. These two components go beyond the Definition of Internal Auditing by expanding upon the necessary attributes and behaviors of the individuals providing internal audit services.

The Principles of the Code express the four ideals internal audit professionals should aspire to maintain in conducting their work and represent the core values that internal auditors must uphold to earn the trust of those who rely on their services. The Rules of Conduct describe 12 behavioral norms that internal auditors should follow to put the Principles into practice. While some might have differing views about how specific engagements are carried out or whether internal audit services are better provided by external providers or an internal function, it is hard to imagine there is anyone who would not want internal audit professionals to follow these four Principles of the Code and 12 Rules of Conduct as presented and discussed below.

Integrity

The integrity of internal auditors establishes trust and thus provides the basis for reliance on their judgment.

Integrity. According to the Code of Ethics, "The integrity of internal auditors establishes trust and thus provides the basis for reliance on their judgment."

The Rules of Conduct associated with the integrity principle state that "Internal auditors:

1.1. Shall perform their work with honesty, diligence, and responsibility.

1.2. Shall observe the law and make disclosures expected by the law and the profession.

1.3. Shall not knowingly be a party to any illegal activity, or engage in acts that are discreditable to the profession of internal auditing or to the organization.

1.4. Shall respect and contribute to the legitimate and ethical objectives of the organization."

Integrity is the "price of admission" for internal auditors. It is so fundamental that, without it, an individual cannot serve as an internal audit professional. For example, how could a stakeholder rely on an internal audit report that contains intentionally false or deceptive statements? Or, would stakeholders be comfortable if an internal auditor was fired from a previous job for committing fraud? Internal auditors must model the ethical values of the organization to gain the trust and respect needed to fulfill their professional responsibilities.

Objectivity. According to the Code of Ethics, "Internal auditors exhibit the highest level of professional objectivity in gathering, evaluating, and communicating information about the activity or process being examined. Internal auditors make a balanced assessment of all the relevant circumstances and are not unduly influenced by their own interests or by others in forming judgments."

The Rules of Conduct associated with the objectivity principle state that "Internal auditors:

2.1. Shall not participate in any activity or relationship that may impair or be presumed to impair their unbiased assessment. This participation includes those activities or relationships that may be in conflict with the interests of the organization.

2.2. Shall not accept anything that may impair or be presumed to impair their professional judgment.

2.3. Shall disclose all material facts known to them that, if not disclosed, may distort the reporting of activities under review."

Objectivity is a fundamental attribute of internal auditing. In performing their work, internal auditors must be aware of potential threats to their objectivity, such as personal relationships or conflicts of interest. For example, accepting gifts from auditees, auditing an operation in which their spouse works, or agreeing with the divisional manager to transfer to the division at the end of the audit would be perceived as impairing an internal auditor's objectivity. Moreover, internal auditors must be objective in their communications and avoid misleading language. For example, it is inappropriate to state that inventory controls were at the same level of effectiveness as in the last audit but neglect to point out that such controls were assessed as unsatisfactory at that time.

Confidentiality. The Code of Ethics also requires that "Internal auditors respect the value and ownership of information they receive and do not disclose information without appropriate authority unless there is a legal or professional obligation to do so."

The Rules of Conduct associated with the confidentiality principle state that "Internal auditors:

3.1. Shall be prudent in the use and protection of information acquired in the course of their duties.

3.2. Shall not use information for any personal gain or in any manner that would be contrary to the law or detrimental to the legitimate and ethical objectives of the organization."

Confidentiality

Internal auditors respect the value and ownership of information they receive and do not disclose information without appropriate authority unless there is a legal or professional obligation to do so.

In providing internal audit services, the internal auditor needs unrestricted access to all relevant data. To grant such access, management must have confidence that the internal auditor will not inappropriately disclose or use data in such a manner that harms the organization, violates laws or regulations, or results in personal gain. Similarly, internal auditors must protect data within their possession to ensure confidential information is not inadvertently disclosed to inappropriate parties. For instance, passwords, encryption, and other security measures should be used when carrying personally identifiable information on a laptop. Likewise, an internal auditor who is aware of material nonpublic information cannot disclose it to outsiders or use it for personal gain (such as insider trading).

Competency. Finally, the Code of Ethics requires that "Internal auditors apply the knowledge, skills, and experience needed in the performance of internal audit services."

The Rules of Conduct associated with the competency principle state that "Internal auditors:

4.1. Shall engage only in those services for which they have the necessary knowledge, skills, and experience.

4.2. Shall perform internal audit services in accordance with the *International Standards for the Professional Practice of Internal Auditing.*

4.3. Shall continually improve their proficiency and the effectiveness and quality of their services."

Competency

Internal auditors apply the knowledge, skills, and experience needed in the performance of internal audit services.

Internal audit services can be performed by people who have integrity, are objective, and maintain confidentiality, but those services are of little value if such persons do not have the necessary knowledge and skills to perform the work and reach valid conclusions. That is why there are specific standards requiring internal auditors to be competent and continuously strive for improvement.

The Code of Ethics applies to all individuals and entities that provide internal audit services, not just those who are IIA members or hold IIA certifications. However, The IIA is only able to exercise enforcement over IIA members and recipients of, or candidates for, IIA professional certifications. Breaches of the Code of Ethics by those in the purview of The IIA can result in censure, suspension of membership and/or certifications, and expulsion and/or revocation of certification. It should also be noted that conduct need not be explicitly mentioned in the Rules of Conduct for it to be considered unacceptable or discreditable and thus subject to disciplinary action.

The *International Standards for the Professional Practice of Internal Auditing*

The Core Principles of internal auditing are embodied in The IIA's *Standards*. The introduction to the *Standards* recognizes that "Internal auditing is conducted in diverse legal and cultural environments; for organizations that vary in purpose, size, complexity, and structure; and by persons within or outside the organization." While the differences that exist among organizations may affect the practice of internal auditing, "conformance with [the *Standards*] is essential in meeting the responsibilities of internal auditors and the internal audit activity."

The *Standards*

Principles-focused, mandatory requirements consisting of Statements and Interpretations.

The Introduction to the *Standards* further points out that "The *Standards* apply to individual internal auditors and internal audit activities." Each internal auditor is accountable for conforming with the *Standards* related to individual objectivity, proficiency, and due professional care. In addition, each internal auditor is accountable for conforming with the *Standards* that are relevant to the performance of his or her job responsibilities. The CAE is "accountable for the internal audit activity's overall conformance with the *Standards*."

"The purpose of the *Standards* is to:

1. Guide adherence with the mandatory elements of the International Professional Practices Framework.
2. Provide a framework for performing and promoting a broad range of value-added internal auditing.
3. Establish the basis for the evaluation of internal audit performance.
4. Foster improved organizational processes and operations."

"The *Standards* are a set of principles-focused, mandatory requirements consisting of:

- *Statements* of core requirements for the professional practice of internal auditing and for evaluating the effectiveness of performance that are internationally applicable at organizational and individual levels [italics added].
- *Interpretations*, clarifying terms or concepts within the *Standards* [italics added]."

For example, in Standard 2040: Policies and Procedures the *standard* is: "The chief audit executive must establish policies and procedures to guide the internal audit activity." The *interpretation* is: "The form and content of policies and procedures are dependent upon the size and structure of the internal audit activity and the complexity of its work." In this case, the interpretation explains that the appropriate form and content of policies and procedures will vary across internal audit functions because of size, organizational structure, and types of services provided.

The *Standards* includes a Glossary of terms that have been given specific meanings. The *Standards*, their interpretations, and terms defined in the Glossary must be considered together to understand and apply the *Standards* correctly. The *Standards* is reproduced in its entirety in appendix A of this textbook.

There are two categories of *Standards*:

- **Attribute Standards** "address the attributes of organizations and individuals performing internal auditing."
- **Performance Standards** "describe the nature of internal auditing and provide quality criteria against which the performance of these services can be measured."

Implementation Standards ". . . expand upon the Attribute and Performance Standards by providing the requirements applicable to assurance . . . or consulting . . . activities," which is why they are not considered a third category of Standards. (Introduction to the *International Standards*)

Two Categories of *Standards*

– Attribute Standards
– Performance Standards

The *Standards* are organized using a system of numbers and letters. Attribute Standards make up the 1000 series and Performance Standards the 2000 series. The Attribute Standards and Performance Standards apply equally to both assurance and consulting activities. The Implementation Standards are presented directly under the related Attribute and Performance Standards and are indicated by an "A" if they pertain to assurance services or by a "C" if they pertain to consulting services. This system is illustrated in exhibit 2-3.

Assurance and Consulting Services

The two types of internal audit services—assurance and consulting—were introduced in chapter 1 and defined in the Glossary to the *Standards* as follows:

Assurance Services. An objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization. Examples may include financial, performance, compliance, system security, and due diligence engagements.

Consulting Services. Advisory and related [customer] service activities, the nature and scope of which are agreed with the [customer], are intended to add value and improve an organization's governance, risk management, and control processes without the internal auditor assuming management responsibility. Examples include counsel, advice, facilitation, and training.

EXHIBIT 2-3
ILLUSTRATION OF THE NUMBERING SYSTEM USED IN THE *STANDARDS*

1220 – Due Professional Care

Internal auditors must apply the care and skill expected of a reasonably prudent and competent internal auditor. Due professional care does not imply infallibility.

1220.A3 – Internal auditors must be alert to the significant risks that might affect objectives, operations, or resources. However, assurance procedures alone, even when performed with due professional care, do not guarantee that all significant risks will be identified.

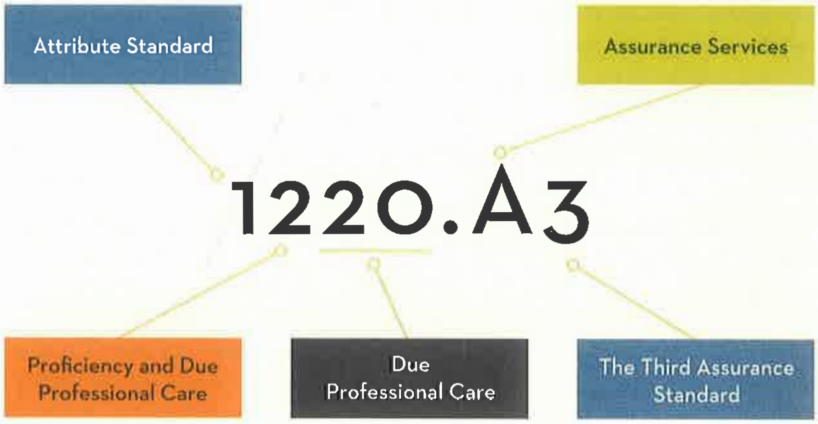
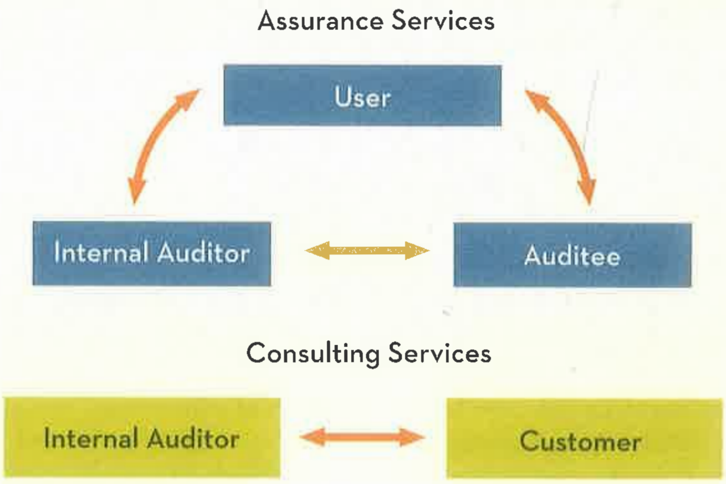

Attribute Standard
Assurance Services
1220.A3
Proficiency and Due Professional Care
Due Professional Care
The Third Assurance Standard

EXHIBIT 2-4
ASSURANCE AND CONSULTING SERVICES



The difference in purpose between these two types of services is clear. Assurance engagements are performed to provide independent assessments. Consulting engagements are performed to provide advisory, training, and facilitation services.

The structural difference between assurance and consulting engagements is not as obvious and is illustrated in exhibit 2-4. The structure of consulting engagements is relatively simple. They typically involve two parties: 1) the party requesting and receiving the advice—the customer, and 2) the party providing the advice—the internal audit function. The internal audit function works directly with the customer to tailor the engagement to meet the customer's needs. The structure of assurance engagements is more complex. They typically involve three parties: 1) the party directly responsible for the process, system, or other subject matter being assessed—the auditee, 2) the party making the assessment—the internal audit function, and 3) the party/parties using the assessment—the user(s). The users of the internal audit function's assessment are not involved directly in the engagement and in some cases are not identified explicitly.

The relative complexity of assurance engagements is reflected in the *Standards*. The internal audit function must plan and perform an assurance engagement and report the engagement results in a manner that meets the needs of the third-party users who are not involved directly in the engagement. Moreover, the internal audit function must take care to avoid any potential conflicts of interest with these users. Many of the attributes and practices required by the *Standards* and Code of Ethics are particularly concerned with keeping the interests of assurance service providers and the third-party users aligned. Accordingly, the Implementation Standards for assurance services are more stringent and numerous than the Implementation Standards for consulting services.

While the *Standards* treats each engagement as either an assurance or a consulting engagement, practice engagements usually have elements of both assurance and operational improvement. The Value Proposition (exhibit 1-1 from chapter 1) can be applied at the function or the engagement level. At the engagement level, value comes from objective assurance and objective insight. Some engagements are designed primarily to provide assurance, although they may also generate insight as well through recommendations and advice for management. Likewise, while consulting engagements are designed primarily to generate insight into an operation or process, they may provide at least limited assurance regarding the effectiveness of managing risks in that area. In terms of which set of Implementation Standards apply to an engagement, if the primary objective is assurance, then the Assurance Implementation Standards would apply. If the primary objective of the engagement is insight (that is, improvement of the organization's effectiveness and efficiency), the Consulting Implementation Standards would apply with the understanding that a lower level of assurance is obtained from the engagement when the Assurance Implementation Standards have not been followed. Engagements are sometimes structured such that there are both significant assurance and insight objectives. Such engagements are referred to as blended engagements. The issues involved in structuring blended engagements are discussed further in chapter 15, "The Consulting Engagement."

Coverage of the Implementation Standards is integrated in the following discussion of Attribute Standards and Performance Standards.

The Attribute Standards

The Attribute Standards, which address the characteristics that the internal audit function and individual internal auditors must possess to perform effective assurance and consulting services, are divided into four main sections:

1000 – Purpose, Authority, and Responsibility
1100 – Independence and Objectivity
1200 – Proficiency and Due Professional Care
1300 – Quality Assurance and Improvement Program

Purpose, Authority, and Responsibility. The internal audit function must have a charter that clearly states the function's purpose, authority, and responsibilities and specifies the nature of the assurance and consulting services the function provides. The charter must be consistent with the Mission of Internal Audit. It also must acknowledge the internal audit function's responsibility to adhere to the Core Principles, the Definition of Internal Auditing, the Code of Ethics, and the *Standards*. Such information may be documented in the form of a service contract when internal audit services are outsourced to a third-party service provider. The CAE "must periodically review the internal audit charter and present it to senior management and the board for approval" (Standard 1000: Purpose, Authority, and Responsibility). Final approval of the charter is the responsibility of the board. More information about the internal audit charter is presented in chapter 9, "Managing the Internal Audit Function."

Independence

The freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner.

Objectivity

An unbiased mental attitude.

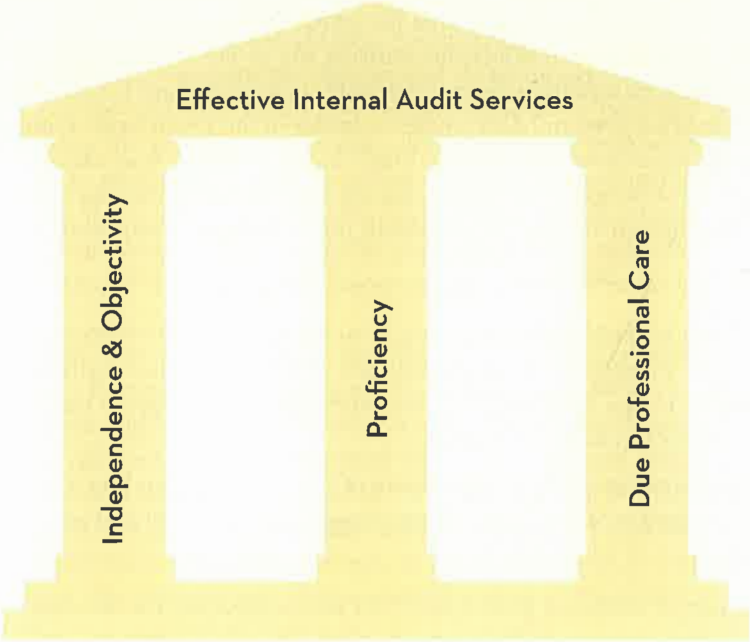
Independence and Objectivity. "The internal audit [function] must be independent, and internal auditors must be objective in performing their work" (Standard 1100: Independence and Objectivity). The Glossary to the *Standards* defines independence and objectivity as follows:

> **Independence.** The freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner.
>
> **Objectivity.** An unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they believe in their work product and that no quality compromises are made. Objectivity requires that internal auditors do not subordinate their judgment on audit matters to others.

It is important to note that independence and objectivity are two distinct, yet interrelated, concepts that are fundamental to providing value-adding internal audit services—the internal audit function must be independent and individual internal auditors must be objective. Whereas independence is an attribute of the internal audit function, objectivity is an attribute of the individual auditor. This is a subtle, yet extremely important, distinction.

The extent to which an internal function can be independent depends on the relative status of the function within the organization. Standard 1110: Organizational Independence states that "The chief audit executive must report to a level within the organization that allows the internal audit [function] to fulfill its responsibilities . . . and confirm to the board, at least annually, the organizational independence of the internal audit [function]." Standard 1111: Direct Interaction with the Board requires the CAE to "communicate and interact directly with the board." Positioning the internal audit function at a high level within the organization facilitates broad audit coverage and promotes due consideration of engagement outcomes. Conversely, positioning the internal audit function lower within the organization greatly increases the risk of conflicts of interest that impair the function's ability to provide objective assessments and advice. For example, it would be difficult for an internal audit function to assess objectively the controls over financial reporting if the CAE reports to the controller who is responsible for the design adequacy and operating effectiveness of those controls.

EXHIBIT 2-5
THE THREE PILLARS OF EFFECTIVE INTERNAL AUDIT SERVICES



As shown in exhibit 2-5, independence and objectivity is one of three pillars supporting effective internal audit services. Organizational independence of the internal audit function facilitates the objectivity of individual auditors. Objectivity is a state of mind and is defined as freedom from bias. It involves the use of facts without distortions by personal feelings or prejudices.[3] In an applied sense, it would mean that two people with the same level of expertise and facing the same facts and circumstances will come to similar conclusions.

Conflicts of interest impair independence and objectivity. A conflict of interest is "a situation in which an internal auditor, who is in a position of trust, has a competing professional or personal interest" (Interpretation of Standard 1120: Individual Objectivity). Potential conflicts of interest often arise as a result of naturally occurring events, such as:

- A senior manager from another area of the organization is asked to be the CAE.
- An employee moves into the internal audit function from another area of the organization or rotates through the internal audit function as part of his or her training regimen.

- An internal auditor with specialized accounting expertise is asked to assume a temporary accounting position.
- An internal auditor with management experience is asked to fill a vacated management position while the organization searches for a suitable replacement.
- An internal auditor is asked to design control policies and procedures in an area of the organization that does not have the requisite expertise to address existing control deficiencies.
- The CAE manages functions in addition to internal audit, such as risk management, information security, or compliance.

Task-related threats to independence and objectivity arise from the nature of the work itself. For example, an individual who recently joined the internal audit function might be asked to audit the area for which they were previously responsible. This individual would, in effect, be auditing his or her own work. Objectivity is threatened in such situations because people sometimes have trouble recognizing or acknowledging personal deficiencies or errors in their own work. Human beings exhibit an unconscious "self-serving bias" that is a cognitive weakness. Research has shown, for example, that people are not as good at identifying weaknesses in systems they design as they are in identifying weaknesses in systems designed by others.[4]

Independence and objectivity also can be undermined by incentives and personal relationships. *Incentives* involve conditions in which internal auditors have economic stakes in the outcomes of their work that could impair their judgment. Examples of such conditions include:

Conflict of Interest

Any relationship that is, or appears to be, not in the best interest of the organization.

- The auditee's management promises to offer the internal auditor a job or support a promotion of the auditor if the engagement goes well and no problems are found.
- A manager or employee gives a gift to, or does a favor for, the internal auditor, thus placing pressure on the internal auditor to reciprocate.
- The internal audit function's compensation structure awards bonuses based on the number of observations internal auditors include in their reports.

Personal relationships cause conflicts of interest when internal auditors perform engagements in areas of the organization in which relatives or close friends work as managers or employees. Such relationships may tempt internal auditors to overlook problems or soften negative conclusions.

The CAE is responsible for guarding the internal audit function against potential conflicts of interest. Standard 1130.A1 states that "Internal auditors must refrain from assessing specific operations for which they were previously responsible. Objectivity is presumed to be impaired if an internal auditor provides assurance services for an activity for which the internal auditor had responsibility within the previous year." Standard 1130.A2 states that "Assurance engagements for functions over which the chief audit executive has responsibility must be overseen by a party outside the internal audit [function]."

The standards pertaining to consulting services are not as stringent. Standard 1130.C1 states that "Internal auditors may provide consulting services relating to operations for which they had previous responsibilities." Per Standard 1130.C2, they must, however, disclose potential impairments to independence or objectivity to the prospective customer before accepting a consulting engagement.

Impairment of independence or objectivity, in fact or appearance, may be unavoidable in certain circumstances. Standard 1130: Impairment to Independence or Objectivity indicates that, in such instances, the CAE must disclose the details of the impairment to appropriate parties. To whom the details of the impairment should be reported depends on the nature of the impairment and the CAE's responsibilities to senior management and the board as covered in the internal audit charter. This prevents the users of internal audit services from unknowingly placing unwarranted confidence in the internal audit function's work products and allows the users to determine for themselves the extent to which they want to rely on the work of the internal audit function.

Proficiency and Due Professional Care. As illustrated in exhibit 2-5, proficiency and due professional care are the second and third pillars supporting effective internal audit services. Assurance and consulting services provided by internal auditors lacking the requisite knowledge, skills, and other competencies (that is, proficiencies) to perform the work or failing to apply the care and skills required will be of little, if any, value. Thus, the *Standards* requires that internal audit functions and individual auditors possess the knowledge, skills, and other competencies needed to fulfill their responsibilities and apply due professional care.

Proficiency

The knowledge, skills, and other competencies needed to fulfill internal audit responsibilities.

Due Professional Care

The care and skill expected of a reasonably prudent and competent internal auditor.

The *Standards* does not mandate a specific set of knowledge, skills, and other competencies. Recommended guidance regarding proficiency is provided in Implementation Guide 1210/Proficiency. Specifically, the Implementation Guide suggests that to conform with Standard 1210, the CAE and internal auditors should review core competencies needed for internal audit professionals at various levels such as staff, management, and CAE, which are defined in The IIA's Global Internal Audit Competency Framework. Exhibit 2-6 lays out the 10 Core Competencies. The Competency Framework structure is presented in exhibit 1-7 and is further discussed in chapter 1.

EXHIBIT 2-6
THE IIA GLOBAL INTERNAL AUDIT COMPETENCY FRAMEWORK - 10 CORE COMPETENCIES

I. **Professional Ethics: Promotes and applies professional ethics**

a) Foster the ethical climate of the organization

II. **Internal Audit Management: Develops and manages the internal audit function**

a) Advocate internal audit and its value

b) Risk-based audit plan

c) Manage internal audit resources

d) Foster the professional growth of others

III. **IPPF: Applies the International Professional Practices Framework (IPPF)**

a) Exemplifies quality and continuous improvement of the internal audit activity

(continued next page)

EXHIBIT 2-6 THE IIA GLOBAL INTERNAL AUDIT COMPETENCY FRAMEWORK – 10 CORE COMPETENCIES (cont'd)

IV. Governance, Risk, and Control: Applies a thorough understanding of governance, risk, and control appropriate to the organization

a) Apply the governance, risk, and control frameworks in audit activities

b) Support a culture of fraud risk awareness at all levels of the organization

V. Business Acumen: Maintains expertise of the business environment, industry practices, and specific organizational factors

a) Understand the organization's business risks and related internal control activities

b) Understand the strategic risks to the organization's control environment and governance processes

c) Understand the risks of macro and micro economic factors on the organization's industry

VI. Communication: Communicates with impact

a) Use effective verbal communication skills

b) Use effective written communication skills

VII. Persuasion and Collaboration: Persuades and motivates others through collaboration and cooperation

a) Collaborate with others to remove organizational barriers

b) Utilize techniques to persuade and reach consensus

c) Demonstrate effective leadership to achieve desired results

VIII. Critical Thinking: Applies process analysis, business intelligence, and problem-solving techniques

a) Select and use tools and techniques to obtain relevant data/information

b) Select and use research, business intelligence, and problem-solving techniques to analyze and solve complex situations

c) Assist management in identifying practical solutions to address issues

IX. Internal Audit Delivery: Delivers internal audit engagements

a) Perform effective planning to ensure a quality audit engagement

b) Perform effective fieldwork to ensure a quality audit engagement

c) Effectively document and organize audit evidence to support the audit engagement results

d) Identify the root causes of issues in the audit engagement

e) Organize, adapt, and effectively express audit findings

f) Establish a follow-up process to monitor completion of management actions

X. Improvement and Innovation: Embraces change and drives improvement and innovation

a) Support an environment that embraces change across the organization

b) Create and support an environment that embraces change within the internal audit activity

c) Pursue personal and professional development goals

Source: The IIA's *Global Internal Audit Competency Framework* (Lake Mary, FL: The Institute of Internal Auditors, 2014).

One specific competency that is required by the *Standards* is knowledge of fraud risks. Standard 1210.A2 states that "Internal auditors must have sufficient knowledge to evaluate the risk of fraud and the manner in which it is managed by the organization . . . " They are not expected, however, "to have the expertise of a person whose primary responsibility is detecting and investigating fraud." Chapter 8, "Risk of Fraud and Illegal Acts," covers the nature of fraud risks and the controls that organizations can put in place to mitigate these risks in detail.

Likewise, Standard 1210.A3 states that "Internal auditors must have sufficient knowledge of key information technology risks and controls and available technology-based audit techniques to perform their assigned work." However, every internal auditor need not possess "the expertise of an internal auditor whose primary responsibility is information technology auditing." Chapter 7, "Information Technology Risks and Controls," covers the nature of IT risks and the controls that organizations can implement to mitigate these risks in detail. Chapter 10, "Audit Evidence and Working Papers," provides an overview of computer-assisted audit techniques. The website that accompanies this textbook contains access to and instructions for ACL, CaseWare IDEA, and TeamMate Analytics, the three most widely used commercially available audit software programs.

Proficiency applies to the internal audit function as a whole as well as to the individual internal auditor. The CAE is responsible for ensuring that the internal audit function possesses the knowledge, skills, and other competencies required to fulfill the function's responsibilities as specified in its charter. In cases in which the function lacks competencies required to perform all or part of an assurance engagement, the CAE "must obtain competent advice and assistance" from other sources (Standard 1210.A1). Chapter 9 discusses how such advice and assistance may be obtained from outside service providers. When the internal audit function is asked to perform a consulting engagement for which the internal audit function does not possess the necessary competencies, the CAE "must either decline the consulting engagement or obtain competent advice and assistance" (Standard 1210.C1).

Standard 1220: Due Professional Care requires internal auditors to "apply the care and skill expected of a reasonably prudent and competent internal auditor." This does not mean that internal auditors can never make mistakes or imperfect judgments, but rather that they will demonstrate the level of concern and competence expected of a professional. Due care also does not mean that internal auditors will examine every transaction, visit every location, or speak with every employee of the engagement auditee or customer. It does, however, mean that they will put forth the same level of effort as other internal audit professionals would in similar situations.

The *Standards* prescribe what needs to be considered in determining the appropriate level of care for assurance and consulting engagements. Standard 1220.A1 indicates that internal auditors must consider the following for assurance engagements: "the

- Extent of work needed to achieve the engagement's objectives;
- Relative complexity, materiality, or significance of matters to which assurance procedures are applied;
- Adequacy and effectiveness of governance, risk management, and control processes;

- Probability of significant errors, fraud, or noncompliance; and
- Cost of assurance in relation to potential benefits."

Internal auditors also must consider "the use of technology-based audit and other data analysis techniques" (Standard 1220.A2) and "be alert to the significant risks that might affect objectives, operations, or resources" (Standard 1220.A3).

Standard 1220.C1 indicates that internal auditors must consider the following for consulting engagements: "the

- Needs and expectations of [customers], including the nature, timing, and communication of engagement results;
- Relative complexity and extent of work needed to achieve the engagement's objectives; and
- Cost of the consulting engagement in relation to potential benefits."

Certifications Sponsored by The IIA:

- Certified Internal Auditor (CIA)
- Certified Government Auditing Professional (CGAP)
- Certified Financial Services Auditor (CFSA)
- Certification in Control Self-Assessment (CCSA)
- Certification in Risk Management Assurance (CRMA)
- Qualification in Internal Audit Leadership (QIAL)

Standard 1230: Continuing Professional Development states that "Internal auditors must enhance their knowledge, skills, and other competencies through continuing professional development." Individuals aspiring to become internal auditors and internal auditors who have not yet achieved professional certification should pursue education, training, and experience programs that qualify them to obtain one or more certifications relevant to their professional responsibilities. As discussed in chapter 1, certifications sponsored by The IIA include the Certified Internal Auditor (CIA), Certified Government Auditing Professional (CGAP), Certified Financial Services Auditor (CFSA), the Certification in Control Self-Assessment (CCSA), the Certification in Risk Management Assurance (CRMA), and the Qualification in Internal Audit Leadership (QIAL). Other professional organizations also sponsor certifications that internal audit professionals may find worthwhile to pursue. Examples include the Certified Information Systems Auditor (CISA) certification sponsored by ISACA (previously known as the Information Systems Audit and Control Association) and the Certified Fraud Examiner (CFE) certification sponsored by the Association of Certified Fraud Examiners (ACFE). Internal auditors possessing professional certifications need to meet specified continuing professional education requirements to retain their certifications. This standard complements rule 4.3 of The IIA's Code of Ethics, which requires internal auditors to continually improve their proficiency and the effectiveness and quality of their services.

Quality Assurance

Instills confidence that the product or service possesses the essential features and characteristics it is intended to have.

Quality Assurance and Improvement Programs. The basic concept of quality assurance for internal audit services is the same as it is for the manufacturing of products or the delivery of other types of services. Quality assurance instills confidence that the product or service possesses the essential features and characteristics it is intended to have. For example, quality assurance associated with manufacturing a particular metal bolt would focus on ensuring that the bolt is made in accordance with the prescribed engineering specifications. In a similar vein, an internal audit function's quality assurance and improvement program "is designed to enable an evaluation of the internal audit [function's] conformance with the *Standards* and an evaluation of whether internal auditors apply the Code of Ethics. The program also assesses the efficiency and effectiveness of the internal audit [function] and identifies opportunities for improvement" (Interpretation to Standard 1300: Quality Assurance and Improvement Program).

EXHIBIT 2-7 FRAMEWORK FOR QUALITY ASSURANCE PROGRAM DESIGN

HIERARCHY OF QUALITY ASSURANCE ELEMENTS

Control Element	Control Objective	Source	Assurance Level
Professionalism (Due Care)	Individual Auditor's Work	Individual	Individual Auditor
Ongoing Monitoring/ Supervisory Review	Engagement	Supervisor *Within* Line of Responsibility	Audit Function Management
Internal Assessment	Aggregate of Engagements or Divisional Offices or Autonomous Audit Units	Supervisor/Peer *Outside* Line of Responsibility	CAE
External Assessment	Audit Function as a Whole	Qualified Persons From Outside the Organization	Audit Committee and Senior Management

"The chief audit executive must develop and maintain a quality assurance and improvement program that covers all aspects of the internal audit [function]" (Standard 1300: Quality Assurance and Improvement Program). The CAE also "must communicate the results of the quality assurance and improvement program to senior management and the board" (Standard 1320: Reporting on the Quality Assurance and Improvement Program) and may state that the internal audit function conforms with the *Standards* "only if supported by the results of the quality assurance and improvement program" (Standard 1321: Use of "Conforms with the *International Standards for the Professional Practice of Internal Auditing*"). "When nonconformance with the Code of Ethics or the *Standards* impacts the overall scope or operation of the internal audit [function], the chief audit executive must disclose the nonconformance and the impact to senior management and the board" (Standard 1322: Disclosure of Nonconformance).

Standard 1310: Requirements of the Quality Assurance and Improvement Program states that "The quality assurance and improvement program must include both internal and external assessments." "Internal assessments must include:

- Ongoing monitoring of the performance of the internal audit [function]; and
- Periodic self-assessment or assessments by other persons within the organization with sufficient knowledge of internal audit practices" (Standard 1311: Internal Assessments).

"External assessments must be conducted at least once every five years by a qualified, independent assessor or assessment team from outside the organization. The chief audit executive must discuss with the board:

- The form and frequency of external assessment; and
- The qualifications and independence of the external assessor or assessment team, including any potential conflict of interest" (Standard 1312: External Assessments).

Exhibit 2-7 provides a framework for designing a quality assurance program, which includes an underlying principle of substitutability. Quality assurance elements can be substituted for those higher in the hierarchy if specific independence conditions are met. For example, an internal assessment may be conducted in lieu of an external assessment if the assessors are independent (that is, outside the line of authority and responsibility of the work they are assessing). Large internal audit functions with several decentralized internal audit units (for example, an Asian office, a North and South American office, and a European office) may internally assess the work performed by internal auditors on individual assurance and consulting engagements. In such situations, external assessors may focus on the internal audit function's quality assurance process, organizational independence, risk assessment process, and relationships with the audit committee and senior management. Conversely, assessments of individual assurance and consulting engagements conducted by small, centralized internal audit functions must be performed by qualified external assessors.

Chapter 9 provides more details regarding the implementation of quality assurance and improvement programs. Further guidance for conducting internal and external reviews can be found in The IIA's *Quality Assessment Manual*.

The Performance Standards

The Performance Standards, which describe the nature of internal audit services and the criteria against which the performance of these services can be assessed, are divided into seven main sections:

2000 – Managing the Internal Audit Activity
2100 – Nature of Work
2200 – Engagement Planning
2300 – Performing the Engagement
2400 – Communicating Results
2500 – Monitoring Progress
2600 – Communicating the Acceptance of Risks

Managing the Internal Audit Activity. Standard 2000 indicates that the CAE is responsible for managing the internal audit function (referred to throughout the *Standards* as the internal audit activity) and ensuring that the function adds value to the organization. Even when an organization outsources the internal audit function to an outside service provider, the organization must have someone in-house who is responsible for approving the service contract, overseeing the quality of the service provider's work, arranging for reporting assurance and consulting engagement outcomes to senior management and the board, and tracking engagement results and observations. In many cases, this person functions as a CAE. However, when this person has conflicting responsibilities or the outsourced function is managed by the board, the external service provider has the additional responsibility of making "the organization aware that the organization has the responsibility for maintaining an effective internal audit activity" (Standard 2070: External Service Provider and Organizational Responsibility for Internal Auditing). The interpretation of this standard goes on to say that "This responsibility is demonstrated through the quality assurance and improvement program which assesses conformance with the Code of Ethics and the *Standards*."

The interpretation to Standard 2000 states that "The internal audit activity is effectively managed when:

- It achieves the purpose and responsibility included in the internal audit charter.
- It conforms with the *Standards*.
- Its individual members conform with the Code of Ethics and the *Standards*.
- It considers trends and emerging issues that could impact the organization."

Subsequent standards go on to indicate that, to meet his or her management responsibilities, the CAE must:

- ". . . establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals" (Standard 2010: Planning).
- ". . . communicate the internal audit activity's plans and resource requirements, including significant interim changes, to senior management and the board for review and approval." The CAE "must also communicate the impact of resource limitations" (Standard 2020: Communication and Approval).
- ". . . ensure that internal audit resources are appropriate, sufficient, and effectively deployed to achieve the approved plan" (Standard 2030: Resource Management).
- ". . . establish policies and procedures to guide the internal audit activity" (Standard 2040: Policies and Procedures).
- " . . . share information, coordinate activities, and consider relying upon the work of other internal and external assurance and consulting service providers to ensure proper coverage and minimize duplication of efforts" (Standard 2050: Coordination).
- ". . . report periodically to senior management and the board on the internal audit activity's purpose, authority, responsibility, and performance relative to its plan and on its conformance with the Code of Ethics and the *Standards*." The CAE also must report "significant risk and control issues, including fraud risks, governance issues, and other matters that require the attention of senior management and/or the board" (Standard 2060: Reporting to Senior Management and the Board).

These responsibilities of the CAE are discussed further in chapter 9.

Nature of Work. Standard 2100: Nature of Work is consistent with the Definition of Internal Auditing discussed earlier in this chapter. It states that "The internal audit activity must evaluate and contribute to the improvement of governance, risk management, and control processes using a systematic, disciplined, and risk-based approach."

The internal audit function "must assess and make appropriate recommendations to improve the organization's governance process for:

- Making strategic and operational decisions,
- Overseeing risk management and control,
- Promoting appropriate ethics and values within the organization;
- Ensuring effective organizational performance management and accountability;
- Communicating risk and control information to appropriate areas of the organization; and
- Coordinating the activities of, and communicating information among, the board, external and internal auditors, other assurance providers, and management" (Standard 2110: Governance).

Likewise, the internal audit function "must evaluate the effectiveness and contribute to the improvement of the organization's risk management processes" (Standard 2120: Risk Management). Determining whether the organization's risk management processes are effective is based on the internal audit function's "assessment that:

- Organizational objectives support and align with the organization's mission;
- Significant risks are identified and assessed;
- Appropriate risk responses are selected that align risks with the organization's risk appetite; and
- Relevant risk information is captured and communicated in a timely manner across the organization, enabling staff, management, and the board to carry out their responsibilities" (Interpretation to Standard 2120: Risk Management).

Third, the internal audit function assists "the organization in maintaining effective controls by evaluating their effectiveness and efficiency and by promoting continuous improvement" (Standard 2130: Control).

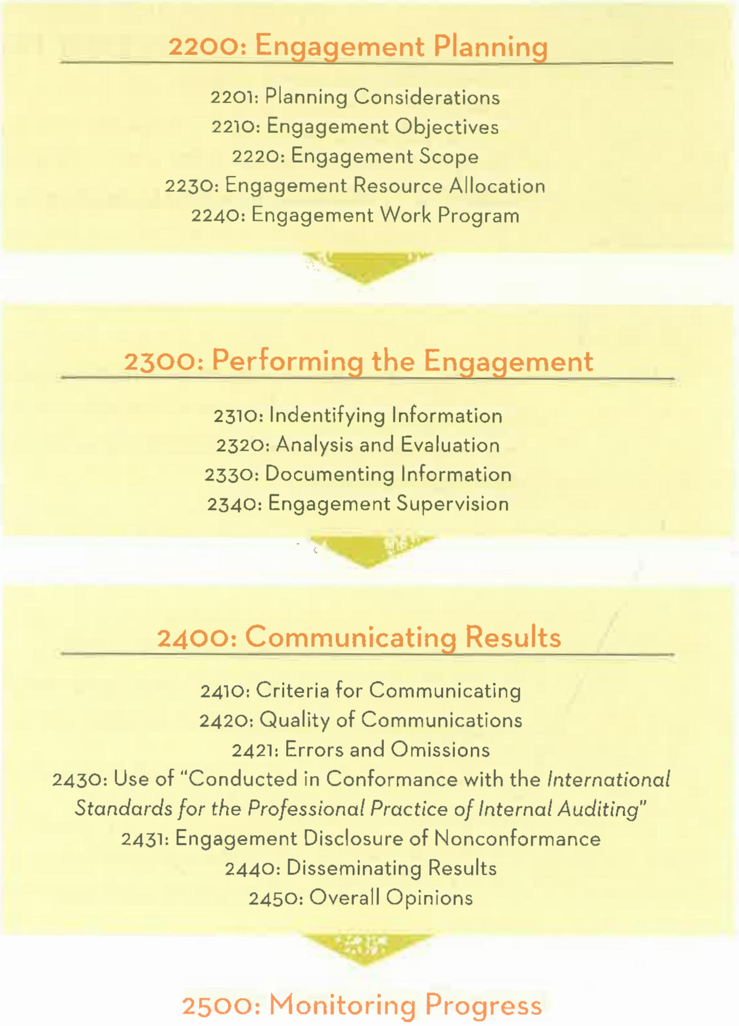
The internal audit function evaluates risk exposures and evaluates the design adequacy and operating effectiveness of controls "regarding the:

- Achievement of the organization's strategic objectives;
- Reliability and integrity of financial and operational information;
- Effectiveness and efficiency of operations and programs;
- Safeguarding of assets; and
- Compliance with laws, regulations, and contracts" (Standards 2120.A1 and 2130.A1).

Chapter 3, "Governance," chapter 4, "Risk Management," and chapter 6, "Internal Control," discuss governance, risk management, and control processes in detail and discuss the internal audit function's responsibilities for evaluating and contributing to the improvement of these processes.

The Engagement Process. The performance of internal audit engagements, whether assurance or consulting, can be divided into three phases. These engagement phases are illustrated in exhibit 2-8. The following Performance Standard sections pertain directly to the engagement process:

EXHIBIT 2-8
THE PHASES OF THE ENGAGEMENT PROCESS AND CORRESPONDING STANDARDS



2200: Engagement Planning

2201: Planning Considerations
2210: Engagement Objectives
2220: Engagement Scope
2230: Engagement Resource Allocation
2240: Engagement Work Program

2300: Performing the Engagement

2310: Indentifying Information
2320: Analysis and Evaluation
2330: Documenting Information
2340: Engagement Supervision

2400: Communicating Results

2410: Criteria for Communicating
2420: Quality of Communications
2421: Errors and Omissions
2430: Use of "Conducted in Conformance with the *International Standards for the Professional Practice of Internal Auditing*"
2431: Engagement Disclosure of Nonconformance
2440: Disseminating Results
2450: Overall Opinions

2500: Monitoring Progress

2200 – Engagement Planning
2300 – Performing the Engagement
2400 – Communicating Results
2500 – Monitoring Progress

The last two sections have been combined in the "Communicate" phase of the engagement process illustrated in exhibit 2-8. The standards pertaining specifically to the engagement process are intentionally general in nature to accommodate the varying nature of internal audit engagements.

Standard 2200: Engagement Planning states that "Internal auditors must develop and document a plan for each engagement, including the engagement's objectives, scope, timing, and resource allocations." In planning the engagement, the internal audit function "must consider:

- The strategies and objectives of the activity being reviewed and the means by which the activity controls its performance;

- The significant risks to the activity, its objectives, resources, and operations and the means by which the potential impact of risk is kept to an acceptable level;
- The adequacy and effectiveness of the activity's governance, risk management, and control processes compared to a relevant framework or model; and
- The opportunities for making significant improvements to the activity's governance, risk management, and control processes" (Standard 2201: Planning Considerations).

The following standards apply when planning the internal audit engagement:

- "Objectives must be established for each engagement" (Standard 2210: Engagement Objectives).
- "The established scope must be sufficient to achieve the objectives of the engagement" (Standard 2220: Engagement Scope).
- "Internal auditors must determine appropriate and sufficient resources to achieve engagement objectives based on an evaluation of the nature and complexity of each engagement, time constraints, and available resources" (Standard 2230: Engagement Resource Allocation).
- "Internal auditors must develop and document work programs that achieve the engagement objectives" (Standard 2240: Engagement Work Program).

Criteria for Communicating

Communications must include the engagement's objectives, scope, and results.

While performing the engagement, the internal audit function must:

- ". . . identify sufficient, reliable, relevant, and useful information to achieve the engagement's objectives" (Standard 2310: Identifying Information).
- ". . . base conclusions and engagement results on appropriate analyses and evaluations" (Standard 2320: Analysis and Evaluation).
- ". . . document sufficient, reliable, relevant, and useful information to support the engagement results and conclusions" (Standard 2330: Documenting Information).
- Make sure that the engagement is "properly supervised to ensure objectives are achieved, quality is assured, and staff is developed" (Standard 2340: Engagement Supervision).

Quality of Communications

Communications must be accurate, objective, clear, concise, constructive, complete, and timely.

For internal audit engagements to have value, their outcomes must be communicated timely to the appropriate users. It is not enough, however, for the users to receive a report. The communication must be in a form that minimizes the risk of misinterpretation. Standard 2410: Criteria for Communicating states that "Communications must include the engagement's objectives, scope and results." Standard 2420: Quality of Communications further states that "Communications must be accurate, objective, clear, concise, constructive, complete, and timely." Moreover, Standard 2421: Errors and Omissions states, "If a final communication contains a significant error or omission, the chief audit executive must communicate corrected information to all parties who received the original communication."

Internal audit functions may report that their engagements are "conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing*" only if the results of the quality assurance and improvement program support the statement (Standard 2430: Use of "Conducted in Conformance with the *International Standards for the Professional Practice of Internal Auditing*"). "When nonconformance with the Code of Ethics or the *Standards* impacts a specific engagement, communication of the results must disclose the:

- Principle(s) or rule(s) of conduct of the Code of Ethics or Standard(s) with which full conformance was not achieved;
- Reason(s) for nonconformance; and
- Impact of nonconformance on the engagement and the communicated engagement results" (Standard 2431: Engagement Disclosure of Nonconformance).

The CAE is responsible for communicating internal audit engagement results to the appropriate parties (Standard 2440: Disseminating Results) and may issue an overall opinion on the organization's governance, risk management, and/or control processes based on the results of a number of individual engagements and other activities for a specific time interval. When such an opinion is given, it must take into account the expectations of senior management, the board, and other stakeholders and must be supported by sufficient, reliable, relevant, and useful information (Standard 2450: Overall Opinions).

The CAE also has responsibility for establishing and maintaining a system to monitor the disposition of engagement results communicated (Standard 2500: Monitoring Progress). For assurance engagements, this means that the CAE must ascertain that "management actions have been effectively implemented or that senior management has accepted the risk of not taking action" (Standard 2500.A1). For consulting engagements, the internal audit function "must monitor the disposition of results . . . to the extent agreed upon with the [customer]" (Standard 2500.C1).

The engagement process is covered extensively in chapter 12, "Introduction to the Engagement Process," chapter 13, "Conducting the Assurance Engagement," chapter 14, "Communicating Assurance Engagement Outcomes and Performing Follow-up Procedures," and chapter 15.

Residual Risk

The portion of inherent risk that remains after management executes its risk responses (sometimes referred to as net risk).

Communicating the Acceptance of Risks. Standard 2600: Communicating the Acceptance of Risks addresses the issue of accepting a level of residual risk that may be unacceptable to the organization. Residual risk is the portion of inherent risk that remains after management executes its risk responses. When a CAE "concludes that management has accepted a level of risk that may be unacceptable to the organization, the [CAE] must discuss the matter with senior management. If the chief audit executive determines that the matter has not been resolved, the chief audit executive must communicate the matter to the board." The identification of this residual risk may be observed through assurance or consulting engagements, monitoring the actions taken by management on prior engagement results, or by other means. The interpretation of Standard 2600 goes on to note that "It is not the responsibility of the chief audit executive to resolve the risk." That responsibility rests with management and the board.

RECOMMENDED GUIDANCE

The IIA's mandatory guidance (the Core Principles, the Code of Ethics, the *Standards*, and the Definition of Internal Auditing) is relatively general in nature because it is applicable to all internal audit activities. Internal audit assurance and consulting engagements are conducted in a wide variety of organizations, by in-house internal audit functions or outside service providers, in a centralized or decentralized organizational structure, and in diverse cultures and legal environments.

Recommended guidance (Implementation Guidance and Supplemental Guidance) provides more specific, nonmandatory guidance. In some cases, recommended guidance may not be applicable to all internal audit functions. In other cases, it may represent only one of many acceptable alternatives. However, this guidance is authoritative in the sense that The IIA has endorsed it through a formal endorsement process, which includes review for consistency with the mandatory guidance.

Implementation Guidance. The Implementation Guidance component of the IPPF is provided in the Implementation Guides. These guides are not intended to give detailed processes and procedures but to provide potential or acceptable approaches to achieving conformance with the *Standards*. Each of the *Standards* has an Implementation Guide (IG) and each guide has the same basic structure as shown in exhibit 2-9.

Implementation Guides

Implementation Guides assist internal auditors in applying the *Standards*. They collectively address the approach, methodologies, and considerations for internal auditing.

First, the standard is presented, including the interpretation, and then there is a section titled "Getting Started," which brings together the relevant mandatory elements of the IPPF that pertain to the specific standard the guide addresses (specific Core Principles, elements of the Code of Ethics, and other *Standards*). For example, in IG 1210/Proficiency, the guide notes that for the overall function, proficiency is a responsibility of the CAE and that the 2000 series of standards address the details of managing the function and its resources, and that these standards should also be considered in approaching this standard. In the case of Standard 1210, the guide also directs the reader to The IIA's Global Internal Audit Competency Framework, which sets out the core competencies needed for members of the function for various occupational levels. This section also outlines information the CAE may want to compile when considering how to implement the standard.

The next section of the guide, "Considerations for Implementation," deals with specific issues of implementation for the specific standard. For example, in this section for IG 1120/Individual Objectivity, the suggestion is made that to manage individual internal audit objectivity, the CAE could establish an internal audit policy manual that would describe the expectation and requirements for an unbiased mindset for every internal auditor. IG 1120 then proceeds to outline what elements might be included in such a policy. In IG 1120, other issues are also addressed, such as the fact that performance and compensation practices can have a significant negative impact on an individual auditor's objectivity.

The final section of the guide, "Consideration for Demonstrating Conformance," addresses how the internal audit function can show its implementation of the standard. For IG 1110/Organization Independence (shown in exhibit 2-9), implementation of the standard could be demonstrated through documents such as the internal audit charter, the audit committee charter, organizational charts, and the CAE's job description. CAE hiring documents, including who interviewed the final CAE candidates as well as CAE's performance evaluation, particularly with evidence of audit committee input, also would demonstrate conformance with this standard. Audit committee agendas, reports, and minutes can show appropriate communications of internal audit plans, budgets, and performance, providing an indication of organizational independence.

EXHIBIT 2-9
STRUCTURE OF IMPLEMENTATION GUIDES

Example of Implementation Guides - Standard 1110

THE STANDARD

Standard 1110 – Organizational Independence: The chief audit executive must report to a level within the organization that allows the internal audit activity to fulfill its responsibilities. The chief audit executive must confirm to the board, at least annually, the organizational independence of the internal audit activity.

Interpretation: Organizational independence is effectively achieved when the chief audit executive reports functionally to the board. Examples of functional reporting to the board involve....

GETTING STARTED

The standard requires the chief audit executive (CAE) to report to a level within the organization that allows internal audit to fulfill its responsibilities. Therefore, it is necessary to consider the organizational placement and supervisory oversight/ reporting lines of internal audit to ensure organizational independence.

The CAE does not solely determine the organizational placement of internal audit, the CAE's reporting relationships, or the nature of board or senior management supervision; the CAE needs help from the board and senior management to address these items effectively. Typically, the CAE, the board, and senior management reach a shared understanding of internal audit's responsibility, authority, and expectations, as well as the role of the board and senior management in overseeing internal audit. Generally, the internal audit charter documents the decisions reached on organizational placement and reporting lines.

It may also be helpful for the CAE to be aware of regulatory requirements for both internal audit positioning and CAE reporting lines.

CONSIDERATIONS FOR IMPLEMENTATION

As noted above, the CAE works with the board and senior management to determine organizational placement of internal audit, including the CAE's reporting relationships. To ensure effective organizational independence, the CAE has a direct functional reporting line to the board. Generally, the CAE also has an administrative, or "dotted," reporting line to a member of senior management.

A functional reporting line to the board provides the CAE with direct board access for sensitive matters and enables sufficient organizational status. It ensures that the CAE has unrestricted access to the board, typically the highest level of governance in the organization.

Functional oversight requires the board to create the right working conditions to permit the operation of an independent and effective internal audit activity.
As noted, the board assumes responsibility for approving the internal audit charter, the internal audit plan, the budget and resource plan, the evaluation and compensation of the CAE, and the appointment and removal of the CAE. Further, the board monitors the ability of internal audit to operate independently. It does so by asking the CAE and members of management questions regarding internal audit scope, resource limitations, or other pressures or hindrances on internal audit.

(continued next page)

EXHIBIT 2-9
STRUCTURE OF IMPLEMENTATION GUIDES *(cont.)*

CAEs who find themselves with a board that does not assume these important functional oversight duties may share Standard 1110 and recommended governance practices – including board responsibilities – with the board to pursue a stronger functional relationship over time.

To facilitate board oversight, the CAE routinely provides the board with performance updates, generally at quarterly meetings of the board. Often, the CAE is involved in crafting board meeting agendas and can plan for sufficient time to discuss internal audit performance relative to plan as well as other matters, including key findings or emerging risks that warrant the board's attention. Further, to ensure that organizational independence is discussed annually, as required by this standard, the CAE will often create a standing board agenda item for a specific board meeting each year.

Generally, the CAE also has an administrative reporting line to senior management, which further enables the requisite stature and authority of internal audit to fulfill responsibilities. For example, the CAE typically would not report to a controller, accounting manager, or mid-level functional manager. To enhance stature and credibility, The IIA recommends that the CAE report administratively to the chief executive officer (CEO) so that the CAE is clearly in a senior position, with the authority to perform duties unimpeded.

CONSIDERATIONS FOR DEMONSTRATING CONFORMANCE

There are several documents that may demonstrate conformance with this standard, including the internal audit charter and the audit committee charter, which would describe the audit committee's oversight duties. The CAE's job description and performance evaluation would note reporting relationships and supervisory oversight. If available, CAE hiring documentation may include who interviewed the CAE and who made the hiring decision. Further, an internal audit policy manual that addresses policies like independence and board communication requirements or an organization chart with reporting responsibilities may demonstrate conformance. Board reports, meeting minutes, and agendas can demonstrate that internal audit has appropriately communicated items such as the internal audit plan, budget, and performance, as well as the state of organizational independence.

The International Internal Audit Standards Board is responsible for developing the Implementation Guides. These Guides do not undergo a process of public exposure but are approved by the Professional Practices Advisory Council prior to issuance. The Implementation Guides are available to IIA members at no cost on The IIA's website and in the published edition of the IPPF.

Supplemental Guidance. This component of the IPPF provides guidance for delivering internal audit services. This guidance, like the Implementation Guides, is not mandatory but is recommended and goes through an endorsement process. Supplemental Guidance is not organized by standard or other mandatory elements of the IPPF. Rather, the guidance addresses topic areas, industry sector specific issues, processes and procedures, various tools and techniques, and examples of deliverables. Exhibit 2-10 provides a number of examples of available

Supplemental Guidance. As can be seen in the exhibit, a significant amount of the Supplement Guidance deals with IT, both as a subject of audit and as an audit tool, and with the assessment of IT risks.

Supplemental Guidance is produced by a number of IIA committees: the Guidance Development Committee (general guidance to support the IPPF globally), the Information Technology Guidance Committee (information technology-related IPPF guidance), the Financial Services Guidance Committee (IPPF guidance in support of financial service sector auditors globally), and the Public Sector Guidance Committee (IPPF guidance to support internal auditors in the governmental sector globally). The various materials that make up Supplemental Guidance are available to IIA members at no cost on The IIA's website and are available for purchase in The IIA's online bookstore.

Other Guidance. Guidance that is not a part of the IPPF but may be useful for internal audit practitioners and their stakeholders is occasionally produced by The IIA. These documents can be found on The IIA's website under "Standards & Guidance" and "Topics and Resources." Currently, topics covered include issues

EXHIBIT 2-10
SUPPLEMENTAL GUIDANCE - SELECTED EXAMPLES

General

Internal Audit and the Second Line of Defense

Business Continuity Management

Auditing Anti-Bribery and Anti-Corruption Programs

Selecting, Using, and Creating Maturity Models: A Tool for Assurance and Consulting Engagements

Developing the Internal Audit Strategic Plan

Auditing Privacy Risks

Evaluating Ethics-Related Programs and Activities

Coordinating Risk Management and Assurance

Reliance by Internal Audit on Other Assurance Providers

Interaction with the Board

Evaluating Corporate Social Responsibility/Sustainable Development

Formulating and Expressing Internal Audit Opinions

Global Technology Audit Guides (GTAGs)

Assessing Cybersecurity Risk: Roles of the Three Lines of Defense

Auditing Smart Devices: An Internal Auditor's Guide to Understanding and Auditing Smart Devices

Auditing IT Governance

Data Analysis Technologies

Information Security Governance

Auditing User-Developed Applications

Fraud Prevention and Detection in an Automated World

Auditing IT Projects

Information Technology Outsourcing, 2nd Edition

Identity and Access Management

Continuous Auditing: Coordinating Continuous Auditing and Monitoring to Provide Continuous Assurance, 2nd Edition

Information Technology Risk and Controls, 2nd Edition

Guide to the Assessment of IT Risk (GAIT)

GAIT Methodology

GAIT for IT General Control Deficiency Assessment

GAIT for Business and IT Risk

Public Sector

Creating an Internal Audit Competency Process for the Public Sector

Assessing Organizational Governance in the Public Sector

Other

Applying The IIA's International Professional Practices Framework as a Professional Services Firm pertaining to internal audit and audit committees, the role of the internal audit function in enterprise risk management, the three lines of defense in risk management, internal audit issues related to Sarbanes-Oxley 302 and 404 initiatives, and internal audit practice issues in the public sector.

HOW THE INTERNATIONAL PROFESSIONAL PRACTICES FRAMEWORK IS KEPT CURRENT

The IPPF is not intended to be a static body of guidance. It will continue to evolve as the profession responds to a continuously changing environment.

The Professional Practices Advisory Council (PPAC) and the Professional Guidance Advisory Council (PGAC) are responsible for coordinating the initiation, development, issuance, and maintenance of the authoritative guidance that makes up the IPPF. These Councils comprise The IIA's vice president of professional guidance and the chairs of The IIA's six global technical committees. These committees are:

- Professional Responsibilities and Ethics Committee (PPAC)
- International Internal Audit Standards Board (PPAC)
- Guidance Development Committee (PGAC)
- Information Technology Guidance Committee (PGAC)
- Financial Services Guidance Committee (PGAC)
- Public Sector Guidance Committee (PGAC)

Professional Responsibilities and Ethics Committee. The Professional Responsibilities and Ethics Committee's mission is to promote an understanding of, and to identify ways to promote the importance of, the professional responsibilities of practicing internal auditors, certificate holders, and certificate candidates, including adherence with the Code of Ethics and conformance with the *Standards*. It serves the global profession of internal auditing by maintaining and updating The IIA's Code of Ethics; promoting an understanding of, and compliance with, The IIA's Code of Ethics; maintaining and updating the Competency Framework, with a periodic review to validate competencies; and promotion of conformance with the *Standards*. The committee is required to complete a formal review of the existing Code of Ethics every three years. Any changes in the Code of Ethics, such as adding additional rules, must be initiated by this committee. Prior to adoption of changes to the Code of Ethics, revisions will be made available for a 90-day exposure period for public comment. Final approval of changes to the Code of Ethics rests with The IIA's Board of Directors. The committee membership comprises experienced internal audit leaders from around the globe. Members are required to be CIAs.

International Internal Audit Standards Board. The International Internal Audit Standards Board's mission is to develop, issue, and maintain the *Standards* and strategically direct the development of implementation guidance in support of the *Standards* by identifying, prioritizing, commissioning, and ultimately approving guidance specifically geared to helping internal audit practitioners achieve conformance with the *Standards*. The board is required to complete a review of the existing *Standards* every three years. New standards or modifications to existing standards are initiated with this board and require a 90-day exposure period for public comment. Exposure includes translation into Spanish and French, and often into other major member languages (for example, Chinese, Italian, German, Japanese, and potentially others). After due consideration of responses to the exposure draft, a minimum of two-thirds of the International Internal Audit Standards Board must approve *Standards* changes prior to final issuance. The Standards Board has a minimum of 14 members, all of whom must hold the CIA certification.

Guidance Development Committee. The Guidance Development Committee's mission is to strategically direct the development of general Supplemental Guidance in support of internal auditors globally (exclusive of financial services, public sector, and IT guidance) by identifying, prioritizing, commissioning, and ultimately approving guidance specifically geared to the needs of auditors in general. The committee's membership typically consists of members with a broad range of expertise and experience that is globally diverse and represents a cross-section of industry sectors and be attuned to the changing nature of the internal audit profession, including its impact on stakeholders, on a global basis. CIA is strongly preferred, as the committee has a requirement that two-thirds of membership must be a CIA. Members should have experience at a senior level within an internal audit activity. Prior experience as a global guidance contributor for The IIA is strongly preferred.

Information Technology Guidance Committee. The mission of this committee is to strategically direct the development of IT-related IPPF Supplemental Guidance by identifying, prioritizing, commissioning, and ultimately approving guidance specifically addressing IT-related matters. Members of this committee are typically IT audit managers or IT audit supervisors with a detailed understanding of IT representing a cross-section of industries. Members should have experience at a senior level within an internal audit activity. Prior experience as a global guidance contributor for The IIA is strongly preferred.

Financial Services Guidance Committee. The Financial Services Guidance Committee develops IPPF Supplemental Guidance in support of financial services auditors globally by identifying, prioritizing, commissioning, and ultimately approving topical guidance specifically geared to the financial services sector. It has a global membership representing a cross-section of the financial services industry with an emphasis on banking and being attuned to the changing nature of the internal audit profession, including its impact on stakeholders, globally. CIA/CFSA is strongly preferred, as the committee has a requirement that two-thirds of their membership must be CIAs. Typically, members are CAEs or directors with 10 years of supervisory internal audit experience. Prior experience as a global guidance contributor for The IIA is strongly preferred.

Public Sector Guidance Committee. The Public Sector Guidance Committee's mission is to strategically direct the development of IPPF Supplemental Guidance in support of government sector auditors globally by identifying, prioritizing, commissioning, and ultimately approving guidance specifically geared to the unique needs of auditors servicing the governmental sector at all levels and being attuned to the changing nature of the internal audit profession, including its impact on stakeholders, globally. CIA/CGAP is strongly preferred, as the committee has a requirement that two-thirds of their membership must be CIAs. Members represent a cross-section of local, state/ provincial, and national government activities at the senior level within an internal audit activity. Prior experience as a global guidance contributor for The IIA is strongly preferred.

EXHIBIT 2-11
THE IPPF GUIDANCE DEVELOPMENT PROCESS

IPPF Element/Responsibility	Process	Final Approval
The Core Principles		
—	Board of Directors establishes special task force: • 90-day public exposure period.	IIA Board of Directors IPPF Oversight Council evaluates the rigor of the development process prior to approval.
The Definition		
—	Board of Directors establishes special task force: • 90-day public exposure period.	IIA Board of Directors
Code of Ethics		
Professional Responsibilities and Ethics Committee	Developed and maintained by the International Internal Audit Standards Board: • 90-day public exposure period.	International Internal Audit Standards Board IPPF Oversight Council evaluates the rigor of the development process prior to approval.
International Standards for the Professional Practice of Internal Auditing		
International Internal Audit Standards Board	Developed and maintained by Professional Responsibilities & Ethics Committee: • 90-day public exposure period.	International Internal Audit Standards Board IPPF Oversight Council evaluates the rigor of the development process prior to approval.
Implementation Guides		
International Internal Audit Standards Board	Developed and maintained by the International Internal Audit Standards Board: • Reviewed by Professional Practices Advisory Council. • No additional exposure.	Professional Practices Advisory Council IPPF Oversight Council evaluates the rigor of the development process prior to approval.
Supplemental Guidance		
Respective technical committees: Guidance Development Committee Information Technology Guidance Committee Financial Services Guidance Committee Public Sector Guidance Committee	Developed and maintained by the four technical committees: Guidance Development Committee Information Technology Guidance Committee Financial Services Guidance Committee Public Sector Guidance Committee • Reviewed by Professional Guidance Advisory Council • No additional exposure	Professional Guidance Advisory Council

The process for developing the mandatory and recommended guidance included in the IPPF is summarized in exhibit 2-11.

To improve transparency and enhance the trust that legislators, regulators, and other users of internal audit services have in the profession's authoritative guidance, The IIA's 2006 Vision for the Future Task Force recommended the establishment of an independent oversight committee. The IPPF Oversight Council represents the interests of stakeholders outside the internal audit profession and provides assurance that The IIA follows its stated protocol in developing, issuing, and maintaining the IPPF.[5] The majority of the members of this Council are prominent individuals who are stakeholders from around the world. Current members of the Council represent the International Federation of Accountants (IFAC), the World Bank, Organisation for Economic Co-operation and Development (OECD), the National Association for Corporate Directors (NACD), and the International Organization of Supreme Audit Institutions (INTOSAI). The Council representatives observe the guidance-setting process and certify that appropriate procedures are followed before mandatory guidance is issued. The IIA also places two experienced internal audit professionals on the Council to provide context about the profession to those representing the stakeholder groups.

As the internal audit profession continues to grow in size and stature, the IPPF, in particular the *Standards*, is increasingly being recognized as the global criteria for the practice of internal auditing. For example:

- The Basel Committee on Banking Supervision encourages bank internal auditors to comply with and to contribute to the development of national and international professional standards, such as those issued by The Institute of Internal Auditors.[6]
- The National Treasury of South Africa requires that all public sector entities implement internal auditing following The IIA's Definition of Internal Auditing and *Standards*.[7]
- The King III Report endorses The IIA's Definition of Internal Auditing and *Standards* for publicly listed companies in South Africa.[8]
- A 2007 report by the Council of Europe recommends that internal audit functions for member states be established at the local and regional level of government pursuant to generally accepted international standards, such as those promulgated by The IIA.[9]
- The Government of Canada and its departments have adopted the IPPF for their internal audit work.[10]

STANDARDS PROMULGATED BY OTHER ORGANIZATIONS

The IIA recognizes that guidance promulgated by other organizations is pertinent to the profession of internal auditing. In fact, some internal audit functions need to follow other professional guidance in addition to the IPPF. Such guidance includes, for instance, the U.S. Government Accountability Office's (GAO's) Governmental Auditing Standards, Standards for the Professional Practice of Environmental, Health, and Safety Auditing, and standards issued by the International Standards Organization (ISO). For example, it is common for the internal audit functions in many state and local government agencies in the United States to incorporate both The IIA's *Standards* and the *Government Auditing Standards* (Yellow Book) issued by the GAO into their internal audit charters.

The introduction to The IIA's *Standards* provides the following directive as to how to handle situations in which multiple standards apply:

> If the *Standards* are used in conjunction with requirements issued by other authoritative bodies, internal audit communications may also cite the use of other requirements, as appropriate. In such a case, if the internal audit activity indicates conformance with the *Standards* and inconsistencies exist between the *Standards* and other requirements, internal auditors and the internal audit activity must conform with the *Standards* and may conform with the other requirements if such requirements are more restrictive.

U.S. GAO

Issues standards for governmental audits known as *Government Auditing Standards* (Yellow Book).

The IIA's *Standards* are principles-focused and intended for use by internal audit functions in a wide range of organizations in a variety of legal and cultural environments. For this reason, there is little, if any, direct conflict between The IIA's *Standards* and the standards promulgated by other professional organizations. The differences that do exist typically involve a situation in which one set of standards is more stringent than another regarding a particular requirement. For example, ISACA's Standard 1207 requires information systems auditors to obtain written representation from management at least annually that acknowledges management's responsibility for the design and implementation of internal controls to prevent and detect illegal acts.[11] The IIA's *Standards* contain no specific requirements for obtaining written representations from management, but obtaining such representations does not in any way conflict with the *Standards*.

Standards for Internal Auditing in Government. The GAO has issued standards for governmental audits in the United States. These standards are commonly referred to as the Yellow Book standards because of its yellow cover. The Yellow Book standards apply to U.S. federal financial audits, performance (or operational) audits, and other audit-related activities. Federal legislation requires that both federal and nonfederal auditors comply with the Yellow Book standards for audits of federal organizations, programs, and functions. The standards are generally relevant to, and are recommended for use by, state and local government auditors and public accountants who conduct state and local government audits. The Yellow Book explicitly recognizes The IIA's *Standards* as relevant for internal audit work in governmental entities. However, it does require that in cases of conflict, or when the Yellow Book standards are more restrictive, that the Yellow Book be followed. For example, The IIA's *Standards* require internal audit functions to have an external quality review every five years, but the Yellow Book requires such a review every three years.

ISACA

Issues standards, guidelines, and procedures for conducting information systems audits.

Like the United States, most countries have established standards for auditing governmental entities and contracts. Many have modeled their standards after the principles established by INTOSAI. Like the Yellow Book, these standards tend to focus on financial statement and performance audits for external users.

Standards for Information Technology Audits. Auditing computerized information systems is integral to internal auditing. While The IIA's *Standards* provide a sufficient framework for auditing computerized systems, ISACA provides more detailed and specialized guidance. ISACA has developed a framework similar to the IPPF called ITAF (Information Technology Assurance Framework) for providing guidance to assurance professionals providing assurance on information systems. The ITAF is very similar in nature to The IIA's IPPF except for the fact that they are directed to a much more specific practice. The ITAF framework consists of "Standards," "Guidelines," and "IT Audit and Assurance Tools and Techniques" for conducting information systems audits. ISACA's "Guidelines" provide more specific information about how to apply their "Standards" and require justification for departure from them when appropriate. "IT Audit and Assurance Tools and Techniques" provide examples of what an information systems auditor might do in performing an internal audit engagement, but these procedures are not required. There is not, at present, any incompatibility between The IIA's *Standards* and ISACA's Standards. However, internal audit functions whose work involves a significant portion of information systems audits should be aware of the ISACA guidance and consider adopting this guidance for their information systems audit work.

Standards for the Professional Practice of Environmental, Health, and Safety Auditing. The Board of Environmental, Health, and Safety Auditor Certifications (BEAC) has developed *Standards for the Professional Practice of Environmental, Health, and Safety Auditing* to address the needs of environmental, health, and safety audit professionals. Some organizations have functions other than the internal audit function that provide assurance that the organization is complying with environmental protection, health, and safety laws and regulations. Other organizations consider such assurances to be within the scope of their internal audit functions' responsibilities. When internal audit functions perform environmental, health, and safety audit engagements, they can use the BEAC Standards to direct their work. The BEAC Standards are consistent with The IIA's *Standards*.

BEAC

Issues standards to address the needs of environmental, health, and safety audit professionals.

Standards for Financial Audits. The U.S. Public Company Accounting Oversight Board (PCAOB) and the American Institute of Certified Public Accountants (AICPA) currently set the standards for audits of companies' financial statements in the United States. Standards for audits of companies' financial statements are set separately in other countries as well. However, as is the case with accounting standards, there are initiatives underway to unify the financial audit standards among certain countries. For example, the International Auditing and Assurance Standards Board (IAASB), which is a part of the International Federation of Accountants (IFAC), has issued international audit standards that are being adopted by a number of countries. Although these standards pertain directly to independent audits of companies' financial statements, they can have a bearing on internal audit work, particularly those standards pertaining to the coordination of work between internal audit functions and outside independent auditors.

PCAOB and AICPA

Issue standards for audits of companies' financial statements in the United States.

IFAC

Issues international audit standards adopted by a number of countries.

Other Relevant Guidance. Guidance promulgated by other professional organizations also is relevant to internal auditors. For example:

- The International Standards Organization (ISO) sets standards for quality, environmental audits, and risk management.
- The Committee of Sponsoring Organizations of the Treadway Commission (COSO) has issued frameworks pertaining specifically to internal control, risk management, and fraud deterrence.
- The Society of Corporate Compliance and Ethics (SCCE) provides guidance for ethics and compliance practitioners.

- The Health Care Compliance Association (HCCA) provides guidance for compliance professionals specifically operating in the healthcare industry.
- The Basel Committee on Banking Supervision has specific requirements (referred to as *Basel 1*, *Basel 2*, and *Basel 3*) for internal audits of banking and financial institutions' risk management and rating systems.

These are just a few of the many organizations that promulgate guidance of relevance to internal auditors. Internal auditors must be cognizant of these organizations and the nature of the guidance they issue. Internal auditors practicing in specific countries or in certain industries must be knowledgeable of existing guidance other than The IIA's IPPF that is relevant to their work.

SUMMARY

This chapter covered in detail The IIA's IPPF. This framework contains two categories of authoritative guidance—mandatory and recommended—that enable internal audit functions to fulfill the mission of enhancing and protecting organizational value. Mandatory guidance includes the Core Principles, the Code of Ethics, the *Standards*, and the Definition of Internal Auditing. Recommended guidance includes Implementation Guidance and Supplemental Guidance. The process through which The IIA maintains and develops the IPPF also was discussed, as was guidance of relevance to internal auditors that is promulgated by professional organizations other than The IIA.

The Core Principles set out what it takes for an internal audit function to be effective. The Code of Ethics articulates the ethical principles and behavioral norms relevant to the practice of internal auditing. The Attribute Standards prescribe the attributes that internal audit functions and individual internal auditors must have to deliver assurance and consulting services effectively. The Performance Standards provide authoritative guidance on managing the internal audit function and conducting assurance and consulting engagements. The Implementation Standards expand upon the Attribute and Performance Standards by providing guidance that is specifically applicable to either assurance services or consulting services. Implementation Guidance and Supplemental Guidance provide guidance that is helpful to internal auditors in implementing the Core Principles, the Code of Ethics, the *Standards*, and the Definition of Internal Auditing. Finally, standards promulgated by other organizations that are relevant to internal auditors were discussed.

The IPPF, especially the *Standards* and Implementation Guidance, will be referred to extensively throughout the remainder of this book.

REVIEW QUESTIONS

1. What are the circumstances that precipitated the need for internal audit-type activities?

2. What are the six components of the IPPF? Which components constitute mandatory guidance? Which components constitute recommended guidance?

3. Contrast the mission statement with the Definition of Internal Auditing. What, if anything, does the mission statement add?

4. What is the purpose of The IIA's Code of Ethics?

5. Identify the four principles of the Code of Ethics. Why should internal auditors strive to comply with these principles?

6. What is the purpose of The IIA's *Standards*? Explain the difference between Attribute and Performance Standards.

7. Explain the difference between assurance and consulting services. Why does each type of service have its own Implementation Standards?

8. What is the definition of independence as it pertains to an internal audit function? What is the definition of objectivity as it pertains to individual internal auditors?

9. Explain what is meant by the term "conflicts of interest." How do conflicts of interest arise?

10. What does "proficiency" mean? What does "due professional care" mean?

11. What is the purpose of the internal audit function's quality assurance and improvement program?

12. What are the seven main sections of the Performance Standards?

13. Identify the Performance Standards that pertain specifically to:

    a. Engagement planning.

    b. Performing the engagement.

    c. Communicating results.

14. What is the relationship between *Standards* and the Implementation Guidance?

15. What is the role of Supplemental Guidance in the IPPF?

16. What are the responsibilities of The IIA's Professional Practices and Professional Guidance Advisory Councils?

17. What is the role of the IPPF Oversight Council?

18. What organizations, other than The IIA, promulgate guidance that is pertinent to internal auditors?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. A primary purpose of the *Standards* is to:

   a. Promote coordination of internal and external audit efforts.

   b. Establish a basis for evaluating internal audit performance.

   c. Develop consistency in internal audit practices.

   d. Provide a codification of existing practices.

2. Which of the following are "mandatory guidance" in The IIA's IPPF?

   I. Implementation Guides.

   II. The Code of Ethics.

   III. The Definition of Internal Auditing.

   IV. The *Standards*.

   a. I, II, and IV.

   b. II and IV.

   c. II, III, and IV.

   d. I, II, III, and IV.

3. An internal auditor provides income tax services during the tax season. For which of the following activities would the auditor most likely be considered in violation of The IIA's Code of Ethics?

   a. Preparing, for a fee, a division manager's personal tax returns.

   b. Appearing on a local radio show to discuss retirement planning and tax issues.

   c. Receiving a stipend for teaching an evening tax class at the local junior college.

   d. Working on weekends for a friend who has a small CPA firm.

4. An internal auditor is auditing a division in which the division's chief financial officer (CFO) is a close, personal friend. The auditor learns that the friend is to be replaced after a series of critical contract negotiations with the Department of Defense. The auditor relays this information to the friend. Which principle of The IIA's Code of Ethics has been violated?

   a. Integrity.

   b. Objectivity.

   c. Confidentiality.

   d. Privacy.

5. The IIA's *Standards* require internal auditors to exercise due professional care while conducting assurance engagements. Which of the following is not something an internal auditor is required to consider in determining what constitutes the exercise of due care in an assurance engagement of treasury operations?

   a. The audit committee has requested assurance on the treasury function's compliance with a new policy on use of financial instruments.

   b. Treasury management has not instituted any risk management policies.

   c. The independent outside auditors have requested to see the engagement report and working papers.

   d. The treasury function just completed implementation of a new real-time investment tracking system.

6. In which of the following situations does the internal auditor potentially lack objectivity?

   a. A payroll accounting employee assists an internal auditor in verifying the physical inventory of small motors.

   b. An internal auditor discusses a significant issue with the vice president to whom the auditee reports prior to drafting the audit report.

   c. An internal auditor recommends standards of control and performance measures for a contract with a service organization for the processing of payroll and employee benefits.

   d. A former purchasing assistant performs a review of internal controls over purchasing four months after being transferred to the internal audit department.

MULTIPLE-CHOICE QUESTIONS

7. Which of the following is/are components of the *Standards*?

   I. Statements.
   II. Interpretations.
   III. Glossary.

   a. I only.
   b. I and II.
   c. I and III.
   d. I, II, and III.

8. According to the *Standards*, which of the following must the internal audit manager think about when considering appropriate due care while planning an assurance engagement?

   a. The opportunity to cross-train internal audit staff.
   b. The cost of assurance in relationship to potential benefits.
   c. Job openings in the area that may be of interest to internal auditors assigned to the engagement.
   d. The potential to deliver consulting services to the auditee.

9. Which of the following types of IPPF guidance require(s) public exposure?

   I. A new Implementation Guide.
   II. A new standard.
   III. New Supplemental Guidance for auditing cybersecurity.
   IV. A new definition in the *Standards* Glossary.

   a. III only.
   b. II and IV.
   c. II, III, and IV.
   d. I, II, III, and IV.

10. Which of the following are required of the internal audit function per the *Standards*?

    a. Evaluate the effectiveness of the audit committee annually.
    b. Issue an overall opinion on the adequacy of the organization's system of internal controls annually.
    c. Obtain an annual representation from management acknowledging management's responsibility for the design and implementation of internal controls to prevent illegal acts.
    d. Assess whether the IT governance of the organization sustains and supports the organization's strategies and objectives.

11. Which of the following is a Core Principle for the Professional Practice of Internal Auditing?

    a. Maintain confidentiality.
    b. Promote an ethical culture in the internal audit profession.
    c. Develop consistency in internal audit practices.
    d. Is appropriately positioned and adequately resourced.

12. According to the *Standards*, how is the independence of the internal audit function achieved?

    a. Staffing and supervision.
    b. Organizational status and objectivity.
    c. Human relations and communications.
    d. Quality assurance and internal review.

13. To determine what needs to be done regarding follow-up on an assurance engagement the internal audit staff just completed, one would consult:

    a. The Attribute Standards: Assurance Services Implementation Standards.
    b. The Performance Standards: Consulting Services Implementation Standards.
    c. The Attribute Standards: Consulting Services Implementation Standards.
    d. The Performance Standards: Assurance Services Implementation Standards.

MULTIPLE-CHOICE QUESTIONS

14. In addition to the *Standards, s*ome internal audit departments follow other standards in conducting their work, either because of regulatory requirements or by choice. When these other standards are inconsistent with IIA *Standards*, what should the audit department do?

    a. Follow IIA *Standards*.

    b. Follow the other standards.

    c. Follow the standard that is least restrictive.

    d. Follow the standard that is most restrictive.

15. Which of the following would be a violation of The IIA's Code of Ethics?

    a. An internal auditor was subpoenaed in a court case in which a joint venture partner claimed to have been defrauded by the auditor's company. The auditor divulged confidential audit information to the court during testimony.

    b. During an audit, an internal auditor learned that the company was about to introduce a new product that would revolutionize the industry. Because of the probable success of the new product, the product manager suggested that the internal auditor buy additional stock in the company, which the auditor did.

    c. An internal auditor's husband inherited 25,000 shares of company stock when his grandfather died. They have held the stock for more than two years.

    d. An internal auditor works weekends doing tax returns for a friend who owns a small CPA firm.

DISCUSSION QUESTIONS

1. Why is it important for a profession, such as internal auditing, to promulgate standards?

2. Refer to appendix A, "The IIA's Code of Ethics," and answer the following questions:

   a. Why is it important for the internal audit profession to have a code of ethics?
   b. How do the Code of Ethic's Principles differ from Rules of Conduct?
   c. Who must abide by the Code of Ethics?
   d. What are the ramifications of breaching the Code of Ethics?

3. How does The IIA's Code of Ethics differ from the *Standards* in governing the behavior and activities of internal auditors?

4. Does including the CAE in a company's stock option program violate either The IIA's Code of Ethics or the *Standards*? Explain your answer.

5. The CAE for Sargon Products reports administratively to the CFO and functionally to the audit committee. The scope of the internal audit function assurance services includes financial, operational, and compliance engagements. Is the internal auditors' objectivity regarding accounting-related matters impaired in each of the situations described below? Briefly explain your answer.

   a. The internal auditors are frequently asked to make accounting entries for complex transactions that the company's accountants do not have the expertise to handle.
   b. A staff accountant reconciles the company's monthly bank statements. An internal auditor reviews the bank reconciliations to make sure they are completed properly.

6. Review IG 1000/Purpose, Authority, and Responsibility and answer the following questions.

   a. Why is it important for an internal audit function to have a charter?
   b. What information should an internal audit charter contain?

7. You are part of a three-person internal audit function that was asked by your company's CEO to conduct an audit of the internal controls over the company's commodities trading and hedging activities. No member of the internal audit function has any training or experience in auditing trading and hedging activities.

   a. Refer to appendix B, "*International Standards for the Professional Practice of Internal Auditing*." Which standard(s) would you consult for guidance regarding the situation described above? Explain.
   b. Refer to the list of Implementation Guides on The IIA's website (www.theiia.org). Which Implementation Guides would you consult for guidance? Explain.

CASES

CASE 1[12]

Mark Hobson is an internal auditor employed by Comstock Industries. He is nearing completion of an audit of the Avil Division conducted during the first five weeks of the year. The Avil Division is one of three manufacturing divisions in Comstock and manufactures inventories to supply about 50 percent of Comstock's sales. In addition to the manufacturing divisions, Comstock has two marketing divisions (domestic and international) and a technical service division that offers worldwide technical support. Each customer is assigned to the most suitable manufacturing division, which functions as the supplier for that customer. The manufacturing division then approves the customer's credit, ships against orders obtained by the sales representatives, and collects the customer receivables when due. This allows order-to-order monitoring of customer credit limits against customer orders received.

Two Potential Observations

Two items concern Mark. First, there was a material dollar amount of inventory of part number A2 still carried on the Avil books at year-end, despite the fact that the Fast-tac machining component in which part A2 was used is now considered first generation and is no longer manufactured. Company policy requires an immediate write-off of all obsolete inventory items. Second, some accounts receivable still carried as collectible at year-end were more than 180 days old. All receivables are due in 30 days, which is standard for the industry. Mark believes many of these old accounts are uncollectible.

The division manager's administrative assistant, Brenda Wilson, performed the aging of accounts receivable rather than the division accountant, as is standard practice. The division accountant refused to discuss the circumstances of Brenda's actions.

The Auditee's Comments

Mark scheduled a meeting with Brenda to discuss his concerns.

"Well, Mark," Brenda responded, "I know that policy requires that obsolete inventories be written off, but part A2 is just not being used at present. We might start to make those Fast-tac components again. Who knows? Wide ties are coming back again, aren't they? Fast-tac could, too. There are plenty of customers, especially in the third world, that are finding those second- and third-generation machines pretty expensive to maintain. I mean, there is a policy that states obsolete inventories should be written off, but there is no policy defining an obsolete part."

"And as for those receivables," Brenda continued, "that is certainly a judgment call, too. Who knows if those accounts will be collected? We're in a slight recession now. When things pick up, we'll probably collect a few. There isn't even a policy in this division on writing off receivables. I checked. Nothing says I have to write them off. So who are you to say I have to?"

"Brenda, be straight. You know those parts will never be used. And you know those receivables are bad."

"Look, Mark," Brenda finally bargained, "it's only two weeks from the close of the year. Let's let these items ride till after the close so that everyone gets their bonuses. Then, I promise I'll take a fresh look at both inventories and receivables. I'll write them down after year-end, after the financial reports are issued. No one will know. And, after all, who's to be hurt?"

The Division Manager

Mark continued his audit, drafted his report containing observations related to the inventory and receivables, and reviewed the report with the division manager, Hal Wright. Hal was visibly disturbed.

"Gee, Mark, this couldn't have come at a more awkward time. Our figures just passed muster by the independent outside auditors. There was a guy out here for our inventory count in November, and Brenda already sent her spreadsheet on year-end receivables to corporate headquarters. No one up there, in our group or on the CPA audit team, was the least bit critical. If you go raising a big stink, particularly now, the independent outside auditors will catch us writing off inventory and receivables, they'll adjust profit, and there will be hell to pay for all of us. And, Mark, this is no clear-cut issue either. I mean, I can see how you can write a report calling for clearer policy, but not one calling for specific write-downs. That's way out of your jurisdiction. But still, I promise, we'll look at all this after our statements go to bed. Right now, I feel the managers of this division have worked their hearts out and I intend to fight to protect what little bonuses they have coming. If we write down as you suggest, those bonuses will go and the stockholders will lose too. Earnings per share (EPS) will drop like a rock. They might even close this division. Now you don't want that, do you, boy?"

"Well, Hal, I could word my observations as they are in the draft but include your response." Hal was suddenly angry. "What? And let the audit committee decide the issue? They have nothing to do with this. They accepted the CPA's report. If you want to make the audit committee happy, you'll accept it, too, and leave this adjustment stuff alone."

The Internal Audit Director

Concerned, Mark delayed finalizing his report and discussed the draft with Gail Wu, director of internal audit. Gail is not trained as an auditor and was promoted to director of internal audit from corporate finance so that she might develop a better understanding of operating relationships. Still, Gail is very smart and Mark has always respected her opinion. The discussion was by telephone, with Mark still at the Avil Division headquarters and Gail at the corporate office.

"Mark, Hal is right. If you, in essence, blow the whistle on management bonuses this year, we can kiss goodbye all the goodwill I've been struggling to build for this department. It will all go out the window."

"I know you've been trying to put us on a better footing, Gail, but Hal is intractable. As far as he is concerned, the only observation he will accept in the report is that of deficient policy, with nothing mentioned about the inventory or receivables needing adjustment."

"Well, do what you have to," Gail ended the discussion. "But I insist that you submit a report that Hal agrees to and has signed. I don't want to stir up hornets and then have to try to explain my loose cannon to the board when everyone is howling about the bonus problem."

A. Refer to The IIA's Code of Ethics. Identify *three* specific Rules of Conduct relevant to this case. Using the Rules of Conduct you identify as the context, discuss the ethical issues raised in the case.

B. Discuss how the ethical dilemma Mark faces might have been avoided. In other words, discuss specific things Comstock's management and/or the internal audit function might have done to reduce the risk of such a situation arising.

C. Clearly indicate what you would do if you found yourself in Mark's position. Briefly explain why.

CASE 2

KnowledgeLeader Practice Case: Internal Auditor Independence & Objectivity

Background Information

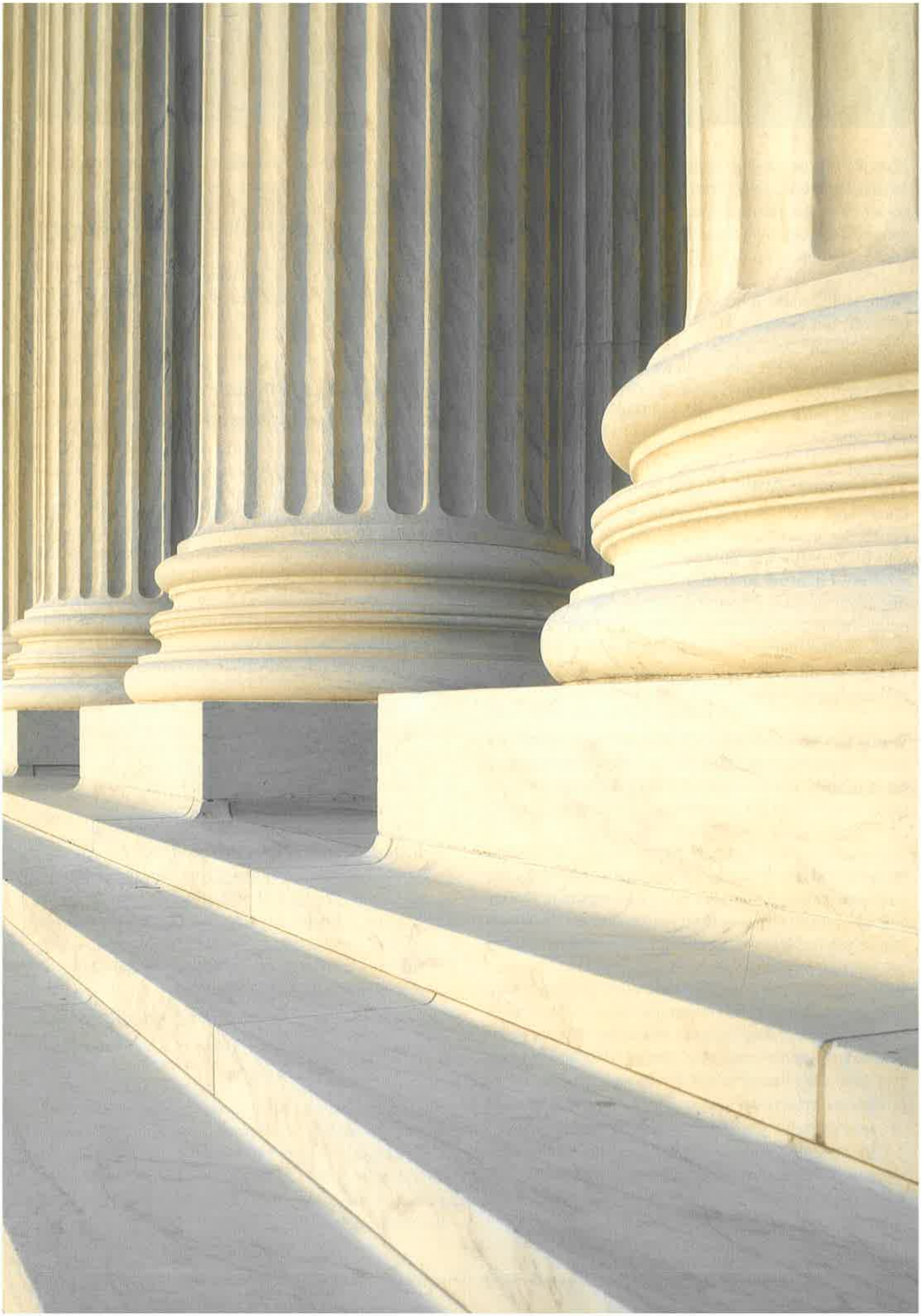
As indicated in the *Standards*, the internal audit function must be independent, and internal auditors must be objective in performing their work. As indicated in the chapter reading, independence and objectivity together represent one of three pillars supporting effective internal audit services. It is also important to note that independence and objectivity are two distinct, yet interrelated, concepts that are fundamental to providing value-adding internal audit services.

Use the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and define what it means for an internal auditor to be independent. Contrast internal audit independence with internal auditor objectivity. Why is it important for an internal audit function to be independent and internal auditors to possess objectivity?

C. Submit a brief write-up indicating the results of your research to your instructor.



CHAPTER 3

Governance

LEARNING OBJECTIVES

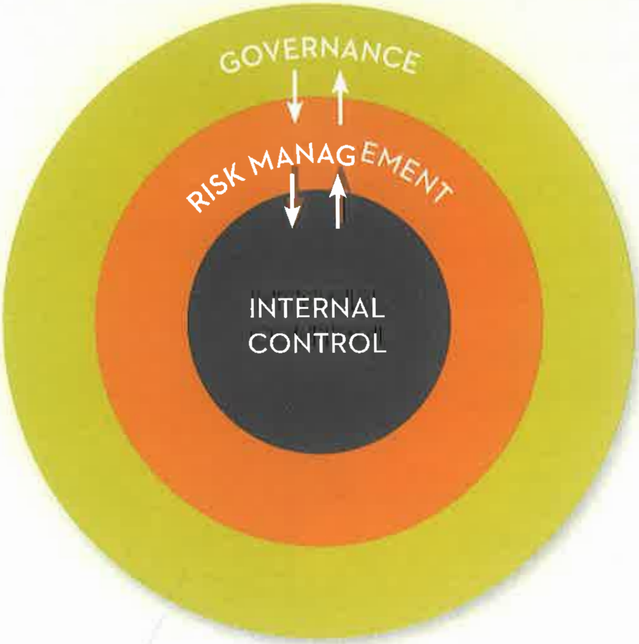
- Define governance and contrast the different roles and responsibilities within governance.
- Articulate the different enterprisewide governance principles.
- Describe the changes in regulations and how governance has evolved into its present state.
- Describe the role of the internal audit function in the governance process.
- Know where to find information about governance codes and regulations from countries around the world.

EXHIBIT 3-1 IPPF GUIDANCE RELEVANT TO CHAPTER 3

- **Standard 2010** – Planning
- **Standard 2100** – Nature of Work
- **Standard 2110** – Governance

Any successful organization must establish a basic framework through which both long-term and day-to-day decisions will be made. Think about how a university is structured, or the business through which you gained your first part-time job. Reflect on any clubs or athletic teams in which you participated. All had some form of structure that helped them be successful. In most organizations, internal audit can be a key enabler to that success. Before you can fully understand how an internal audit function can serve such a role, it is important first to understand how organizations are structured and operate to achieve success. Although the actual organizational structure will vary from one organization to the next, each must establish an overall governance structure to ensure key stakeholder needs are met. This governance structure provides direction to those executing the day-to-day activities of managing the risks inherent in an organization's business model. These day-to-day activities represent internal control. These elements are depicted in exhibit 3-2.

EXHIBIT 3-2
DEPICTION OF KEY ELEMENTS OF A GOVERNANCE STRUCTURE



This figure shows that governance surrounds all activities in an organization. The governance structure may be established to comply with laws and regulations in the jurisdictions in which an organization operates. These laws and regulations are typically promulgated to protect the public's interest. Additionally, the board and management of an organization may establish governance structures to ensure the needs of key stakeholders are met and that the organization operates within the boundaries and values established by the board and senior management.

Risk management is the next layer in the governance structure. Risk management is intended to 1) identify and manage the risks that may adversely affect the organization's success, and 2) exploit the opportunities that enable that success. Management develops risk responses or strategies to best manage the key risks and opportunities. Risk management activities should operate within the overall direction of the governance structure. Risk management is discussed in greater detail in chapter 4, "Risk Management."

Internal control is shown in the center of exhibit 3-2 because the system of internal controls represents a subset, but integral part, of the broader risk management activities. Risk responses, which include controls, are designed to execute the risk management strategies. Refer to chapter 6, "Internal Control," for additional discussion about controls and the overall system of internal controls.

Finally, there are arrows that represent the flow of information throughout the governance structure. The board provides direction to senior management to guide them in carrying out the risk management activities. Senior management in turn provides direction to lower levels of management who are responsible for the specific controls. However, lower level managers are accountable to senior management with regard to the success of those controls. And senior management is accountable to provide the board assurances regarding the effectiveness of risk management activities. The arrows in the exhibit depict that flow of direction and accountability from one layer to the next.

This chapter describes governance in detail, discussing key elements and principles of governance, as well as the roles and responsibilities. Other illustrations are provided to depict, in greater detail, how one might envision the key elements of governance. The chapter also includes a discussion about the internal audit function's assurance role in governance, as well as the role other assurance activities can play.

GOVERNANCE CONCEPTS

To perform effective internal assurance and consulting services, it is imperative to have an understanding of an organization's business. As part of gaining that understanding, it is necessary to determine how an organization operates from a top-down perspective. The overall means by which organizations operate is commonly referred to as corporate governance (referred to more generally as "governance" throughout this chapter).

Governance

The combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives.

Definition of Governance

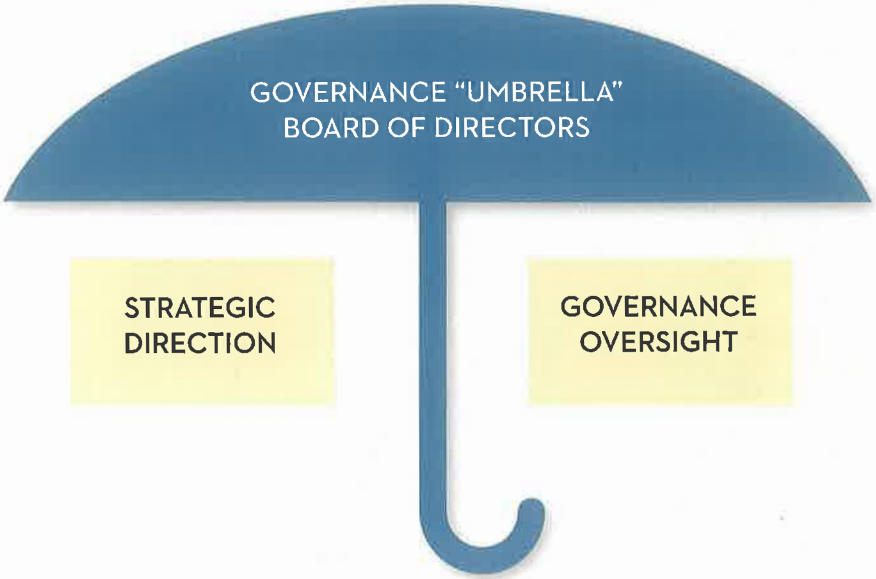
As discussed in chapter 1, "Introduction to Internal Auditing," governance is the process conducted by the board of directors to authorize, direct, and oversee management toward the achievement of the organization's objectives. An often-used definition of governance comes from the Paris-based forum of democratic markets, the Organisation for Economic Co-operation and Development (OECD):

> Corporate governance involves a set of relationships between a company's management, its board, its shareholders, and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined.[1]

Although there are many other definitions of governance, there are certain common elements present in most of them. [Readers should refer to http://www.ecgi.org/codes/all_codes.php for a comprehensive list of codes from around the world, many of which relate to governance.] The glossary to The IIA's *International Standards for the Professional Practice of Internal Auditing* captures these elements in its definition, which describes governance as "The combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives."

As part of the board informing and directing the organization's activities, the discussion of governance that follows includes the elements of organizations determining their objectives and values and establishing boundaries for conduct. Taking into consideration the different governance definitions and associated elements, governance can be depicted in a diagram as shown in exhibit 3-3.

EXHIBIT 3-3
OVERVIEW OF GOVERNANCE



The first broad area of governance is depicted in the exhibit as strategic direction. The board is responsible for providing strategic direction and guidance relative to the establishment of key business objectives, consistent with the organization's business model and aligned with stakeholder priorities. Directors bring varied and diverse business experience to the board and, thus, are in a position to provide the information and direction that will help ensure the organization is successful. The board also can influence the organization's risk-taking philosophy and establish broad boundaries of conduct based on the organization's overall risk appetite and cultural values. Monitoring progress toward meeting the goals and objectives of the organization is another key reason for the board's existence.

The second broad area of governance is depicted in the exhibit as governance oversight, which focuses on the board's role in managing and monitoring the organization's operations. Expanding on the view in exhibit 3-3, the key components of governance oversight are shown in exhibit 3-4. Because this oversight responsibility is where the risk management and internal audit activities are most relevant, governance oversight is discussed in greater detail following this exhibit.

Board

An organization's governing body, such as a board of directors, supervisory board, head of an agency or legislative body, board of governors or trustees of a nonprofit organization, or any other designated body of the organization.

The key points that should be taken from this depiction of governance are:

- Governance begins with the board of directors and its committees. The board serves as the "umbrella" of governance oversight for the entire organization. It provides direction to management, empowers them with the authority to take the necessary actions to achieve that direction, and oversees the overall results of operations.
- The board must understand and focus on the needs of key stakeholders. Ultimately, the board has a fiduciary responsibility to the organization's stakeholders.
- Day-to-day, governance is executed by management of the organization. Both senior management and line managers have important, although somewhat

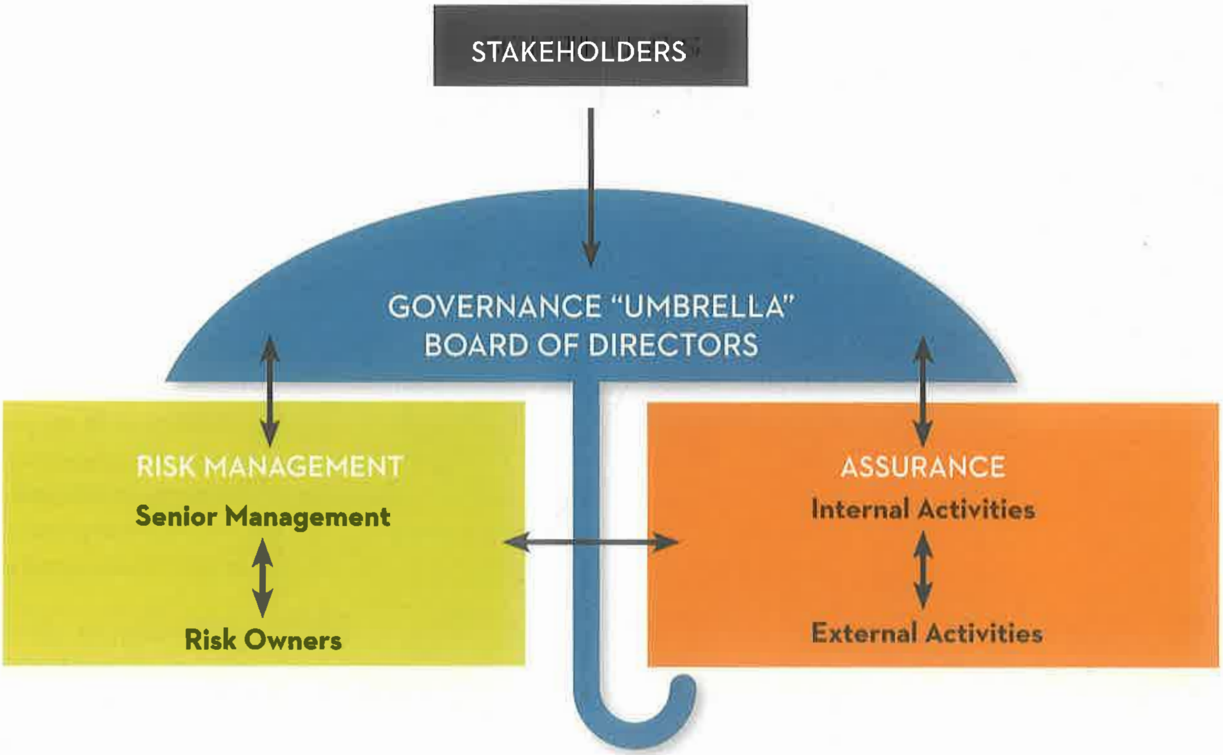
Strategy

Refers to how management plans to achieve the organization's objectives.

different, roles in governance. These roles are carried out through risk management activities.

- Internal and external assurance activities provide management and the board with assurances regarding the effectiveness of governance activities. These parties include, but are not limited to, internal auditors and the independent outside auditors.

EXHIBIT 3-4
KEY COMPONENTS OF GOVERNANCE OVERSIGHT



Roles and Responsibilities within Governance: The Board and Its Committees

Governance is ultimately the responsibility of the board, although this responsibility is frequently carried out by its various committees (for example, the audit committee). The first of the board's responsibilities is to identify the key stakeholders of an organization. A stakeholder is any party with a direct or indirect interest in an organization's activities and outcomes. Stakeholders can be viewed as having one or more of the following characteristics (examples follow this list):

- Some stakeholders are *directly involved* in the operation of the organization's business.
- Other stakeholders are not directly involved, but are *interested* in the organization's business; that is, they are affected by the success or other outcomes of the business.

- Some stakeholders are neither directly involved nor interested in the success of an organization's business, but these stakeholders may nonetheless *influence* aspects of the organization's business and, as a result, the organization's success.

The most common stakeholders are discussed below:

Stakeholder Types

– Directly involved
– Interested
– Influence

Employees work for an organization and, therefore, are *directly involved* in the conduct of the organization's business. Employees also have a vested *interest* in the organization's ongoing viability and success. If the organization ceases to exist, or has to downsize due to the lack of success in a market, employees may lose their source of livelihood. Therefore, a board must ensure an organization is operating in a manner that serves the best interest of its employees.

Customers are typically the lifeblood of an organization's business, and, as such, are *directly involved* in its success. Customers also are *interested* in an organization's success because failure of the organization may reduce the number of viable options from which the customer can obtain a needed good or service. In exchange for some form of payment, customers rely on an organization to build safe and reliable products, deliver agreed-upon services, and comply with other aspects of sales contracts and arrangements. Because the organization has obligations to customers, the board has a responsibility to ensure these obligations are met.

Vendors provide the goods and services needed for an organization to conduct its business and, therefore, are *directly involved* in the business. Similar to customers, vendors will have an *interest* in the ongoing viability of the organization as a key customer of the vendor. An organization has certain obligations to vendors, the most obvious of which is the obligation to pay for the goods and services received from those vendors. Therefore, a board has oversight responsibilities to ensure that the organization meets its obligations under vendor contracts and arrangements.

Shareholders/investors are not directly involved in the business but have a strong *interest* in the organization's success. These stakeholders own an investment in the company, either through shares of stock, ownership units, or some other legal instrument that vests them in the future success of the company. Shareholders may be individual investors, institutions, or funds that invest on behalf of a group of investors. Typically, shareholders have the right to elect individuals to serve as directors on the board who they believe will best serve and protect their interests. Therefore, because they can *influence* the board, shareholders are frequently considered the most important and powerful stakeholders from the board's perspective.

Regulatory agencies represent governmental agencies that may have either an *interest* in the organization's success or may be able to *influence* that success. The rules and regulations promulgated by these agencies may dictate certain operational and reporting requirements of an organization, or influence the decisions made by management of the organization. For example, the U.S. Securities and Exchange Commission (SEC) influences all publicly held companies in the United States. Examples of regulatory agencies affecting most U.S. companies include the Department of Labor, the Environmental Protection Agency, and the Occupational Safety and Health Administration. Additionally, some industries are subject to specific regulators such as banking (the Federal Deposit Insurance Corporation and others) and utilities (for example, the Federal Energy Regulatory Commission and state regulatory commissions that are responsible for approving the rates that can be charged to customers). These regulators are responsible for ensuring organizations comply with regulations that meet a public good and, as such, have a strong interest in the operations of the organizations. Virtually every country or legal jurisdiction will have agencies or similar bodies that promulgate regulations. A board must understand the requirements of these agencies to exercise its oversight responsibilities.

Financial institutions (creditors) impact the capital structure of an organization. Capital structures typically comprise a combination of debt and equity. The equity component was covered under the previous discussion of shareholders. Debt stakeholders are typically financial institutions such as banks or other institutions that provide financing to an organization. Financial institutions are willing to provide financing in exchange for a return, most commonly in the form of an interest rate on the outstanding balance. However, such institutions frequently have other stipulations, or covenants, with which an organization must comply. These covenants typically relate to the overall financial health and liquidity of an organization, and provide ongoing assurance to the financial institutions regarding the organization's ability to repay its obligations. This creates both an *interest* in the success of an organization and *influence* on how the organization will operate to comply with the covenants. Therefore, a board must provide oversight to ensure management is mindful of, and complying with, all relevant covenants of financing arrangements with these influencing stakeholders.

Although the above are the most common types of stakeholders, there may be other parties who have an *interest* in or can *influence* an organization. Examples include rating agencies, industry associations, financial analysts, and competitors of the organization. The key point is that a board must make the effort and spend the time to ensure it has identified all of the key stakeholders of an organization.

Once the key stakeholders are identified, the next step the board must undertake is to understand the needs and expectations of those stakeholders. Some of the needs and expectations are self-evident. For example, customers expect that products are generally free of defects and vendors expect obligations to be paid on time. However, other expectations, such as shareholders' desire for dividends versus share price growth, may require some research and analysis to fully understand. Boards may be able to determine these expectations through internal discussions, but they also may need to discuss expectations directly with key stakeholders.

Finally, the board should identify the potential outcomes that would be unacceptable to key stakeholders. For example, certain investors may be disappointed if the organization misses its earnings estimate by one cent per share in a given quarter, but may still consider that acceptable because they recognize some components of earnings are more volatile than others. However, if the organization misses its earnings estimates for several consecutive quarters, investors may find that unacceptable and question whether the board should consider a change in senior management. Note that when considering unacceptable outcomes, it is important to think both in terms of outcomes that cause harm to the organization as well as outcomes that represent failure to effectively pursue and exploit opportunities.

Because the various stakeholders will likely have different expectations, the outcomes each type of stakeholder deems unacceptable will vary as well. The board may need to consider the following types of outcomes:

- **Financial**—for example, earnings per share, cash liquidity, credit rating, return on investments, capital availability, tax exposures, material weaknesses, and disclosure transparency.
- **Compliance**—for example, litigation, code of conduct violations, safety and environmental violations, restraining orders, governmental investigations, regulatory fines and penalties, indictments, and arrests.
- **Operations**—for example, achievement of objectives, efficient use of assets, protection of assets (insurance coverage, asset impairments, asset destruction), protection of people (health and safety, work stoppages), protection of information (data integrity, data confidentiality), and protection of community (environmental spills, plant shutdowns).
- **Strategic**—for example, reputation, corporate sustainability, employee morale, and customer satisfaction.

Risk Appetite

The types and amount of risk, on a broad level, an organization is willing to accept in pursuit of value.

Tolerance

The boundaries of acceptable outcomes related to achieving business objectives.

Once the board determines the outcomes that key stakeholders deem unacceptable, it can establish tolerance levels, which represent levels of acceptable variations in performance based on those outcomes. These levels, which are consistent with the organization's overall risk appetite, can be communicated to management as boundaries within which the board would like the organization to operate. While the concepts of risk appetite and tolerance are discussed in greater depth in chapter 4, a broad understanding of these concepts will be helpful to appreciate the board's role.

Risk appetite can be thought of in terms of an eating metaphor, thinking quite literally about an individual's appetite for food. This appetite represents the total amount of food that should be consumed to achieve certain objectives, such as maintaining good health and a desired weight. It is possible to satiate an appetite by consuming all of one type of food (for example, chocolate). However, while it is possible to feel "full" at that point, eating only chocolate will not likely support the longer term objectives of maintaining good health and a desired weight. Thus, the brain of a human being (which is analogous to the board of an organization) determines how much of certain types of foods, including minimum and maximum amounts, should be consumed.

Using the concepts discussed previously, the board can best execute its governance responsibilities by:

- Establishing a governance committee:
  - This committee could be a new committee or an expansion of responsibilities for an existing committee (for example, many public companies have expanded the responsibilities of the nominating committee to become a nominating and governance committee).
  - It should be made up of independent directors.
  - The committee should have the responsibilities outlined above.
- Articulating requirements for reporting to the board:
  - The board should delegate to management the authority to operate the business within the board's tolerable limits relative to unacceptable outcomes. Management must have the authority to make day-to-day business decisions, but also must have a clear understanding of the board's parameters around acceptable variations in performance within which to manage the business.

    - As part of its oversight role, the board also must establish reporting thresholds for management—that is, which outcomes must be approved by the board, reported directly to the board, or summarized for the board as part of quarterly meetings.

- Reevaluating governance expectations periodically (typically annually):
    - Key stakeholder expectations may evolve and change. Therefore, the board must identify those changes and reevaluate its governance direction.
    - As a result of those changes, what the board deems acceptable in terms of variations in performance also should be reevaluated.

In summary, the board of directors plays a very key and comprehensive role in corporate governance. Without that umbrella of authority, direction, and oversight, governance will not be sufficiently effective over the long term.

Senior Management

Although the board provides the umbrella of governance oversight, management executes the day-to-day activities that help ensure effective governance is achieved. Once the board determines its tolerance levels relative to the boundaries of operations, it must next delegate authority to members of senior management so they can manage the operations within those levels. Senior management then has the responsibility to execute the board's direction in a manner that achieves corporate objectives, but within the parameters outlined by the board.

To execute its governance responsibilities, senior management is responsible for:

- Ensuring that the full scope of direction and authority delegated is understood appropriately. Senior management must understand the board's governance expectations, the amount of authority the board has delegated to management, its tolerance levels relative to unacceptable outcomes, and requirements for reporting to the board.
- Identifying the processes and activities within the organization that are integral to executing the governance direction provided by the board. That is, senior management must determine:
    - Where in the organization to manage the specific risks that could result in unacceptable outcomes.
    - Who will be responsible for managing those risks (that is, risk owners).
    - How those risks will be managed.
- Evaluating what other business considerations or factors might create a justification for delegating a lower level of tolerance to risk owners than that delegated by the board. For example, the board may specify that management must maintain controls to ensure there are no control weaknesses beyond a certain level of severity. However, senior management, desiring to avoid the situation in which multiple significant control deficiencies aggregate to an unacceptable level, may specify to risk owners that controls be maintained to ensure there are no control deficiencies exceeding a lower level of severity.
- Ensuring that sufficient information is gathered from the risk owners to support its reporting requirements to the board.

Senior management can best execute its governance responsibilities by:

- Establishing a risk committee.
  - This committee is typically led by a senior executive: a chief risk officer (CRO), if one exists, or some other executive who has broad risk oversight responsibility.
  - It is responsible for determining that all key risks are identified, linked to risk management activities, and assigned to risk owners. As part of this responsibility, the committee must ensure that it comprehensively considers all possible outcomes for key risks, not just the financial outcomes.
  - It evaluates the organization's ongoing risk appetite and ensures that tolerance levels delegated to the risk owners are within the board's approved risk appetite.
- Articulating reporting requirements.
  - Risk owners must understand the nature, format, and timing of communications regarding the effectiveness of the risk management activities. These communications typically should be consistent with the tolerance levels delegated to the risk owners.
  - This reporting may occur through regularly scheduled risk committee meetings or as part of the process of compiling information for reporting to the board.
- Reevaluating governance expectations periodically (as business changes occur, and at least annually).
  - As an organization evolves and changes, senior management must reevaluate its governance direction and the corresponding tolerance levels that have been delegated to risk owners. These changes may come from the board or from other external and internal factors. Such changes may result in the need for new risk management activities or modifications to existing risk management activities.
  - As a result of those changes, senior management's tolerance levels also should be reevaluated.
  - This also gives senior management the opportunity to evaluate the overall effectiveness of the organization's risk management program.

Risk

Possibility that an event will occur and adversely affect the achievement of objectives.

Senior management plays an integral role in risk management, which is a key component of governance. Refer to chapter 4 for a more in-depth discussion of these risk management concepts.

Risk Owners

Individuals who have day-to-day responsibility for ensuring that risk management activities effectively manage risks within the organization's tolerance levels are called risk owners. Many would argue that the CEO and the other chief officers are ultimately the owners of risk within an organization. However, the term is used here in reference to the individuals who conduct day-to-day activities to manage specific risks. These individuals are responsible for identifying, measuring, managing, monitoring, and reporting on risks to the members of senior management to whom they report, typically the chief officers. In some instances, risk owners may be individuals who are lower in the organizational hierarchy. However, risk owners certainly work with senior management to carry out the risk management activities of an organization.

The responsibilities of risk owners include:

- Evaluating whether the risk management activities are designed adequately to manage the related risks within the tolerance levels specified by senior management. Although senior management may provide direction relative to the risk management activities, the risk owners typically will determine the specific tasks that are necessary to carry out those activities.
- Assessing the ongoing capabilities of the organization to execute those risk management activities. This assessment should evaluate the maturity of the procedures in place, the competence and experience of the people performing those procedures, the sufficiency of any enabling technologies (for example, computer systems), and the availability of external and internal information to support risk-related decision-making.
- Determining whether the risk management activities are currently operating as designed—that is, whether the people and systems are executing the processes consistently with the desired objectives.
- Conducting day-to-day monitoring activities to identify, in a timely manner, whether anomalies or divergences from expected outcomes have occurred.
- Ensuring that the information needed by senior management and the board is accurate and readily available, and is provided to senior management on a timely basis.

Risk owners can best execute their governance responsibilities by:

- Presenting governance recommendations to the risk committee.
    - If an individual becomes a new risk owner, or is responsible for a risk that was not previously subject to formal risk management and reporting, the risk owner should prepare a recommendation for the risk committee. This recommendation should cover the inherent nature and source of the risk, its potential impact, proposed tolerance levels, and expected risk management activities. This information is presented to, discussed with, and approved by the risk committee.
- Reevaluating risk management activities periodically (at least annually, and more frequently when justified).
    - The design of risk management activities should continue to align with organizationwide risk strategies and ensure the risks are managed within the delegated tolerance levels.
    - The risk management capabilities should be reassessed in light of personnel turnover, systems changes, and other events that could impact the maturity and effectiveness of those capabilities.
    - Risk management monitoring activities should provide the risk owners with timely information on the effectiveness of the risk management activities.
    - The reporting of risk management results to senior management should be reassessed periodically to ensure the reporting continues to meet senior management's expectations.

Risk owners are on the front lines of managing risks and, as such, are key contributors to good governance. Their role in executing and monitoring risk management activities, along with reporting on the effectiveness of those activities, will greatly influence the success an organization will have in avoiding or mitigating unacceptable outcomes. Refer to chapter 4 for a more in-depth discussion of these risk management concepts.

Assurance Activities

Assurance Services

An objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization.

The final component of governance is independent assurance activities, which help provide the board and senior management with an objective assessment regarding the effectiveness of the governance and risk management activities. These independent assurance activities can be performed by a variety of parties, either internal or external to the organization. The most common internal group to provide such assurances is the internal audit function.

IIA Standard 2110: Governance states the following regarding the internal audit function's role in governance activities:

> "The internal audit activity must assess and make appropriate recommendations to improve the organization's governance processes for:
>
> - Making strategic and operational decisions.
> - Overseeing risk management and control.
> - Promoting appropriate ethics and values within the organization.
> - Ensuring effective organizational performance management and accountability.
> - Communicating risk and control information to appropriate areas of the organization.
> - Coordinating the activities of, and communicating information among, the board, external and internal auditors, other assurance providers, and management."

IIA Standard 2120: Risk Management states, "The internal audit activity must evaluate the effectiveness and contribute to the improvement of risk management processes." Embedded in both of these standards is the notion that an internal audit function may provide both assurance and consulting services to an organization. The extent of assurance activities performed by the internal audit function will depend on 1) the internal audit charter, which specifies the internal audit function's role in governance assurance, and 2) specific direction from the board regarding current or ongoing expectations to perform such activities. Depending on these two factors, the internal audit function's governance responsibilities may include any or all of the following:

- Evaluating whether the various risk management activities are designed adequately to manage the risks associated with unacceptable outcomes.
- Testing and evaluating whether the various risk management activities are operating as designed.
- Evaluating the design adequacy and operating effectiveness of the risk management program/system as a whole.
- Determining whether the assertions made by the risk owners to senior management regarding the effectiveness of the risk management activities accurately reflect the current state of risk management effectiveness.

- Determining whether the assertions made by senior management to the board regarding the effectiveness of the risk management activities provide the board with the information it desires about the current state of risk management effectiveness.
- Evaluating whether information related to the organization's tolerance is communicated timely and effectively from both the board to senior management and from senior management to the risk owners.
- Assessing whether there are any other risk areas that are currently not included in the governance process but should be (for example, a risk for which tolerance and reporting expectations have not been delegated to a specific risk owner).

The internal audit function can be an effective part of the governance process by:

- Ensuring it fully understands the board's governance direction and expectations.
  - The internal audit function should understand the direction provided to senior management, including tolerance levels and reporting expectations.
  - Additionally, it is important to understand the board's expectations of the role the internal audit function should play with regard to governance assurance.
- Supporting management's risk management program.
  - The internal audit function can help bring structure and discipline to the risk management program, which may be managed in a manner similar to managing internal audit activities.
  - The internal audit function can help educate management and other employees on risk and control topics.
  - Organizational and divisional risk assessments can be facilitated or monitored by the internal audit function.
  - Ongoing oversight and input can be provided formally (for example, sitting on a risk steering committee) or informally (for example, periodic discussions with management).
- Developing an internal audit plan that appropriately encompasses the governance assurance activities and allows for periodic communications to senior management and the board on the effectiveness of risk management activities.

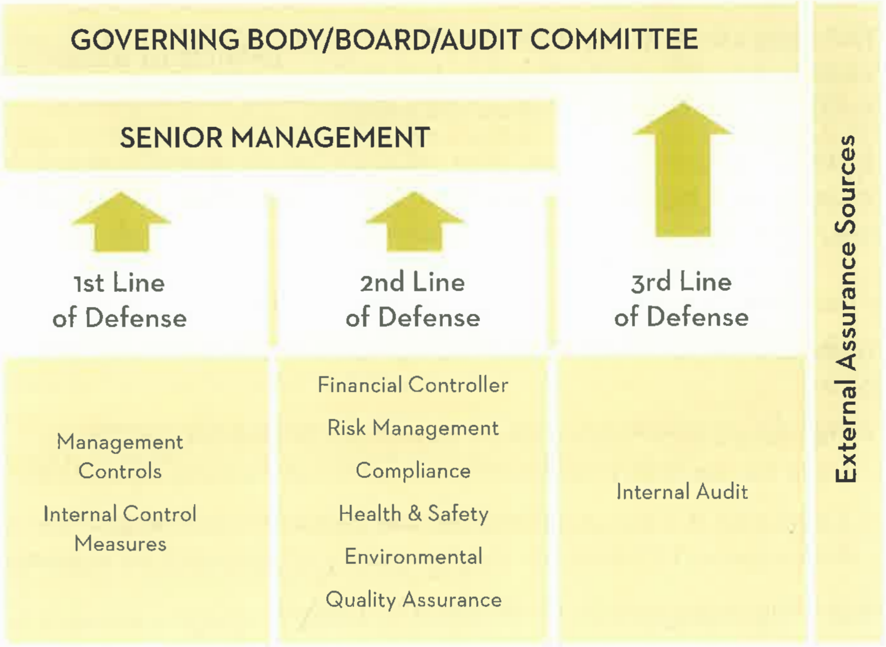
Consulting Services

Advisory and related services, the nature and scope of which are agreed to with the customer, and which are intended to improve an organization's governance, risk management, and control processes without the internal auditor assuming management responsibility.

Three Lines of Defense Model

While the internal audit function provides a valuable form of assurance, as described above, most organizations have other groups that also provide some form of assurance (for example, environmental and safety departments, quality assurance groups, or trading control activities). These groups may provide assurance directly to the board, or they may communicate to members of management who provide the assurance to the board. Recognizing that assurance can come from different activities inside and outside the organization, many organizations have implemented a technique of assurance layering to achieve the risk mitigation needed or desired to operate within the organization's tolerance levels. Often, this strategy is referred to as a "multiple lines of defense" model. One common example of this strategy is the Three Lines of Defense model, which is depicted in exhibit 3-5.

EXHIBIT 3-5
THREE LINES OF DEFENSE MODEL



Source: *Global Advocacy Platform* (Lake Mary, FL: The Institute of Internal Auditors Global, 2012), 9.

This model starts with a simplified version of governance, depicting the board and senior management as rectangular boxes at the top. Their roles are no different than that which was previously described in this chapter. The three lines, however, do require some explanation:

- The **first line of defense** represents the internal control activities conducted by individuals and management. These activities are comprised of both the specific internal control activities, referred to as internal control measures in the model, and management controls, which are those that oversee and monitor the individual activities. First line of defense controls are very important, but they are conducted by individuals and management who are directly responsible for those control areas and, therefore, are considered the least independent and objective of the lines of defense.
- The **second line of defense** represents other assurance activities such as those listed in the exhibit. These activities are conducted by individuals reporting through different lines of management than those directly responsible for the internal control activities. Therefore, the level of independence and objectivity is considered to be greater than the first line. However, those performing second line of defense assurance frequently also have other management responsibilities beyond their assurance responsibilities. Therefore, the level of independence and objectivity may not be sufficient to provide the desired level of assurance.
- The **third line of defense** represents the most independent and objective form of assurance. Internal audit activities typically are the only activities that report functionally to the board and have no other management responsibilities. Thus, the third line of defense is the most independent and objective of the three lines.

Assurance also may be provided by external parties. While less common than internal assurance activities, they still can be important to the board. For example, although the attestation opinions provided by independent outside auditors are primarily for the purpose of meeting regulatory or contractual requirements, such opinions may also provide the board and management with assurance regarding the effectiveness of activities designed to mitigate financial reporting risks. Similarly, third-party consultants may be hired to provide management or the board with assurance regarding specific risk management activities. Finally, regulatory auditors, who assess regulatory compliance for the benefit of the sponsoring agency, also can provide forms of assurance to management.

While multiple levels of assurance are valuable, organizations must be careful to avoid too much assurance, sometimes called "assurance fatigue" or "audit fatigue." This occurs when the different assurance activities do not coordinate and collaborate sufficiently, resulting in redundant and unnecessary assurance activities. Some might argue that there can never be too much assurance, but assurance activities require valuable organizational resources, both by the activities performing the assurance and by those being assessed; therefore, there is a cost to assurance that must be considered.

To combat assurance fatigue, some organizations have developed models called combined or integrated assurance models. These models vary from one organization to the next, and can be implemented at a high level or in great detail. In general, such models focus on understanding the different types of assurance being provided, and based on the level of risk being assessed and how strong the assurance is, a coordinated plan or calendar is developed to facilitate awareness of what assurance activity will perform assessments when, and how other assurance activities can rely on that work.

Independent Outside Auditor

Registered public accounting firm, hired by the organization's board or executive management, to perform a financial statement audit providing assurance for which the firm issues a written attestation report that expresses an opinion about whether the financial statements are fairly presented in accordance with applicable Generally Accepted Accounting Principles.

Regardless of how it is structured, the independent assurance activities performed by internal auditors and the other lines of defense and external parties provide valuable information to senior management and the board to help them monitor the ongoing effectiveness of governance and risk management activities. These assurance activities are an integral part of good governance.

THE EVOLUTION OF GOVERNANCE

Despite the publicity that corporate governance has received in recent years, effective governance is not a new concept. An underlying premise of the public equity markets is that investors will provide capital to organizations in exchange for a potential return on that investment. To instill confidence in the capital markets, investors need sufficient appropriate information to evaluate the potential risks and rewards of their investments. They also need assurance that it is a level playing field—that is, all investors will be able to transact consistently and fairly. Various regulations and standards have been written to achieve this objective and provide greater transparency in publicly available information. Frequently, new regulations and standards have been promulgated in response to events in the business world. These regulations and standards were designed to eliminate or minimize the undesirable outcomes of those events. Exhibit 3-6 summarizes some of those key business events in the United States and the legislation that resulted. Appendix 3-A, "Summary of Key U.S. Regulations," at the end of this chapter presents a summary of key U.S. regulations and a description of each piece of legislation shown in exhibit 3-6.

EXHIBIT 3-6
KEY U.S. BUSINESS EVENTS AND RESULTING LEGISLATION

Key Business Events	Legislation/Guidance
The U.S. stock market crash in 1929, combined with the subsequent failures of several major corporations because of fraud, precipitated the need for investor faith to be restored. The intent of the resulting regulations was to provide a level playing field for investors through consistent, timely, complete, and relevant public reporting of financial information.	Securities Act of 1933 Securities Exchange Act of 1934
In the aftermath of the Watergate investigation at the beginning of the 1970s, by 1976, over 450 American companies were reported to have paid bribes or made questionable payments to foreign government officials or political parties.	Foreign Corrupt Practices Act (FCPA) of 1977
There were mulitple incidents of financial reporting that were inaccurate, incomplete, or misleading.	Report of the National Commission on Fraudulent Financial Reporting (Treadway Commission Report) - 1987
Several savings and loan institutions required bailout by the government, bringing into question, among other things, the strength of their system of internal controls.	Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991
Bankruptcy and fraud at major U.S. corporations (for example, Enron Corporation and WorldCom).	The U.S. Sarbanes-Oxley Act of 2002 which amends the 1933 and 1934 Securities Acts U.S. Stock Exchange Listing Standards (NYSE, AMEX, NASDAQ)
The financial crisis in late 2007 and 2008 helped fuel a global recession and failure of several well-known companies.	Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010

Increasing Focus on Governance

While governance-related regulations have not changed dramatically in the United States in recent years, the expectations of effective governance continues to grow. Shareholder activist groups have become more powerful, in some cases influencing the nomination of directors and which resolutions are voted on during annual shareholder meetings. Board-focused associations, such as the National Association of Corporate Directors (NACD), provide more guidance and training to board members. Expectations have grown for increased board oversight in key areas, such as:

- Executive compensation and succession planning.
- Corporate culture.
- Emerging risk identification and management.
- Cybersecurity.
- Crisis response plans.

Nobody can forecast what transformational events may occur in the future that could drive new or changing regulations. However, recent years have shown that market forces will continue to cause increased focus on good governance and expanded expectations around areas for more board oversight.

Regulations in Other Parts of the World

Similar business events have occurred in other countries around the world, resulting in the promulgation of legislation by different legislative bodies. Each piece of legislation was designed to improve overall governance, as well as the controls surrounding the preparation of financial statements, and enhance the fairness and transparency of financial reporting. Some parts of the world are recognized as having very progressive governance requirements, even more so than in the United States (for example, the King Code of Governance requirements in South Africa and regulations promulgated throughout much of Europe). Refer to the discussion questions at the end of this chapter for opportunities to learn more about such regulations.

OPPORTUNITIES TO PROVIDE INSIGHT

As is probably evident from the previous discussions, governance is a broad concept. Organizations around the world have posted their governance principles on their websites, making them highly visible. Visits to these websites make it clear that approaches to governance vary. Whatever the specific form governance takes at any particular organization, the internal audit function has ample opportunity to add value by providing insight on the process. Exhibit 3-7 describes 10 such opportunities.

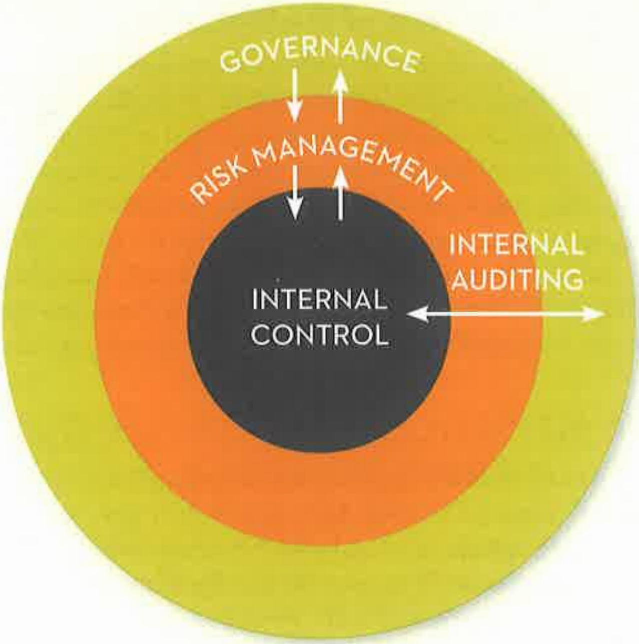
EXHIBIT 3-7
10 OPPORTUNITIES FOR THE INTERNAL AUDIT FUNCTION TO PROVIDE INSIGHT ON GOVERNANCE

1. Provide advice on alignment of current board practices against leading practices.
2. Provide input and advice on the audit committee's charter and other charters as appropriate.
3. Advise on the clarity and appropriateness of the protocol for escalating issues to the board or its committees.
4. Help ensure the board and its committees receive information timely to better effectively prepare for their meetings.
5. Contribute to the preparation of the board and committee agendas to ensure appropriate topics are discussed timely.
6. Evaluate whether the reporting to the board and its committees is sufficiently transparent to ensure they receive the information necessary to govern effectively.
7. Facilitate or advise on the board and committee self-assessment process.
8. Provide the necessary information to help the audit committee oversee the internal audit activity, including information related to organizational independence, adequacy and competency of resources, scope of activities, and attention by management.
9. Provide publications or links to other information that can help board or committee members keep current with emerging risks and practices.
10. Provide input that helps the audit committee provide oversight on and assess the effectiveness of the independent outside auditors.

SUMMARY

Organizations must take great care to implement effective governance structures and risk management approaches. The governance structure provides direction to those executing the day-to-day activities of managing the risks inherent in an organization's business model. These activities must be monitored to ensure consistent operation. The three elements of a governance structure can be depicted as shown in exhibit 3-8.

EXHIBIT 3-8
DEPICTION OF KEY ELEMENTS OF A GOVERNANCE STRUCTURE



Governance involves a set of relationships between an organization's management, its board, and its stakeholders. The board typically provides the "umbrella" of governance direction, authority, and oversight. The board must understand and strive to meet the needs and expectations of the organization's various stakeholders. Thus, the board must articulate its direction, advise on the creation of business objectives, establish boundaries of business conduct, and empower management to carry out its direction. Management executes its risk management activities to fulfill the direction of the board. These activities may be carried out by lower-level risk owners in the organization, but senior management is ultimately accountable for the effectiveness of risk management activities. Finally, internal and external parties, in particular the respective auditors, carry out activities that can provide levels of assurance to management and the board regarding the effectiveness of risk management activities. These levels of assurance can be described as part of a "multiple lines of defense model," although care must be taken not to provide too much assurance, commonly called assurance fatigue.

Finally, it should be clear that the internal audit function fulfills an important role in governance. This will become even more evident in chapter 4 and chapter 6. As a result, exhibit 3-8 depicts internal audit as a key element in governance.

APPENDIX

APPENDIX 3-A SUMMARY OF KEY U.S. REGULATIONS

Securities Act of 1933

This piece of U.S. federal legislation was enacted after the market crash of 1929 and the ensuing Great Depression. The market crash raised some serious questions about the effectiveness of governance over the sale of securities. It was signed into law by President Franklin D. Roosevelt as part of his "New Deal" with America to bring back stability and investor confidence in the securities markets. The legislation had two main goals: 1) to ensure greater transparency in financial statements so investors can make informed decisions about securities being offered for public sale, and 2) to establish laws against deceit, misrepresentation, and other fraudulent activities in the sale of securities in the public markets.

Securities Exchange Act of 1934

The Securities Exchange Act of 1934 was created to provide governance of securities transactions on the secondary market (after issue) and regulate the different exchanges and broker-dealers to protect the investing public. From this act, the U.S. Securities and Exchange Commission (SEC) was created. The SEC's responsibility is to enforce securities laws. Primary requirements include registration of any securities listed on U.S. stock exchanges, disclosure, proxy solicitations, and margin and audit requirements. Contrasted with the Securities Act of 1933, which regulates these original issues, the Securities Exchange Act of 1934 regulates the secondary trading of those securities between persons often unrelated to the issuer. Trillions of dollars are made and lost through trading in the secondary market.

Foreign Corrupt Practices Act

Due to questionable corporate political campaign finance practices and foreign corrupt practices in the mid-1970s, the SEC and the U.S. Congress enacted campaign finance law reforms and the 1977 Foreign Corrupt Practices Act (FCPA), which criminalizes transnational bribery and requires companies to implement internal control programs. Specifically, the FCPA requires publicly traded companies to "make and keep books, records, and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the issuer... "[2] The act, in effect, broadens the focus on internal control to provide reasonable assurance that transactions are appropriately authorized and accurately recorded, assets are physically safeguarded, and there is periodic substantiation of recorded assets.

Report of the National Commission on Fraudulent Financial Reporting (Treadway Commission Report)

This private-sector initiative, called the National Commission on Fraudulent Financial Reporting (commonly known as the Treadway Commission), was formed in October 1985. Its mission was to identify causal factors that could lead to fraudulent financial reporting and determine the steps necessary to reduce the incidence of those factors. The Treadway Commission studied cases that had been brought before the SEC during the years leading up to its initial report in 1987. This report recommended that the organizations sponsoring the Treadway Commission work together to develop integrated guidance on internal control. Additionally, it had recommendations for public companies, independent public accounting firms, the SEC and others with regulatory power, and educators.

As a result of this report, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) was created. COSO was composed of the American Institute of Certified Public Accountants (AICPA), the American Accounting Association (AAA), Financial Executives International (FEI), The Institute of Internal Auditors (IIA), and the Institute of Management Accountants (IMA). COSO commissioned the creation of an internal control framework, which was issued in 1992, titled *Internal Control – Integrated Framework*. This framework became the only widely accepted internal control framework in the United States. Updated in 2012 to codify 17 principles relative to the five components of internal control outlined in the original framework, the refreshed framework was published in May 2013.

FDICIA

The U.S. Federal Deposit Insurance Corporation Improvement Act of 1991 requires FDIC insured depository institutions with assets in excess of $500 million to certify that their system of internal controls is functioning effectively. It also requires the institution's independent outside auditors to attest to management's assertions regarding the effectiveness of its system of internal controls. Many aspects of this act were later included in the U.S. Sarbanes-Oxley Act of 2002.

U.S. Sarbanes-Oxley Act of 2002

After a series of significant bankruptcies and incidents of fraudulent financial reporting at major U.S. corporations (for example, Enron Corp., Tyco, and WorldCom), legislation was passed in the United States with the overall objectives of creating more accountability over the integrity of financial reporting by chief executive and chief financial officers, and restoring investor confidence in the capital markets. This legislation, the Sarbanes-Oxley Act, contained numerous sections promulgating rules and regulations on many aspects of governance for public companies. The two sections that received the most public awareness and scrutiny were Sections 302 and 404.

- Section 302 requires the chief executive and chief financial officers of public companies to certify each quarter, in connection with the company's quarterly filing of its financial results on Form 10-Q, as to the effectiveness of the disclosure controls and procedures that were in place in connection with preparing that filing.
- Section 404 requires the company to provide assertions, in connection with the annual filing of its financial results on Form 10-K, as to the effectiveness of internal control over financial reporting. This section, in particular, requires most companies to improve the documentation and testing surrounding those internal controls to support the required assertions.

U.S. Stock Exchange Listing Standards

The major stock exchanges in the United States—the New York Stock Exchange (NYSE) and the National Association of Securities Dealers Automated Quotations (NASDAQ)—have promulgated certain standards that must be met by any public company that desires to be listed on those exchanges. These listing standards cover such items as the organization and responsibilities of the board and audit committee, code of business conduct, personal loans to executives, the need for an internal audit function, and stock options.

Dodd-Frank Act

The Dodd–Frank Wall Street Reform and Consumer Protection Act (commonly referred to as Dodd-Frank) was passed as a response to the Great Recession. It brought about significant changes to financial regulation in the United States, including changes in the financial regulatory environment that affect all federal financial regulatory agencies and almost every part of the nation's financial services industry. Its purpose was to create a sound economic foundation to grow jobs, protect consumers, rein in Wall Street and big bonuses, and prevent another financial crisis.

REVIEW QUESTIONS

1. Why are there arrows flowing in both directions between the different elements of governance depicted in exhibit 3-2?

2. What is the OECD's definition of corporate governance?

3. What is the difference between the two areas of governance depicted in exhibit 3-3?

4. What is The IIA's definition of governance? How does this definition relate to the figure in exhibit 3-3?

5. What are the three different types of stakeholders that the board must understand? Give examples of each type.

6. What types of outcomes might a board need to consider to understand stakeholders' expectations?

7. In governance, what are the key responsibilities of:

   a. The board of directors?

   b. Senior management?

   c. Risk owners?

8. What role does the internal audit function play in governance?

9. In addition to the internal audit function, what other internal functions may provide independent assurance to the board or senior management?

10. What are the three lines of defense in the Three Lines of Defense model?

11. What is a combined assurance model? Why do some organizations use such models?

12. What are some key U.S. regulations that have been written in response to adverse business events?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. Which of the following is not an appropriate governance role for an organization's board of directors?

   a. Evaluating and approving strategic objectives.

   b. Influencing the organization's risk-taking philosophy.

   c. Providing assurance directly to third parties that the organization's governance processes are effective.

   d. Establishing broad boundaries of conduct, outside of which the organization should not operate.

2. Which of the following are typically governance responsibilities of senior management?

   I. Delegating its tolerance levels to risk managers.

   II. Monitoring day-to-day performance of specific risk management activities.

   III. Establishing a governance committee of the board.

   IV. Ensuring that sufficient information is gathered to support reporting to the board.

   a. I and IV.

   b. II and III.

   c. I, II, and IV.

   d. I, II, III, and IV.

3. ABC utility company sells electricity to residential customers and is a member of an industry association that provides guidance to electric utilities, lobbies on behalf of the industry, and facilitates sharing among its members. From ABC's perspective, what type of stakeholder is this industry association?

   a. Directly *involved* in the operation of the company.

   b. *Interested* in the success of the company.

   c. *Influences* the company.

   d. Not a stakeholder.

4. Who is responsible for establishing the *strategic* objectives of an organization?

   a. The board of directors.

   b. Senior management.

   c. Consensus among all levels of management.

   d. The board and senior management jointly.

5. Who is ultimately responsible for identifying new or emerging key risk areas that should be covered by the organization's governance process?

   a. The board of directors.

   b. Senior management.

   c. Risk owners.

   d. The internal audit function.

6. The internal audit function should not:

   a. Assess the organization's governance and risk management processes.

   b. Provide advice about how to improve the organization's governance and risk management processes.

   c. Oversee the organization's governance and risk management processes.

   d. Coordinate its governance and risk management-related activities with those of the independent outside auditor.

7. Which of the following would not be considered a first line of defense in the Three Lines of Defense model?

   a. A divisional controller conducts a peer review of compliance with financial control standards.

   b. An accounts payable clerk reviews supporting documents before processing an invoice for payment.

   c. An accounting supervisor conducts a monthly review to ensure all reconciliations were completed properly.

   d. A production line worker inspects finished goods to ensure the company's quality standards are met.

8. Which of the following would be considered a first line of defense in the Three Lines of Defense model?

   a. An accounts payable supervisor conducting a weekly review to ensure all payments were issued by the required payment date.

   b. A divisional compliance and ethics officer conducting a review of employee training records to ensure that all marketing and sales staff have completed the required FCPA training.

c. The external audit team observes the counting of inventory on December 31.

d. An internal audit team conducting an engagement to provide assurance on the company's Sarbanes-Oxley compliance with internal controls over financial reporting.

9. Which of the following would be considered a second line of defense in the Three Lines of Defense model?

a. An accounts payable supervisor conducting a weekly review to ensure all payments were issued by the required payment date.

b. A divisional compliance and ethics officer conducting a review of employee training records to ensure that all marketing and sales staff have completed the required FCPA training.

c. A shift supervisor inspecting a sample of finished goods to ensure quality standards are met.

d. An internal audit team conducting an engagement to provide assurance on the company's Sarbanes-Oxley compliance with internal controls over financial reporting.

10. Companies in industries that are heavily regulated may be subject to audits by the regulator's auditors. While not specifically covered in the Three Lines of Defense model, such auditors would most likely be considered:

a. Part of the first line of defense.

b. Part of the second line of defense.

c. Part of the third line of defense.

d. Not a line of defense.

11. Which of the following is *not* a role of the internal audit function in best practice governance activities?

a. Support the board in enterprisewide risk assessment.

b. Ensure the timely implementation of audit recommendations.

c. Monitor compliance with the corporate code of conduct.

d. Discuss areas of significant risks.

12. Which of the following statements regarding corporate governance is *not* correct?

a. Corporate control mechanisms include internal and external mechanisms.

b. The compensation scheme for management is part of the corporate control mechanisms.

c. The dilution of shareholders' wealth resulting from employee stock options or employee stock bonuses is an accounting issue rather than a corporate governance issue.

d. The internal audit function of a company has more responsibility than the board for the company's corporate governance.

13. What types of business events tend to drive new legislation and guidance?

a. Economic downturns.

b. Fraud or other corporate wrongdoing.

c. Elections or other political changes.

d. Economic growth.

14. Which of the following represents the best governance structure?

Operating Management	Executive Management	Internal Auditing
a. Responsibility for risk	Oversight role	Advisory role
b. Oversight role	Responsibility for risk	Advisory role
c. Responsibility for risk	Advisory role	Oversight role
d. Oversight role	Advisory role	Responsibility for risk

DISCUSSION QUESTIONS

1. Describe ways in which an organization's business model may affect its approach to governance oversight. Provide examples that contrast publicly held companies from privately held companies.

2. Discuss why it is important, from a governance perspective, to have independent outside directors on a board of directors.

3. Given that directors typically do not interface directly with key stakeholders, how might a board of directors obtain an understanding of key stakeholder expectations? How might that process vary among the various stakeholder groups identified in the chapter?

4. In exhibit 3-4, the internal audit function is included in the assurance box. In light of this assurance role, discuss the pros and cons of the chief audit executive (CAE) reporting to the board of directors (or one of its committees) versus the chief financial officer (CFO). Relate your answer to the concepts described in Standard 1100: Independence and Objectivity.

5. IT governance has become a "hot topic" in recent years. Using the governance framework shown in exhibit 3-4, customize each of the components to describe how they might specifically relate to governing IT objectives and risks of an organization.

6. The General Auditor's Office (GAO) of ABC jurisdiction issued a report on the XYZ Electric Cooperative, a large member-owned utility. This report reviewed the work of MNO Consulting. MNO found numerous internal control weaknesses. The GAO concurred with MNO's conclusion and recommendations regarding the overall lack of effective internal controls. In particular, the GAO went on to recommend that the ABC jurisdiction's legislature should require by law that each cooperative:

   - Create a board of directors (board) and maintain a separate audit committee.
   - Employ an internal auditor who reports to the board.

   A reporter for the local newspaper has a couple of questions for you.

   a. Typically, what is a governing board's responsibility for internal controls?

   b. Why would the GAO want each cooperative board to employ an internal auditor?

7. The CAE of PJS Company is working with senior management and the board to develop a combined assurance model and has asked you for advice. More specifically, he has asked you to respond to the following questions:

   a. In a combined assurance model, should the internal audit function postpone assurance engagements in areas of the company for which other assurance providers have already planned assurance activities?

   b. What factors might influence the CAE's decision to postpone an assurance engagement?

   c. What services might the internal audit function provide in lieu of performing an assurance engagement?

8. Discuss how regulations help to improve governance. Explain how some regulations may have unintended consequences regarding governance.

9. The King Code of Corporate Governance for South Africa is widely considered one of the most progressive governance codes in the world. Search the internet for the latest version (King IV) and find Section 5.4, which focuses on Assurance. Under Principle 15 there is information about internal audit. Choose a recommended practice and discuss how it aligns with The IIA's *Standards.*

CASES

CASE 1

Visit the website http://www.ecgi.org/codes/all_codes.php, which contains a list of governance codes from around the world. Review the governance regulations for Australia, South Africa, and the United Kingdom. Conduct additional research on the internet to answer the following questions:

A. What events may have been the impetus for each of these countries promulgating these regulations?

B. Describe ways in which these regulations are similar.

C. Describe at least one notable difference between each of these regulations.

D. Which of these regulations do you believe has the most comprehensive governance requirements? Why?

CASE 2

The IIA has different blogs on its website. One of these is a governance blog (https://iaonline.theiia.org/blogs/marks). Find this site on The IIA's website and review the last three postings, as well as the comments related to each. Be prepared to discuss in class your thoughts on each of the three original postings and the related comments.

CASE 3

KnowledgeLeader Practice Case: Multiple Lines of Defense

Background Information

Many organizations have multiple avenues for ensuring that they operate within their risk appetite. Organizations operating in a highly regulated environment in particular have a need to demonstrate that they have mitigated the many risks that threaten them to a reasonable level. To do so, they implement a technique of assurance layering to get the risk mitigation they need or desire. One common example of this strategy is the Three Lines of Defense model. However, this is not the only model.

Utilize the KnowledgeLeader website and perform the following:

a. Authenticate to the KnowledgeLeader website using your username and password.

b. Perform research and identify alternative model(s) of assurance layering other than the Three Lines of Defense model. Compare and contrast the(se) model(s). How do they differ? How are they similar?

c. Submit a brief write-up indicating the results of your research to your instructor.

Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

CHAPTER 4

Risk Management

LEARNING OBJECTIVES

- Define risk and enterprise risk management.
- Discuss the different dimensions of the Committee of Sponsoring Organizations of the Treadway Commission's exposure draft titled *Enterprise Risk Management - Aligning Risk with Strategy and Performance.*
- Discuss the different dimensions of ISO 31000:2009(E): Risk management - Principles and guidelines.
- Articulate the relationship between governance and enterprise risk management.
- Describe the different roles the internal audit function can play in enterprise risk management.
- Evaluate the impact of enterprise risk management on internal audit activities.

Life is full of uncertainty. If you stop to think about it, there are many day-to-day activities about which you simply do not know what the outcome will be in advance. How you deal with those uncertainties determines what kind of success you will have in life.

Operating a business is no different. Organizations face uncertainties in all aspects of conducting business, and their success is dependent on how well they manage those uncertainties. Internal auditing can be a key enabler to that success.

Refer back to exhibit 3-2 in chapter 3, "Governance." Risk management is depicted as the middle layer in the governance structure. Risk management is intended to 1) identify and mitigate the risks that may adversely affect the organization's success, and 2) exploit the opportunities that enable its success. Management develops strategies regarding how to best manage the key risks and opportunities. Risk management activities should operate within the overall direction of the governance structure.

Similar to the discussion of governance in chapter 3, this chapter describes risk management in detail, discussing key risk management elements and principles, as well as the various roles and responsibilities. Other illustrations will be provided to depict, in greater detail, how one might envision the key elements of risk management.

The chapter ends with discussions about how the internal audit function can play an integral role in risk management. The specific roles of the internal audit function are discussed, as is the impact risk management may have on the internal audit plan.

EXHIBIT 4-1
IPPF GUIDANCE RELEVANT TO CHAPTER 4

- **Standard 2010** – Planning
- **Standard 2100** – Nature of Work
- **Standard 2120** – Risk Management

Before beginning the discussion about risk management, it is important to understand why this area is a frequent topic of discussion in the business world. Many organizations have found that implementing effective risk management is more difficult than first thought. However, there are an increasing number of reasons for organizations to establish strong capabilities in these areas. In addition to the role of risk management in enabling success, ratings agencies in the United States are now focusing more heavily on risk management in their ratings evaluations. Moody's Investors Services incorporates governance into its ratings and considers risk management as well. Standard & Poor's evaluates certain risk management components with the intention of formally incorporating them into its ratings in the future. Since the financial crisis that began in 2008, several regulators around the world have implemented risk management requirements, particularly for banks and other financial service organizations. These are examples of why it is so important for organizations to implement an appropriate risk management structure.

OVERVIEW OF RISK MANAGEMENT

A Brief History of Risk

Risk management is not a recent phenomenon or new way of approaching the management of a business. Peter L. Bernstein provides an extensive history of risk in *Against the Gods: The Remarkable Story of Risk*. His book outlines the evolving acceptance and understanding of risk over the centuries. For example:

- Gambling has been documented back several centuries to early Greek and Egyptian civilizations as well as in the Bible (for example, Pontius Pilate's soldiers cast lots for Christ's robe as he suffered on the cross). While games of chance have been common throughout history, the theory of probability was not discovered until the Renaissance period in the mid-seventeenth century. After that discovery, probability theory advanced from the mathematical exercise of explaining outcomes in games of chance to a key tool used in the business world to support decision-making.
- Chinese and Babylonian traders displayed risk transfer and distribution practices as early as the third and second century B.C., respectively. The Greeks

and Romans introduced early forms of health and life insurance around A.D. 600. Toward the end of the seventeenth century, the growing importance of London as a center for trade led to rising demand for marine insurance. In the late 1680s, Edward Lloyd opened a coffeehouse that became a popular haunt of ship owners, merchants, and ships' captains, and thereby a reliable source of the latest shipping news. It became the meeting place for parties wishing to insure cargoes and ships, and those willing to underwrite such ventures. Today, Lloyd's of London remains one of the world's leading specialty insurance companies.

- Similar to insurance businesses, banks and other financial institutions have been dealing with risks in all aspects of their businesses throughout the years. The first banks were probably the religious temples of the ancient world. There are records of loans from the eighteenth century B.C. in Babylon that were made by temple priests to merchants. The Greek and Roman empires helped evolve banking practices surrounding loans, deposits, and currency exchange. Banks use concepts of risk to determine the rates they can charge for loans based on their own cost of funds and the probabilities of default. Financial institutions also have developed financial instruments, such as options, swaps, and derivative instruments, that create value based on the probabilities of uncertain future events.[1]

Definitions of Risk

The English language word risk comes from the Italian word "risicare," which means "to dare: a choice under uncertain conditions (rather than fate)."[2] The key to this definition is the notion of uncertainty. Expanding on that definition, in its 2016 exposure draft the Committee of Sponsoring Organizations of the Treadway Commission (COSO) defined risk as "The possibility that events will occur and affect the achievement of a strategy and objectives."[3] And the International Organization for Standardization (based in Switzerland and abbreviated ISO based on the French translation) very simply defines risk as the "effect of uncertainty on objectives."[4]

Embedded in the COSO and ISO definitions of risk are certain key, fundamental points that must be understood before proceeding to the concepts of risk management:

- Risk begins with strategy formulation and setting of business objectives. An organization is in business to achieve particular strategies and business objectives. Risks represent the barriers to successfully achieving those objectives as well as the opportunities that may help achieve those objectives. Therefore, because each organization has somewhat different strategies and business objectives, they also will face different types of risks.
- Risk involves uncertainty, which COSO refers to as "The state of not knowing how potential events may or may not manifest."[5]
- Risk does not represent a single point estimate (for example, the most likely outcome). Rather, it represents a range of possible outcomes. Because many different outcomes are possible, the concept of a range is what creates uncertainty when understanding and evaluating risks.
- Risks may relate to preventing bad things from happening (risk mitigation), or failing to ensure good things happen (that is, exploiting or pursuing opportunities). Most people focus on preventing bad outcomes—for example, a hazard that needs to be mitigated or eliminated. While many risks do, in

Risk (COSO)

The possibility that events will occur and affect the achievement of a strategy and objectives.

Opportunity

An action or potential action that creates or alters goals or approaches for creating, preserving, or realizing value.

fact, present threats to an organization, risks are also represented by the failure to pursue and achieve positive outcomes.

- Risks are inherent in all aspects of life—that is, wherever uncertainty exists, one or more risks exist. The examples provided in the previous section on the history of risk illustrate how the understanding of risk has evolved. Those risks specifically associated with organizations conducting a form of business are commonly referred to as business risks. This can be thought of in quite simple terms: uncertainties regarding threats to the achievement of business objectives are considered business risks.

Using this description of risk, it becomes apparent that organizations face an extensive number of risks as they try to execute strategies and achieve objectives. The extensiveness of these risks can be somewhat overwhelming, which brings greater appreciation for the need to have a process to effectively understand and manage risks across an organization. This need can be addressed through enterprise risk management (ERM).

COSO ERM FRAMEWORK

In the United States, COSO issued for public exposure its *Enterprise Risk Management – Aligning Risk with Strategy and Performance* (COSO ERM, or ERM framework) in 2016. As of this publication's printing date, the ERM framework has not been finalized. The discussion that follows reflects key concepts that the authors believe will be embodied in the final framework. Readers are encouraged to visit www.coso.org for updates regarding the final framework.

Enterprise Risk Management

The culture, capabilities, and practices, integrated with strategy-setting, that organizations rely on to manage risk in creating, preserving, and realizing value.

In 2004, COSO identified a need for a robust framework to help companies effectively identify, assess, and manage risk. The resulting risk management framework expanded on the previously issued *Internal Control – Integrated Framework*, incorporating all key aspects of that framework in the broader ERM framework. COSO updated its *Internal Control – Integrated Framework* in 2013 and expects to release an update to the 2004 ERM framework in 2017.

In the exposure draft, COSO defines ERM as:

> The culture, capabilities, and practices, integrated with strategy-setting and its execution, that organizations rely on to manage risk in creating, preserving, and realizing value.[6]

COSO indicated that this definition emphasizes its focus on managing risk through:

- *Recognizing culture and capabilities*, which are key aspects of ERM. Culture relates to the people at all levels of the organization, including those who establish the mission, strategy, and business objectives, as well as all who carry out risk management practices. ERM helps people understand risk and how it relates to the organization's strategy and business objectives. Capabilities relate to the skills needed to execute the organization's mission and vision. An organization that has the capabilities to adapt to changes is better able to compete and thrive in the marketplace.

- *Applying practices*, which are the procedures and tasks employed by the organization to ensure effective risk management. These practices are applied from the highest levels of the organization and flow down through divisions, business units, and functions.

- *Integrating with strategy-setting and its execution*, which involves management considering the implications of each strategy to the organization's risk profile. Management specifically considers new opportunities arising from the strategies, as well as the potential barriers to the success of those strategies. COSO indicates that effective integration is more likely to result in lower costs and a greater ability to identify new opportunities to grow the business.
- *Managing risk to strategy and business objectives* provides management and the board of directors with a reasonable expectation that they can achieve the overall strategy and business objectives. This means that the amount of uncertainty is appropriate for the organization, recognizing that risk cannot be predicted with high precision. Robust risk management practices will increase an organization's confidence that strategies and business objectives will be achieved.
- *Linking to creating, preserving, and realizing value* means that, ultimately, the success of risk management is determined by value. The sufficiency of that value will be a function of the organization's risk appetite, which is discussed further later in this chapter.

The COSO exposure draft discussed how strategy should be considered in the context of an organization's mission, vision, and core values, and as a driver of an organization's overall direction and performance. COSO indicated that when enterprise risk management and strategy-setting are integrated, an organization is better positioned to understand:

- How its mission, vision, and core values can help shape the articulation of acceptable types and amounts of risk for consideration when setting strategy.
- That its strategies and business objectives must align with the mission, vision, and core values.
- There are various types and amounts of risk the organization potentially exposes itself to from the strategy that has been chosen.
- The types and amounts of risk will affect how it executes its strategy and achieves its business objectives.

Mission, Vision, and Core Values

An organization's mission, vision, and core values define what it strives to be and how it wants to conduct business. In the exposure draft, COSO characterized each as follows:

- **Mission**: The entity's core purpose, which establishes what it wants to accomplish and why it exists.
- **Vision**: The entity's aspirations for its future state or what the organization aims to achieve over time.
- **Core Values**: The entity's beliefs and ideals about what is good or bad, acceptable or unacceptable, which influence the behavior of the organization.[7]

An organization's mission, vision, and core values tend to remain stable over time, but they may evolve as stakeholder expectations change. Mission and vision are

Mission

The entity's core purpose, which establishes what it wants to accomplish and why it exists.

Vision

The entity's aspirations for its future state or what the organization aims to achieve over time.

Core Values

The entity's beliefs and ideals about what is good or bad, acceptable or unacceptable, which influence the behavior of the organization.

considered in the context of strategic planning, and core values are considered in the context of the culture the organization wishes to embrace.

Strategy and Business Objectives

The COSO ERM exposure draft refers to strategy as "The organization's plan to achieve its mission and vision and apply its core values" and business objectives are defined as "Those measurable steps the organization takes to achieve its strategy." A well-defined strategy drives the efficient allocation of resources and effective decision-making, which in turn help provide the direction for the business objectives. Thus, ERM is integrated with the process to establish strategy and business objectives.

Strategy

The organization's plan to achieve its mission and vision and apply its core values.

COSO discusses three inherent challenges that arise as part of establishing strategy and business objectives. These are:

1. **The possibility of strategy not aligning.** The mission and vision influence the acceptable types and amount of risk an organization is willing to take on. If a strategy is not aligned with the mission and vision, the organization's ability to realize its mission and vision may be significantly impaired. This can happen even when the misaligned strategy is successfully executed. Integrating ERM can help an organization avoid misaligning its strategy.
2. **Implications from the strategy chosen.** ERM can help an organization understand the potential outcomes of a strategy. Some strategies may appear to align with the mission and vision, but the outcomes may not help the organization realize its mission and vision, or there may be unintended consequences of the strategy. Thus, it is important to consider the implications of every strategy considered.
3. **Risk to executing the strategy.** There is always risk that the strategy will not be executed effectively and, therefore, not deliver the desired results. Organizations must be cognizant of the inherent risks embedded in a strategy, and evaluate whether they have the capabilities to execute the strategy and achieve the desired results.

Business Objectives

Those measurable steps the organization takes to achieve its strategy.

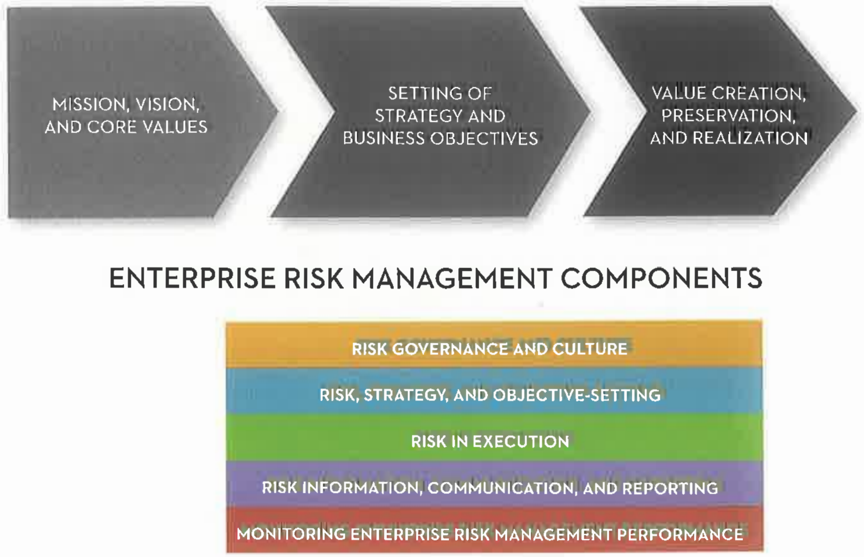
Components and Principles

According to the exposure draft, the COSO ERM framework consists of five interrelated components. Exhibit 4-2 depicts these components and their relationship with the organization's mission, vision, and core values, and how they affect performance.

The COSO exposure draft describes these five risk components as follows:

1. **Risk Governance and Culture**: Risk governance and culture together form a basis for all other components of enterprise risk management. *Risk governance* sets the entity's tone, reinforcing the importance of, and establishing oversight responsibilities for, enterprise risk management. *Culture* pertains to ethical values, desired behaviors, and understanding of risk in the entity. Culture is reflected in decision-making.
2. **Risk, Strategy, and Objective-Setting**: Enterprise risk management is integrated into the entity's strategic plan through the process of setting strategy and business objectives. With an understanding of business context, the organization can gain insight into internal and external factors and their impact on risk. An organization sets its risk appetite in conjunction with

EXHIBIT 4-2
COSO ERM COMPONENTS


MISSION, VISION, AND CORE VALUES
SETTING OF STRATEGY AND BUSINESS OBJECTIVES
VALUE CREATION, PRESERVATION, AND REALIZATION
ENTERPRISE RISK MANAGEMENT COMPONENTS
RISK GOVERNANCE AND CULTURE
RISK, STRATEGY, AND OBJECTIVE-SETTING
RISK IN EXECUTION
RISK INFORMATION, COMMUNICATION, AND REPORTING
MONITORING ENTERPRISE RISK MANAGEMENT PERFORMANCE

Source: Adapted from 2016 COSO's exposure draft for its ERM framework.

strategy-setting. The business objectives allow strategy to be put into practice and shape the entity's day-to-day operations and priorities.

3. **Risk in Execution**: An organization identifies and assesses risks that may affect an entity's ability to achieve its strategy and business objectives. It prioritizes risks according to their severity and considering the entity's risk appetite. The organization then selects risk responses and monitors performance for change. In this way, it develops a portfolio view of the amount of risk the entity has assumed in the pursuit of its strategy and business objectives.

4. **Risk Information, Communication, and Reporting**: Communication is the continual, iterative process of obtaining information and sharing it throughout the entity. Management uses relevant and quality information from both internal and external sources to support enterprise risk management. The organization leverages information systems to capture, process, and manage data and information. By using information that applies to all components, the organization reports on risk, culture, and performance.

5. **Monitoring Enterprise Risk Management Performance**: By monitoring enterprise risk management performance, an organization can consider how well the enterprise risk management components are functioning over time and in light of substantial changes.

According to COSO, these five components contain a series of principles representing the fundamental concepts associated with each component. These principles are phrased to outline actions that organizations would do as part of their ERM practices. COSO considers these principles to be universal and part of any effective ERM initiative, but acknowledge that management must bring judgment to bear in applying them.

At the time of publication, the exposure draft included 23 principles as shown in the numbered bullets. The additional explanations found in the sub-bullets are paraphrased from the respective chapters in the framework. [Note: Although the final framework was not available at the time of this publication, the authors believe some of these principles will be combined and modified slightly in the final framework. Readers are encouraged to visit www.coso.org for updates.]

Culture

The attitudes, behaviors, and understanding about risk, both positive and negative, that influence the decisions of management and personnel and reflect the mission, vision, and core values of the organization.

Risk Governance and Culture

1. **Exercises board risk oversight.** The board of directors provides oversight of the strategy and carries out risk governance responsibilities to support management in achieving strategy and business objectives.

- The board has the primary responsibility for risk oversight, and in some countries even has fiduciary responsibility to stakeholders. However, while the board has overall risk oversight responsibility, management is responsible for day-to-day risk management responsibility.
- The board should have sufficient skills, experience, and business knowledge to carry out its risk oversight responsibility.
- The board should be sufficiently independent to objectively carry out its oversight responsibility.
- The board should understand the complexity of the organization to ensure the risk management approach is suitable relative to the strategy and business objectives.
- The board should ensure organizational bias or "groupthink" is minimized to ensure effectiveness of the risk management decisions.

2. **Establishes governance and operating model.** The organization establishes governance and operating structures in the pursuit of strategy and business objectives.

- The organization should establish an operating model and reporting lines that support its strategies and business objectives.
- ERM should be structured to ensure the right information is communicated to management in support of their decision-making.
- Authorities and responsibilities should be established to enable individuals to carry out their risk management responsibilities.

3. **Defines desired organizational behaviors.** The organization defines the desired behaviors that characterize the entity's core values and attitudes toward risk.

- The board and management shape a culture that reflects the core values and approach to ERM in the organization. They also define the desired behaviors of individuals, which should align with the organization's risk-taking philosophy. Such a philosophy can range from risk averse to risk neutral to risk aggressive. The culture and desired behaviors influence how the ERM framework is applied throughout the organization.
- Management helps to create a risk-aware culture by defining the characteristics needed to achieve the desired culture over time.

4. **Demonstrates commitment to integrity and ethics.** The organization demonstrates a commitment to integrity and ethical values.

- Both the board and management should set a strong tone that supports an ethical culture and risk awareness among all decision-makers.
- Management should establish standards of conduct to guide the organization's risk management efforts, evaluate compliance with those standards, and respond to deviations in the standards.
- Management should ensure alignment of the culture, ethics, and individual behaviors to ensure risk management is sustainable.
- Part of demonstrating their commitment to integrity and ethics is keeping communication open across the organization and ensuring reporting of integrity and ethics issues is free from retribution.

5. **Enforces accountability.** The organization holds individuals at all levels accountable for ERM, and holds itself accountable for providing standards and guidance.

- The board ultimately holds the chief executive officer (CEO) accountable for managing the risks faced by the organization and the establishment of an ERM framework. The CEO in turn assigns accountability to other chief officers and throughout the organization, as appropriate. However, the board must hold itself accountable for its risk management oversight responsibility.
- Performance should be rewarded in such a way that desired outcomes are achieved, while unethical behaviors are not condoned or rewarded.
- Goals, targets, and other pressures that may motivate the wrong behaviors must be addressed timely.

6. **Attracts, develops, and retains talented individuals.** The organization is committed to building human capital in alignment with the strategy and business objectives.

- Management, with board oversight, should understand and define the competencies that are needed to carry out the strategy and business objectives.
- The organization must be able to attract, develop, and retain individuals who possess those competencies. Developing includes training, mentoring, and evaluating their performance.
- The board and management should develop contingency and succession plans to ensure sustainable success.

Risk, Strategy, and Objective-Setting

7. **Considers risk and business context.** The organization considers potential effects of business context on risk profile.

- An organization needs to understand its full business context, including the external environment, internal environment, and both external and internal stakeholder expectations.
- After understanding the business context, management can determine how that business context affects the organization's risk profile.

8. **Defines risk appetite.** The organization defines risk appetite in the context of creating, preserving, and realizing value.

- The exposure draft describes risk appetite as "the types and amount of risk, on a broad level, an organization is willing to accept in pursuit of value."

Risk Appetite

The types and amount of risk, on a broad level, an organization is willing to accept in pursuit of value.

- The risk appetite should be endorsed by the board.
- Once defined, the risk appetite should be communicated throughout the organization.
- Risk appetite is incorporated into decision-making and can help align resource allocation with the mission, vision, and core values.

9. **Evaluates alternative strategies**. The organization evaluates alternative strategies and impact on risk profile.

- Strategy should align with the organization's mission, vision, and core values.
- Strategy should also align with the organization's risk appetite.
- As part of strategy setting, it is important to understand the implications of the chosen strategies in terms of the relevant risks that may rise from a given strategy.

10. **Considers risk while establishing business objectives.** The organization considers risk while establishing the business objectives at various levels that align and support strategy.

- Business objectives should be measurable, observable, attainable, and relevant.
- By aligning business objectives to strategy, such objectives will support the organization's achievement of its mission and vision.
- The organization should set performance measures and targets to monitor performance and support the achievement of business objectives.

11. **Defines acceptable variation in performance**. The organization defines acceptable variation in performance relating to strategy and business objectives.

- There are a range of possible outcomes, and it is important to define the variation in performance that is considered acceptable.
- Acceptable variation in performance is sometimes referred to as risk tolerance.

Risk in Execution

12. **Identifies risk in execution.** The organization identifies risk in execution that impacts the achievement of business objectives.

Tolerance

The boundaries of acceptable outcomes related to achieving business objectives.

- The organization first identifies new, emerging, and changing risks to the achievement of it strategy and business objectives.
- This process includes identifying both opportunities that may help achieve business objectives and threats that can make it more difficult to achieve, or prevent achieving, such objectives.
- All such opportunities and threats are captured in a risk universe.

Severity

A measurement of considerations such as likelihood and impact of events or the time it takes to recover from events.

13. **Assesses the severity of risk.** The organization assesses the severity of risk.

- Risks in the organization's risk universe are assessed to determine the severity to the achievement of the strategy and business objectives. This assessment may be done at different levels of the organization.
- Severity measures are chosen based on the business context of the various risks.
- Inherent, targeted, and residual risk levels are determined.

- Inherent risk represents the level of risk before management's application of direct or focused actions to alter its severity.
- Targeted risk is the level management prefers to assume in the pursuit of strategy and business objectives.
- Residual risk represents the level of risk after management's application of actions to alter its severity.

- It is common to depict residual risk in a graphical way that supports discussion of risk among management and the board.

14. **Prioritizes risks**. The organization prioritizes risks as a basis for selecting responses to risks.

- Criteria should be established to provide consistency among the assessment of multiple risks.
- Risks may be assessed using either quantitative and/or qualitative criteria.
- Risks are prioritized based on the application of such criteria and consideration of the organization's risk appetite.

15. **Identifies and selects risk responses**. The organization identifies and selects risk responses.

- Management evaluates appropriate risk responses, based on the nature and amount of the risk. Responses can be to:
  - *Accept* the risk at its current level and take no action to affect its severity. Such a response indicates the severity is within the organization's risk appetite.
  - *Avoid* the risk by divesting or otherwise removing it from the organization's risk profile. This response indicates the severity may be outside the organization's risk appetite and there is no cost-effective response to bring it within the risk appetite.
  - *Pursue* or exploit the risk because taking on such a risk may be advantageous to the organization and may be necessary to achieve a particular business objective.
  - *Reduce* the risk through application of controls or other risk mitigation activities. Such a response indicates the impact of the risk may go beyond the organization's risk appetite and actions are necessary to reduce the potential impact.
  - *Share* or transfer the risk, which may include outsourcing, insuring, or hedging the risk. This option is best when others can manage the risk more effectively or efficiently than the organization can.
- After considering the risk response options, including the costs and benefits of each, a risk response is chosen and deployed.

16. **Develops portfolio view**. The organization develops and evaluates a portfolio view of risk.

- Since risks do not occur in isolation, management should understand, develop, and analyze a view on the entire portfolio of risk. This allows management and the board to consider the type, severity, and interdependencies of risks and how they may, individually or in aggregate, affect performance.

Inherent Risk

The risk to an entity in the absence of any explicit or targeted actions that management might take to alter the risk's severity.

Residual Risk

The risk remaining after management has taken explicit or targeted action to alter the risk's severity.

Risk Responses

– Accept
– Avoid
– Pursue
– Reduce
– Share

17. **Assesses risk in execution**. The organization assesses operating performance results and considers risk.

- The performance of the organization should be monitored to determine how risk has manifested and impacted strategy and business objectives compared to the risk appetite.
- As part of this monitoring, management and the board should assess whether the organization's current capabilities are sufficient to achieve the desired level of performance.

Risk Information, Communication, and Reporting

18. **Uses relevant information**. The organization uses information that supports ERM.

- Having relevant information by itself is not sufficient; it must also be put to use to enable informed decision-making.
- The quality of information must be maintained. Quality information is accessible, accurate, appropriate, current, reliable, and has integrity.
- Data requirements are established and data is then managed relative to those requirements.

19. **Leverages information systems**. The organization leverages the entity's information systems to support ERM.

- Effective information systems provide information to decision-makers when they need it, which will help sustain effective risk management.
- Information systems must be changed in an appropriately controlled manner to continue meeting the needs of the business.

20. **Communicates risk information**. The organization uses communication channels to support ERM.

- Periodic communications are necessary with both the board and key stakeholders.
- Communications may be in the form of:
  - Electronic messaging (for example, emails, social media, and text messages).
  - External/third-party materials (for example, industry or trade journals and media reports).
  - Informal/oral (for example, discussions and meetings), public events (for example, roadshows, town hall meetings, and professional conferences).
  - Training and seminars (for example, live or online training, webcasts, and workshops).
  - Written internal documents (for example, briefing documents, dashboards, and presentations).

21. **Reports on risk, culture, and performance**. The organization reports on risk, culture, and performance at multiple levels of and across the entity.

- For reporting purposes, management should identify the appropriate users of reports and their roles relative to risk management.
- Attributes for reporting to each type of user should be determined.

- The types of reporting should be determined (for example, portfolio view, cultural assessment, root causes, sensitivity analyses, performance indicators, trend analyses).
- The reporting frequency should be established.

Monitoring ERM Performance

22. **Monitoring substantial change**. The organization identifies and assesses internal and external changes that may substantially impact strategy and business objectives.

- Monitoring should be integrated into business processes.
- Monitoring should include the internal environment, external environment, and culture.

23. **Monitors ERM**. The organization monitors ERM performance.

- The results of monitoring are used to pursue improvement in risk management.

ERM Roles and Responsibilities

The board of directors, management, risk officers, financial officers, internal auditors, and, indeed, every individual within an organization contribute to effective ERM. The roles and responsibilities of each of these groups align with those discussed in chapter 3. While many of the ERM responsibilities were mentioned in the previous discussion of the COSO ERM principles, an overall description of these responsibilities follows.

- **Board of directors**. While the board has some role throughout all aspects of ERM, most of its responsibilities relate to the risk governance and culture component. The board's primary role relates to principle #1, its risk oversight responsibility. The board also helps management establish the governance and operating models, define culture and desired behaviors, demonstrate commitment to integrity and ethics, and assign accountability and authority for risk management.

- **Management**. Management is responsible for carrying out all activities of an organization, including ERM. In fact, management is responsible for aspects of all five components of ERM. However, these responsibilities will vary, depending on the level in the organization and the organization's characteristics.

  The CEO is ultimately responsible for the effectiveness and success of ERM. One of the most important aspects of this responsibility is ensuring that a positive and ethical tone is set. The CEO influences the composition and conduct of the board, provides leadership and direction to senior managers, and monitors the organization's overall risk activities in relation to its risk appetite. When evolving circumstances, emerging risks, strategy implementation, or anticipated actions indicate potential misalignment with risk criteria, the CEO takes the necessary actions to reestablish alignment.

  Senior managers in charge of the various organizational units have responsibility for managing risks related to their specific units' objectives. They convert the organization's overall strategy into ongoing operations activities, identify potential risk events, assess the related risks, and implement actions to manage those risks. Managers guide the application of the organization's ERM components relative to and within their spheres of responsibility, ensuring the application of those components is consistent with the board's and management's levels of acceptable variation in performance. They assign responsibility for specific ERM procedures to managers of the functional processes. As a result, these managers usually play a more active role in devising and executing particular risk procedures that address the unit's objectives, such as techniques for risk identification and assessment, and in determining specific risk management strategies, for example, developing policies and procedures for purchasing goods or accepting new customers.

Staff functions, such as accounting, human resources, compliance, or legal, also have important supporting roles in designing and executing effective ERM practices. These functions may design and implement programs that help manage certain key risks across the entire organization.

Chief Risk Officer

A senior management position established by many companies that acts as the centralized coordination point to facilitate risk management activities.

- **Risk officer.** Some organizations have established a separate senior management position to act as the centralized coordinating point to facilitate ERM. A risk officer—referred to in many organizations as a chief risk officer (CRO)—typically operates in a staff function working with other managers in establishing ERM in their areas of responsibility. The CRO has the resources to help effect ERM across subsidiaries, businesses, departments, functions, and activities. This individual may have responsibility for monitoring risk management progress and assisting other managers in reporting relevant risk information up, down, and across the organization.

- **Financial executives.** Finance and accounting executives and their staffs are responsible for activities that cut across the organization. These executives often are involved in developing organizationwide budgets and plans, and tracking and analyzing performance from operations, compliance, and reporting perspectives. They play an important role in preventing and detecting fraudulent reporting, and influence the design, implementation, and monitoring of the organization's internal control over financial reporting and the supporting systems.

- **Internal auditors.** The internal audit function plays an important role in evaluating the effectiveness of—and recommending improvements to—ERM. The IIA's *International Standards for the Professional Practice of Internal Auditing* specify that the scope of the internal audit function should encompass governance, risk management, and control systems. This includes evaluating the reliability of reporting, effectiveness and efficiency of operations, and compliance with laws and regulations. In carrying out these responsibilities, the internal audit function assists management and the board by examining, evaluating, reporting on, and recommending improvements to the adequacy and effectiveness of the organization's ERM.

- **Other individuals in the organization.** In reality, ERM is the responsibility of everyone in an organization and therefore should be an integral part of everyone's job description, both explicitly and implicitly. This is important because:

- While not every individual may be considered a risk owner per se, virtually all individuals play some role in effecting ERM, ranging from producing information used in identifying or assessing risks, to executing the strategies and actions needed to manage those risks.
- All individuals are responsible for supporting the information and communication flows that are an integral part of, and inherent in, ERM.

Independent outside auditors. An organization's independent outside auditors can provide both management and the board of directors an informed, independent, and objective risk management perspective that can contribute to an organization's achievement of its external financial reporting and other objectives. Findings from their financial statement audits may relate to risk management deficiencies, analytical information, and other recommendations for improvement that can provide management with valuable information to enhance its risk management program related to financial reporting risks.

Legislators and regulators. Legislators and regulators can affect the ERM approach of many organizations, either through requirements to establish risk management mechanisms or systems of internal controls (for example, the U.S · Sarbanes-Oxley Act of 2002) or through examinations of particular entities (for example, by federal and state bank examiners). Legislators and regulators may establish rules that provide the impetus for management to ensure that risk management and control systems meet certain minimum statutory and regulatory requirements. Also, they may conduct regulatory examinations that provide information useful to the organization in applying ERM, and recommendations to management regarding needed improvements.

Other external parties. Finally, other outside stakeholders may impact an organization's ERM activities:

- Customers, vendors, business partners, and others who conduct business with an organization are an important source of information used in ERM.
- Creditors can provide oversight or direction influencing how organizations achieve their objectives. For example, debt covenants may require organizations to monitor and report information differently than they otherwise might.
- Financial analysts, rating agencies, news media, and other external parties can influence risk management activities. Their investigative and monitoring activities can provide insights on how others perceive the organization's performance, industry and economic risks, innovative operating or financing strategies, and industry trends. Management must consider the insights and observations of these parties and, if necessary, adjust the corresponding risk management activities.
- Providers of outsourced services are becoming a more prevalent way for organizations to delegate their day-to-day management of certain noncore functions. The external parties discussed above may directly influence an organization's ERM activities; however, using outside service providers may result in a different set of risks and responses than if the organization did not outsource any functions. Although external parties may execute activities on behalf of the organization, management cannot abdicate its responsibility to

manage the associated risks and should establish a program to monitor outsourced activities. Refer to chapter 5, "Business Processes and Risks," where business process outsourcing is discussed in greater detail.

ISO 31000:2009 RISK MANAGEMENT – PRINCIPLES AND GUIDELINES

In 2009, the International Organization for Standardization issued its standard ISO 31000:2009 (ISO 31000), the first globally recognized standard related to risk management. ISO 31000 was developed to provide a globally accepted way of viewing risk management, taking into consideration principles, frameworks, models, and practices that were evolving around the world. ISO 31000 includes three sections—principles, framework, and process, each of which is described further.

Risk (ISO 31000)

Effect of uncertainty on objectives.

ISO 31000 Principles

ISO 31000 provides 11 principles that ISO believes are necessary for risk management to be effective. These principles state that risk management:

- Creates and protects value.
- Is an integral part of all organizational processes.
- Is part of decision-making.
- Explicitly addresses uncertainty.
- Is systematic, structured, and timely.
- Is based on the best available information.
- Is tailored.
- Takes human and cultural factors into account.
- Is transparent and inclusive.
- Is dynamic, iterative, and responsive to change.
- Facilitates continual improvement of the organization.[8]

Failure to conform with any of those principles makes it more challenging to implement effective and sustainable risk management, which, in turn, makes achievement of objectives more difficult.

Mandate and Commitment

Stated expectations from the board and senior management to ensure alignment with organizational objectives and commitment of sufficient resources to enable success.

ISO 31000 Framework

ISO believes that the success of risk management depends on a framework that provides a foundation for risk management throughout the organization. The framework is composed of the following components:

- **Mandate and commitment** from the board and senior management to ensure alignment with organizational objectives and commitment of sufficient resources to enable success.
- **Design of framework for managing risk**, which ensures the foundation is set for effective risk management processes. This involves:
  - Understanding the organization and its context.
  - Establishing a risk management policy.

- Delegating accountability and authority.
- Integrating risk management into organizational processes.
- Allocating the necessary resources.
- Establishing internal and external communication and reporting mechanisms.

- **Implementing the risk management framework and process** to help the organization achieve its objectives.
- **Monitoring the framework** to determine its ongoing effectiveness.
- **Continually improving the framework** to ensure its sustainability.[9]

While the specific components of a risk management framework can be customized to meet the needs of the organization, failure to introduce some form of structure will likely result in less efficient and effective risk management.

ISO 31000 Process

Finally, a process must be in place throughout the organization that allows for risk management to operate consistently. The ISO risk management process is comprised of the following activities:

- **Establish the context**, which focuses on understanding and agreeing on both the external and internal factors that will influence risk management. This activity also encompasses the definition of risk criteria, which are defined as "the terms of reference against which the significance of a risk is evaluated."[10] Such terms may include the organization's risk appetite, risk tolerance levels, and criteria against which risk may be assessed (such as impact and likelihood).
- **Assess the risks**, which involves identifying the risks, analyzing the risks by considering the causes, sources, and types of outcomes, and evaluating the risks to help prioritize which ones should be treated first.
- **Treat the risks**, which involves making decisions similar to those described in the risk response discussion of COSO earlier in this chapter.
- **Monitor risks** to identify the onset of a risk event and evaluate whether the risk treatments are having the desired effect. Therefore, it is also important to make sure risk management activities are properly recorded to assist in this monitoring.
- **Establish a communication and consultation process** to ensure information flows up, down, and across the organization to enable the risk management process.[11]

The risk management process operates continuously and is embedded in all decision-making activities. An effective process will help enable the ongoing success of risk management.

Other Frameworks

While COSO ERM and ISO 31000 are widely recognized around the world, some countries have developed their own risk management frameworks. As discussed in chapter 3, business conditions and regulatory initiatives have resulted in a variety of codes and regulations to meet the needs of the local capital markets and businesses.

While most of these frameworks are fundamentally similar to COSO ERM and ISO 31000, each has unique characteristics that readers are encouraged to study. Certain frameworks will prove to be more intuitive to some individuals than to others.

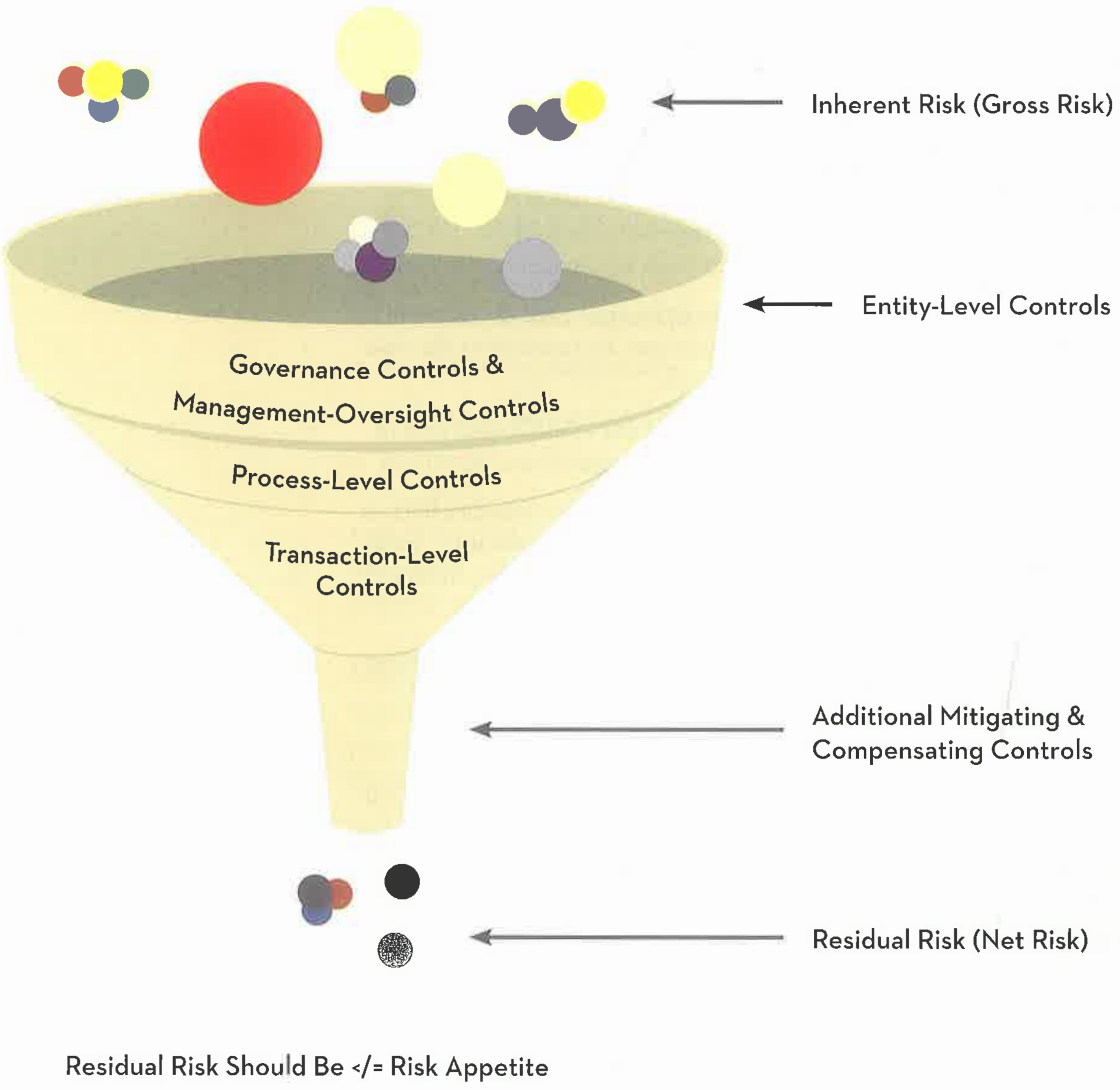
A Top-Down View of Risk

Exhibit 4-3 provides a way of summarizing the role of ERM. It uses a funnel metaphor to depict the top-down role ERM plays in helping organizations reduce their key risks to acceptable levels. This exhibit is also depicted in Case Study 1, "Auditing Entity-Level Controls," which accompanies this textbook. The key points to understand from this illustration are discussed in greater detail in that case study, but are summarized as follows:

Entity-Level Controls

Controls that operate across an entire entity and, as such, are not bound by, or associated with, individual processes.

EXHIBIT 4-3
TOP-DOWN VIEW OF ENTERPRISE RISK MANAGEMENT



- Every organization faces a variety of risks, depending on its business objectives. Some of these business objectives may describe the desired state of operation brought about by an effective system of internal controls.
- Risks that impact an organization's ability to achieve its business objectives are shown in exhibit 4-3 as colored balls of varying sizes. This reflects the fact that some risks will have greater impact than others. Additionally, some risks are clustered together, representing the fact that while the risks individually may not be serious, when related risks are aggregated, they can become more serious. Initially, these risks are uncontrolled or are in their inherent, or gross, risk state.
- The system of internal controls is depicted as a funnel to illustrate the "filtering" of key risks that occurs at varying levels of that system. For example, the largest risks should be mitigated by the entity-level controls at the top of the funnel. Those that pass through the entity-level filters are next subjected to the process-level and transaction-level controls. As discussed in chapter 6, "Internal Control," controls may be considered key or secondary, depending on whether they reduce the risk associated with critical objectives. Additionally, in some cases, management may deploy additional mitigating and compensating controls to further limit the impact of the risks.
- If the system of internal controls is designed adequately and operates effectively, those risks that make it all the way through the funnel should be acceptable to the organization. Stated another way, the overall residual, or net, risk will not exceed the organization's risk appetite.

Compensating Control

An activity that, if key controls do not fully operate effectively, may help to reduce the related risks. A compensating control will not, by itself, reduce risk to an acceptable level.

THE ROLE OF THE INTERNAL AUDIT FUNCTION IN ERM

IIA Standard 2120: Risk Management states, "The internal audit activity must evaluate the effectiveness and contribute to the improvement of risk management processes." The skillsets and broad experience levels that internal auditors possess position them to play a valuable role in ERM. In fact, considering the broad purview of most internal audit functions, as well as their role in the overall monitoring process, failure to involve the internal audit function in some manner would likely result in the ERM initiative falling short of expectations. The following discussion focuses on the role that the internal audit function can play in ERM, depending on whether or not the organization is formally implementing ERM.

Organizations with ERM

Exhibit 4-4 depicts a range of roles the internal audit function might play in ERM. The potential roles that the internal audit function should or should not undertake are shown in a fan- or dial-shaped diagram. The following types of roles are discussed in the paper.

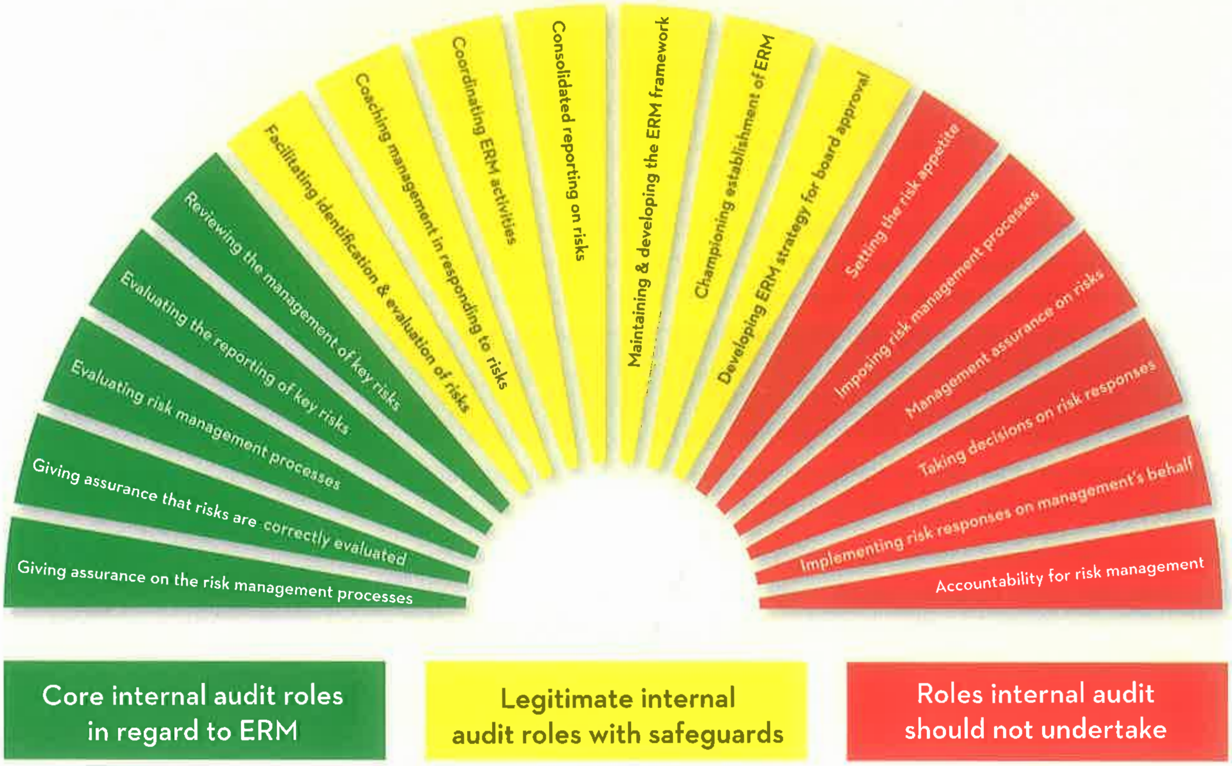
Core internal audit roles. These roles, which are on the left of the dial in the green section in exhibit 4-4, represent assurance activities. They are part of the wider objective of providing assurance on risk management activities. These activities include:

- Giving assurance on the risk management processes.

Consulting Services

Advisory and related services, the nature and scope of which are agreed to with the customer, and which are intended to improve an organization's governance, risk management, and control processes without the internal auditor assuming management responsibility.

EXHIBIT 4-4
INTERNAL AUDIT ROLE IN ENTERPRISE RISK MANAGEMENT


Giving assurance on the risk management processes
Giving assurance that risks are correctly evaluated
Evaluating risk management processes
Evaluating the reporting of key risks
Reviewing the management of key risks
Facilitating identification & evaluation of risks
Coaching management in responding to risks
Coordinating ERM activities
Consolidated reporting on risks
Maintaining & developing the ERM framework
Championing establishment of ERM
Developing ERM strategy for board approval
Setting the risk appetite
Imposing risk management processes
Management assurance on risks
Taking decisions on risk responses
Implementing risk responses on management's behalf
Accountability for risk management
Core internal audit roles in regard to ERM
Legitimate internal audit roles with safeguards
Roles internal audit should not undertake

Source: This diagram is taken from "Position Statement: The Role of Internal Auditing in Enterprise-wide Risk Management," reproduced with the permission of The Institute of Internal Auditors – United Kingdom and Ireland. For the full statement, visit www.iia.org.uk. © The Institute of Internal Auditors – UK and Ireland Ltd., July 2004.

- Giving assurance that risks are correctly evaluated.
- Evaluating risk management processes.
- Evaluating the reporting of key risks.
- Reviewing the management of key risks.

Legitimate internal audit roles with safeguards. These roles represent consulting services that may improve the organization's governance, risk management, and control processes. The extent of such services will depend on the other resources available to the board and on the risk maturity of the organization. The consulting roles are shown in the middle of the dial in the yellow section in exhibit 4-4. In general, the further to the right of the dial that the internal audit function ventures, the greater the safeguards that are required to ensure that its independence and objectivity are maintained. These activities include:

- Facilitating identification and evaluation of risks.
- Coaching management in responding to risks.
- Coordinating ERM activities.

- Consolidating the reporting on risks.
- Maintaining and developing the ERM framework.
- Championing the establishment of ERM.
- Developing ERM strategy for board approval.

Roles the internal audit function should not undertake. These roles, which are depicted on the right of the dial in the red section in exhibit 4-4, should not be undertaken by the internal audit function as the roles represent management responsibilities that would impair the internal auditors' independence and objectivity. These activities include:

- Setting the risk appetite.
- Imposing risk management processes.
- Management assurance on risks [that is, being the sole source for management's assurance that risks are effectively managed—this would be considered performing a management function].
- Taking [making] decisions on risk responses.
- Implementing risk responses on management's behalf.
- Accountability for risk management.

When determining the role the internal audit function plays in ERM, the chief audit executive (CAE) must evaluate whether each activity raises any threats to the internal audit function's objectivity. It is important that the organization fully understands that management remains responsible for risk management. As the internal audit function extends its roles further to the right of the dial, the following are examples of safeguards that could be put in place:

- It should be clear that management remains responsible for risk management.
- The nature of the internal audit function's responsibilities should be documented in the internal audit charter and approved by the audit committee.
- The internal audit function cannot manage any of the risks on behalf of management.
- The internal audit function should provide advice, challenge, and support to management's decision-making, as opposed to making risk management decisions itself.
- The internal audit function cannot give objective assurance on any part of the ERM framework for which it is responsible. Such assurance should be provided by other suitably qualified parties, whether internal or external to the organization.
- Any work beyond the assurance activities should be recognized as a consulting engagement, and the implementation standards related to such engagements should be followed.

Organizations with Internal Audit-Driven ERM

Management and the board are responsible for their organization's risk management and control processes. However, internal auditors acting in a consulting role may be asked to assist the organization in identifying, evaluating, and implementing risk management methodologies and controls to address those risks.

Impairment to Independence & Objectivity

The introduction of threats that may result in a substantial limitation, or the appearance of a substantial limitation, to the internal auditor's ability to perform an engagement without bias or interference.

Audit Universe

A compilation of the subsidiaries, business units, groups, processes, or other established subdivisions of an organization that exist to manage one or more business risks.

In situations where the organization does not have formal risk management processes, the CAE should formally discuss with management and the board their obligations to understand, manage, and monitor risks within the organization and the need to satisfy themselves that there are processes operating within the organization, even if informal, that provide the appropriate level of visibility into the key risks and how they are being managed and monitored. The CAE should obtain an understanding of senior management's and the board's expectations of the internal audit function in the organization's risk management process. This understanding should be codified in the internal audit charter, or some other formal way.

Ultimately, it is the role of senior management and the board to determine the role of internal audit in the risk management process. Their view on the internal audit function's role is likely to be determined by factors such as the culture of the organization, ability of the internal audit staff, and local conditions and customs of the country. However, taking on management's responsibility regarding the risk management process and the potential threat to the internal audit function's objectivity requires a full discussion and board approval.

In summary, it is important for the CAE to bring the lack of a risk management process to management's attention along with suggestions for establishing such a process. If requested, internal auditors can play a proactive role in assisting with the initial establishment of a risk management process for the organization. A more proactive role supplements traditional assurance activities with a consultative approach to improving fundamental processes. If such assistance exceeds normal assurance and consulting activities conducted by internal auditors, objectivity could be impaired. In these situations, internal auditors should comply with the disclosure requirements of the *Standards.*

THE IMPACT OF ERM ON INTERNAL AUDIT ASSURANCE

IIA Standard 2010: Planning states, "The chief audit executive must establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals." The interpretation to this standard states "To develop the risk-based plan, the chief audit executive first considers the risk management framework and consults with senior management and the board and then draws conclusions reached from internal audit's risk assessment." This requires the CAE to consider, for example:

- How risks at the process level relate to the strategic plans and objectives of the organization. Process-level risks are discussed in greater detail in chapter 13, "Conducting the Assurance Engagement."
- Changes in the process (for example, objectives, procedures, personnel, and performance measures) that have occurred over the last year or since the last audit of the process.
- Relevant risk model factors (for example, financial impact and asset liquidity).
- The impact and likelihood of the process-level risks.

EXHIBIT 4-5
10 OPPORTUNITIES FOR THE INTERNAL AUDIT FUNCTION TO PROVIDE INSIGHT RELATING TO RISK MANAGEMENT

1. Assess whether the organization's strategies and business objectives, which are the starting point for risk management, are sufficiently articulated and understood throughout the organization.
2. Provide insights on the nature and effectiveness of the control environment to give management and the board comfort that there are no pervasive entity-level factors that could undermine the effectiveness of risk management.
3. Facilitate determination of the organization's risk appetite and levels of acceptable variation in performance to ensure such risk criteria are determined, supported by the board, and understood throughout the organization.
4. Brainstorm possible risk events and supplement management's list of such events.
5. Facilitate the assessment and prioritization of risks to help management ensure the right risks are subject to treatment.
6. Advise on other risk assessment criteria beyond impact and likelihood, such as velocity and volatility, which may influence the prioritization of risks.
7. Advise on the choice of risk responses/treatments to help management evaluate whether the chosen options will best manage the priority risks.
8. Assist management with monitoring the external and internal environments to help identify new or emerging risks.
9. Provide audit results in a format that helps management understand the design adequacy and operating effectiveness of risk management activities.
10. Conduct an overall assessment of the risk management system (framework and process) to provide assurance regarding the system's design adequacy and operating effectiveness.

In summary, management's approach to risk management, regardless of whether or not an organization has implemented ERM, will have a significant influence on both the internal audit charter and annual internal audit plan.

OPPORTUNITIES TO PROVIDE INSIGHT

There are many opportunities for the internal audit function to add value by providing insight relating to risk management. Exhibit 4-5 describes 10 opportunities for the internal audit function to provide insight at various points throughout the risk management process.

SUMMARY

The COSO ERM exposure draft describes ERM as "The culture, capabilities, and practices, integrated with strategy-setting and its execution, which organizations rely on to manage risk in creating, preserving, and realizing value." An organization's strategy and business objectives should align with its mission, vision, and core values, and drive enhanced performance. ERM can be assessed across five components: risk governance and culture; risk, strategy, and objective setting; risk in execution; risk information, communication, and reporting; and monitoring

ERM performance. COSO outlines 23 principles in the exposure draft that support these components.

ISO 31000 provides a holistic view of risk management, consisting of principles, a framework, and a process for risk management. It is gaining global acceptance and, in general, aligns with COSO ERM.

The skillsets and broad experience levels that internal auditors possess position them to play a valuable role in ERM. The internal audit function may take on a variety of roles relative to ERM, some of which are consistent with the assurance activities as outlined in its charter, and some of which may be consulting services provided to assist the organization in improving its governance, risk management, and control processes. However, an internal audit function must establish appropriate safeguards to ensure that it does not take on roles that could be equivalent to management's responsibilities, thus impairing the objectivity of internal auditors.

An organization's strategic plan and inherent risks will have a direct and profound impact on both the charter of an internal audit function as well as its annual audit plan. Changes in management direction, objectives, emphasis, and focus also may impact the annual internal audit plan. The CAE must consider risks when prioritizing and scheduling the upcoming internal audit engagements.

REVIEW QUESTIONS

1. How does COSO define risk? How does ISO define risk?

2. What are the five fundamental points embedded in the COSO and ISO definitions of risk?

3. According to COSO, what are the fundamental concepts emphasized in its definition of enterprise risk management (ERM)?

4. How does COSO define mission, vision, and core values?

5. How does COSO define strategy and business objectives?

6. What are the five COSO ERM components?

7. How does COSO define risk appetite?

8. What is inherent risk? What is residual risk?

9. What are COSO's five categories of risk response?

10. In what forms might risk information be communicated?

11. What are typical ERM responsibilities of:

    a. The board of directors?

    b. Management?

    c. The chief risk officer?

    d. Financial executives?

    e. The internal audit function?

    f. The independent outside auditors?

12. What are the 11 risk management principles identified in ISO 31000?

13. What are the five components of the ISO 31000 risk management framework?

14. What five activities are included in the ISO 31000 risk management process?

15. In exhibit 4-3, why are some of the balls representing risks clustered together while some are not?

16. What are some ERM assurance activities the internal audit function may perform? What are some ERM consulting activities the internal audit function may perform if appropriate safeguards are implemented? What ERM activities should the internal audit function not perform?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. According to COSO ERM, which of the following is not an inherent challenge that arises as part of establishing strategy and business objectives?

   a. Ensuring culture is clearly articulated by the board.
   b. Possibility of strategy not aligning.
   c. Implications from the strategy chosen.
   d. Risk to achieving the strategy.

2. Which of the following external events will most likely impact a defense contractor that relies on large government contracts for its success?

   a. Economic event.
   b. Natural environment event.
   c. Political event.
   d. Social event.

3. Which of the following is not an example of a risk-sharing strategy?

   a. Outsourcing a noncore, high-risk area.
   b. Selling a nonstrategic business unit.
   c. Hedging against interest rate fluctuations.
   d. Buying an insurance policy to protect against adverse weather.

4. An organization tracks a website hosting anonymous blogs about its industry. Recently, anonymous posts have focused on potential legislation that could have a dramatic effect on this industry. Which of the following may create the greatest risk if this organization makes business decisions based on the information contained on this website?

   a. Appropriateness of the information.
   b. Timeliness of the information.
   c. Accessibility of the information.
   d. Accuracy and reliability of the information.

5. Which of the following risk management activities is out of sequence in terms of timing?

   a. Identify, assess, and prioritize risks.
   b. Develop risk responses/treatments.
   c. Determine key organizational objectives.
   d. Monitor the effectiveness of risk responses/treatments.

6. Who is responsible for implementing ERM?

   a. The chief financial officer.
   b. The chief audit executive.
   c. The chief compliance officer.
   d. Management throughout the organization.

7. Which of the following is not a potential value driver for implementing ERM?

   a. Financial results will improve in the short run.
   b. There will be fewer surprises from year to year.
   c. There will be better information available to make risk decisions.
   d. An organization's risk appetite can be aligned with strategic planning.

8. Which of the following is the best reason for the CAE to consider the organization's strategic plan in developing the annual internal audit plan?

   a. To emphasize the importance of the internal audit function to the organization.
   b. To ensure that the internal audit plan will be approved by senior management.
   c. To make recommendations to improve the strategic plan.
   d. To ensure that the internal audit plan supports the overall business objectives.

9. When senior management accepts a level of residual risk that the CAE believes is unacceptable to the organization, the CAE should:

   a. Report the unacceptable risk level immediately to the chair of the audit committee and the independent outside audit firm partner.
   b. Resign his or her position in the organization.
   c. Discuss the matter with knowledgeable members of senior management and, if not resolved, take it to the audit committee.
   d. Accept senior management's position because it establishes the risk appetite for the organization.

MULTIPLE-CHOICE QUESTIONS

10. The CAE is asked to lead the enterprise risk assessment as part of an organization's implementation of ERM. Which of the following would not be relevant with respect to protecting the internal audit function's independence and the objectivity of its internal auditors?

    a. A cross-section of management is involved in assessing the impact and likelihood of each risk.

    b. Risk owners are assigned responsibility for each key risk.

    c. A member of senior management presents the results of the risk assessment to the board and communicates that it represents the organization's risk profile.

    d. The internal audit function obtains assistance from an outside consultant in the conduct of the formal risk assessment session.

11. An internal audit engagement was included in the approved internal audit plan. This is considered a moderately high-risk audit based on the internal audit function's risk model. It is currently on a two-year audit cycle. Which of the following will likely have the greatest impact on the scope and approach of the internal audit engagement?

    a. The area being audited involves the processing of a high volume of transactions.

    b. Certain components of the process are outsourced.

    c. A new system was implemented during the year, which changed how the transactions are processed.

    d. The total dollars processed in this area are material.

12. When assessing the risk associated with an activity, an internal auditor should:

    a. Determine how the risk should best be managed.

    b. Provide assurance on the management of the risk.

    c. Update the risk management process based on risk exposures.

    d. Design controls to mitigate the identified risks.

13. One of the challenges of ERM in an organization that has a centralized structure is that:

    a. It may be difficult to raise awareness of the impact of work actions on other employees or work areas.

    b. Employees in these structures are inherently less risk averse.

    c. Managers have less incentive to implement and monitor controls.

    d. Effective controls are more difficult to design, and consistent application is more difficult to achieve across the organization.

14. The function of the chief risk officer is most effective when he or she:

    a. Manages risk as a member of senior management.

    b. Shares the management of risk with line management.

    c. Shares the management of risk with the CAE.

    d. Monitors risk as part of the ERM team.

15. Enterprise risk management:

    a. Guarantees achievement of business objectives.

    b. Requires establishment of risk and control activities by internal auditors.

    c. Involves the identification of events with negative impacts on business objectives.

    d. Includes selection of best risk response for the organization.

DISCUSSION QUESTIONS

1. Describe the difference between risk-taking philosophy, risk appetite, and acceptable variation in performance. Give examples of each.

2. How does effective ERM help achieve strategy?

3. Define inherent risk and residual risk. Which of the two types of risk should have a greater impact on the annual internal audit plan?

4. The ISO 31000 risk management framework includes five components, the first of which is "mandate and commitment." Explain what mandate and commitment means. Discuss why mandate and commitment is critical to risk management success.

5. For an organization that has not implemented ERM, describe steps the internal audit function can take to initiate an ERM program without impairing the function's independence and/or objectivity.

6. Risk assessment most commonly focuses on two criteria—impact and likelihood. As an organization's risk assessment process evolves, what other criteria might be valuable to consider and why?

7. One of your classmates, I. M. Motivated, consistently carries a very heavy class load. In addition to his already heavy class load, he is contemplating applying for an internal audit internship at a local company. Discuss the opportunities and risks that are relevant to his decision.

8. It may be easier for some to understand ERM by thinking about five "everyday questions" that can be used to apply risk management thinking:

   a. What are we trying to accomplish (what are our objectives)?
   b. What could stop us from accomplishing them (what are the risks, how bad could they be, and how likely are they to occur)?
   c. What options do we have to make sure those things do not happen (what are the risk management strategies, that is, responses)?
   d. Do we have the ability to execute those options (have we designed and executed control activities to carry out the risk management strategies)?
   e. How will we know that we have accomplished what we wanted to accomplish (does the information exist to evidence success, and can we monitor performance to verify that success)?

Think about the reasons you decided to take this course and answer each of those questions with a focus on achieving your desired level of success.

CASES

CASE 1

COSO provides a variety of guidance relevant to the internal audit profession. The purpose of this case is to become more familiar with COSO and its guidance. Visit www.coso.org and answer the following questions.

A. Based on the statement on COSO's home page, what is the organization dedicated to?

B. What is COSO's mission (can be found on the About Us page)?

C. What are the five sponsoring organizations?

D. What type of internal control guidance does COSO offer? Much of this guidance is discussed in chapter 6.

E. Download an article from the Resources page specified by your instructor. What did you find interesting about this article?

CASE 2

Your organization has implemented a robust ERM program similar to the one outlined in this chapter. The audit committee has asked you to assess the design adequacy and operating effectiveness of the program. Because the audit committee members are familiar with COSO ERM, they would like you to assess the veracity of the ERM program relative to the five components of ERM. Based on this request, develop a list of steps you would follow to test each of the ERM components. Include at least two work steps for each component.

CASE 3

KnowledgeLeader Practice Case: Alternative Risk Management Frameworks

Background Information

In the United States, COSO published its *Enterprise Risk Management – Aligning Risk with Strategy and Performance* (COSO ERM, or ERM framework) in 2017. In 2004, COSO identified a need for a robust framework to help companies effectively identify, assess, and manage risk. The resulting risk management framework expanded on the previously issued *Internal Control – Integrated Framework*, incorporating all key aspects of that framework in the broader ERM framework. COSO updated its *Internal Control – Integrated Framework* in 2013 and released an update to the 2004 ERM framework in 2017. COSO defines ERM as the culture, capabilities, and practices, integrated with strategy-setting and its execution, that organizations rely on to manage risk in creating, preserving, and realizing value.

In 2009, the International Organization for Standardization issued its standard ISO 31000:2009 (ISO 31000), the first globally recognized standard related to risk management. ISO 31000 was developed to provide a globally accepted way of viewing risk management, taking into consideration principles, frameworks, models, and practices that were evolving around the world. ISO 31000 includes three sections—principles, framework, and process.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research on these two globally recognized risk management frameworks. Compare and contrast these frameworks. How do they differ? How are they similar?

C. Submit a brief write-up indicating the results of your research to your instructor.

CHAPTER 5

Business Processes and Risks

LEARNING OBJECTIVES

- Understand how organizations structure their activities to achieve their objectives.
- Identify key business processes in an organization.
- Obtain an understanding of a given business process and be able to document it.
- Understand basic types of business risks organizations face.
- Identify and assess the key risks to an organization's objectives and how they are linked to business processes.
- Develop an audit universe for an organization and determine an annual internal audit plan based on key business risks.
- Understand how to use risk assessment techniques within assurance engagements.
- Obtain an awareness of the new risks that arise when an organization outsources some of its key processes.

EXHIBIT 5-1 IPPF GUIDANCE RELEVANT TO CHAPTER 5

- **Standard 2010** – Planning
- **Standard 2120** – Risk Management
- **Standard 2200** – Engagement Planning
- **Standard 2201** – Planning Considerations
- **Standard 2210** – Engagement Objectives

We all have objectives in life. You may want to earn your degree by next May. You may want to get a job as an internal auditor when you graduate. You may want to get a master of business administration (MBA) degree before you are 30.

Consider a simple objective as an example. You want to get to tomorrow's 8:00 a.m. class on time. What do you need to do?

You might do the following:

- Put the notes, assignments, and books you will need for tomorrow in your backpack along with your cell phone and laptop.
- Set your alarm clock for 6:00 a.m. and then go to sleep.
- Get up when your alarm clock rings.
- Get dressed and eat breakfast.
- At 7:00 a.m., get in your car and drive to campus.
- Find a parking space.
- Walk to the building.
- Get coffee.
- Walk to the classroom and find a seat.

Business Process

The set of connected activities linked with each other for the purpose of achieving one or more business objectives.

This is a list of activities you must complete to achieve your objective of getting to class on time. To achieve this objective, you made specific choices from any number of other choices that could have been made. For instance, you could have packed your backpack in the morning instead of doing it the night before, or decided to take the bus to campus instead of driving your car. So, why did you make these choices?

In some cases, it may have been personal preference. For example, if you pack your backpack the night before, you can sleep five minutes longer the next morning. In other cases, your choice may have a direct impact on your ability to achieve your objective. For instance, you decided to drive rather than take the bus because the bus is often late or is frequently full and you might have to wait for the next one. In this case, you are exercising the same type of risk management thinking described in chapter 4, "Risk Management."

In this chapter, you will learn that organizations go through the same type of thought process to plan steps that will help achieve their objectives, including identifying the potential risks to the objectives and managing those risks to acceptable levels. You also will learn how risk assessment techniques and methodology are used by internal auditors to carry out their responsibilities.

BUSINESS PROCESSES

Chapter 3, "Governance," discussed the importance of the governance process when setting objectives for the organization and the boundaries within which it will operate. This chapter examines how organizations actually structure their activities to implement their strategies and achieve their business (organizational) objectives. Organizations structure activities into business processes or projects. Although there are some common processes across organizations, the exact mix and structure will be unique for each organization. Even within an organization, there may be considerable variability in processes across business areas.

What is a business process? It is simply the set of connected activities linked with each other for the purpose of achieving an objective. Exhibit 5-2 outlines a basic classification of business activities. There are three types of business activities: operating processes, management and support processes, and projects. While this exhibit depicts them as separate and distinct processes and activities, the reader should note that they are not independent of one another. For example, the develop strategy activity (process 2) is a more operationally focused element of governance strategic direction that is shown in exhibit 3-3. Strategy development in this operating context may pertain to many of the other activities in exhibit 5-2. Additionally, management and support processes may enable and interact with the operating processes and projects.

Operating processes for most organizations include the core processes through which the organization achieves its primary objectives. For a manufacturing company, this would be the processes through which it makes and sells products. For service providers such as a consulting firm or financial institution, it would be the processes by which they market and deliver their services. Government entities such as a city fire department or not-for-profit organizations (for example, the Boy Scouts) also have operating processes through which they deliver services. Once the product or service is designed (processes 1 to 3 in exhibit 5-2), the remaining operating processes (processes 4 to 6) are viewed as essentially continuous, being repeated many times in a business cycle. It is through these processes that organizations create value and deliver it directly to their customers.

Objectives

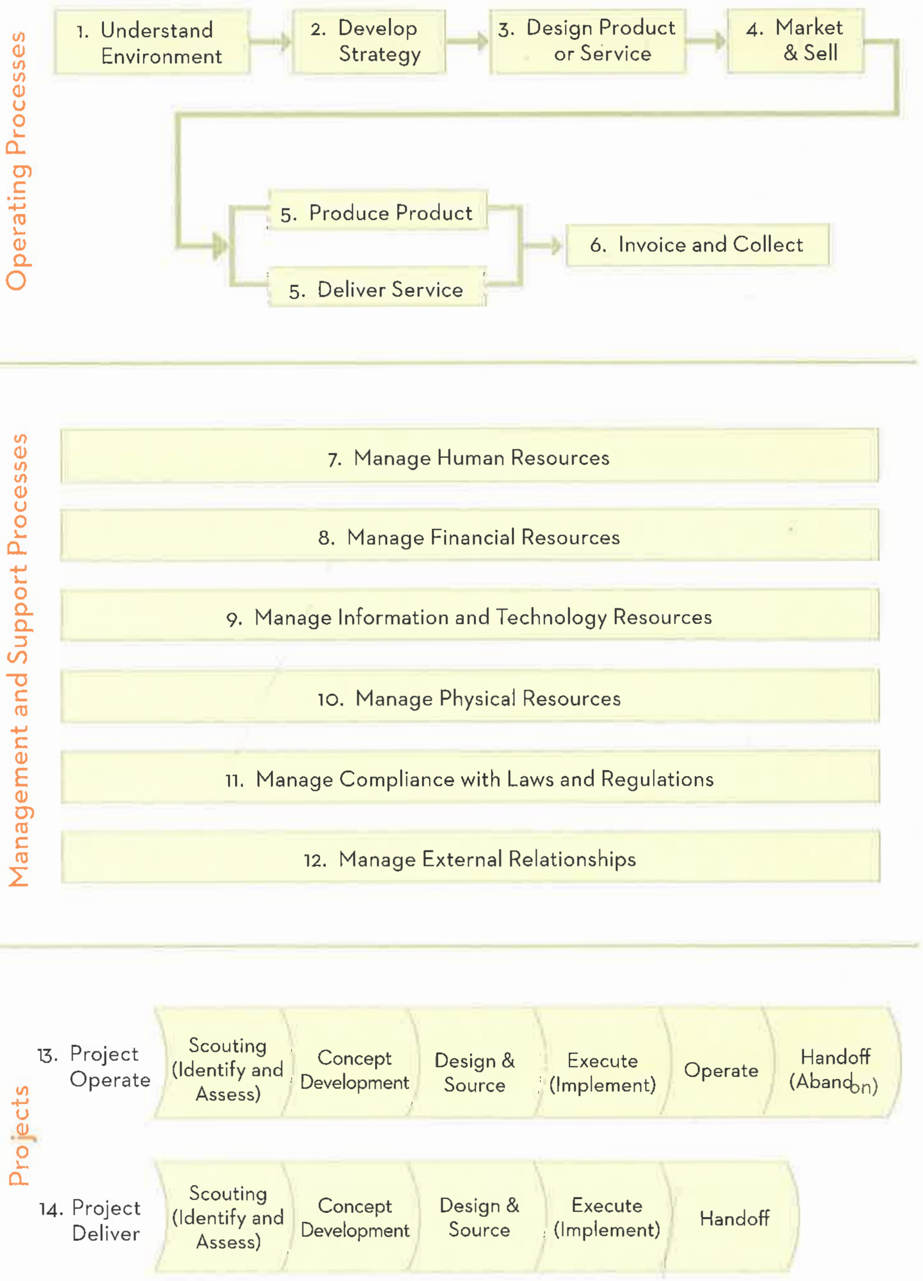
What an entity desires to achieve. When referring to what an organization wants to achieve, these are called business objectives, and may be classified as strategic, operations, reporting, and compliance.

Some organizations may use a different method to organize value-creating activities. This structure, called *projects*, is used when activities happen over an extended period of time, require a complex sequencing, and are relatively unique in that a specific activity is not done continuously. Examples of organizations that often set up their core activities in this manner are engineering and construction firms; mining, oil, and gas companies; and defense contractors. Processes 13 and 14 of exhibit 5-2 show the two different types of projects. Process 13 applies when the organization designs and constructs an asset and operates it, as well. For example, a petroleum company drills and then operates an oil well. Process 14 applies when the organization designs and constructs an asset and hands it off to another organization to operate (for example, a factory or building is constructed by an engineering firm and then transferred to another company for operation). Note that these examples relate to tangible assets. However, the same project approach applies to firms delivering services. In these instances, the “asset” may be intellectual property or some other intangible asset.

Projects also are frequently used in most organizations to structure nonroutine activities to create assets for the organization’s use. For example, a project structure would be used for selection and implementation of a new accounting system, initial implementation of major initiatives, such as what was required to comply with the internal control provisions of the U.S. Sarbanes-Oxley Act of 2002, or construction of a new production facility.

Management and support processes are the activities that oversee and support the organization’s core value-creation processes. While these processes will vary between organizations, they generally are necessary across all industries and support, but do not directly create, the value embedded in the organization’s objectives. Management and support processes include those used to administer the organization’s human, financial, information and technology, and physical resources (processes 7 to 10). Such support processes include recruitment,

EXHIBIT 5-2
BASIC CLASSIFICATION OF BUSINESS ACTIVITIES


Operating Processes
1. Understand Environment
2. Develop Strategy
3. Design Product or Service
4. Market & Sell
5. Produce Product
5. Deliver Service
6. Invoice and Collect
Management and Support Processes
7. Manage Human Resources
8. Manage Financial Resources
9. Manage Information and Technology Resources
10. Manage Physical Resources
11. Manage Compliance with Laws and Regulations
12. Manage External Relationships
Projects
13. Project Operate
Scouting (Identify and Assess)
Concept Development
Design & Source
Execute (Implement)
Operate
Handoff (Abandon)
14. Project Deliver
Scouting (Identify and Assess)
Concept Development
Design & Source
Execute (Implement)
Handoff

Source: Adapted from Protiviti Inc., a leading provider of internal audit and business and technology risk consulting services (www.protiviti.com). This Process Classification Scheme may be found on Protiviti's KnowledgeLeader (www.knowledgeleader.com), a subscription-based website that provides information, tools, templates, and resources for internal audit and risk management professionals.

accounting, cash management, payroll, purchasing, etc. These processes also will encompass the organization's compliance program (process 11). This category also includes processes the organization uses to manage its external relationships (process 12) such as those with suppliers, customers, governmental entities, and regulators, as well as relations with capital markets and venture and alliance partners. Finally, while not specifically depicted in this exhibit, the activities involved in organizational governance that set the strategic direction of the organization and provide oversight of the organization as discussed in chapter 3 also could be considered organizational support processes. Examples of governance processes include strategic planning, the organization's compliance and ethics program, activities of the board and board committees, the enterprise risk management (ERM) program, and various monitoring and assurance activities.

Exhibit 5-2 illustrates business processes from a high-level perspective. Each of these 14 classification types also can be depicted as more discreet sets of activities. Exhibit 5-3 illustrates this point. For example, a retail organization may depict its general sales process at the highest level for processes 4, 5, and 6. A specific type of sale may be a retail sale, which includes processes whereby the customer selects goods, pays for goods with cash or a promise to pay, and accepts possession of goods. Since retail sales may be made in a store setting or over the internet, more detailed processes can be designed for those unique activities. The level of detail used to depict these processes will vary depending on the desired level of documentation. If an overview is desired, the high-level depiction shown at the top of exhibit 5-3 is sufficient. If a more detailed level is desired, the middle or lower examples shown in exhibit 5-3 may be more appropriate. In some instances, subprocesses may be shown at even more detailed levels than those shown in exhibit 5-3. For example, the "store sale" process of entering information into the cash register could involve a number of subprocesses such as updating inventory numbers, recording sales revenue, and opening the cash drawer. Both the high-level and detailed approaches can be valuable to internal auditors, as discussed in the next section.

Strategy

Refers to how management plans to achieve the organization's objectives.

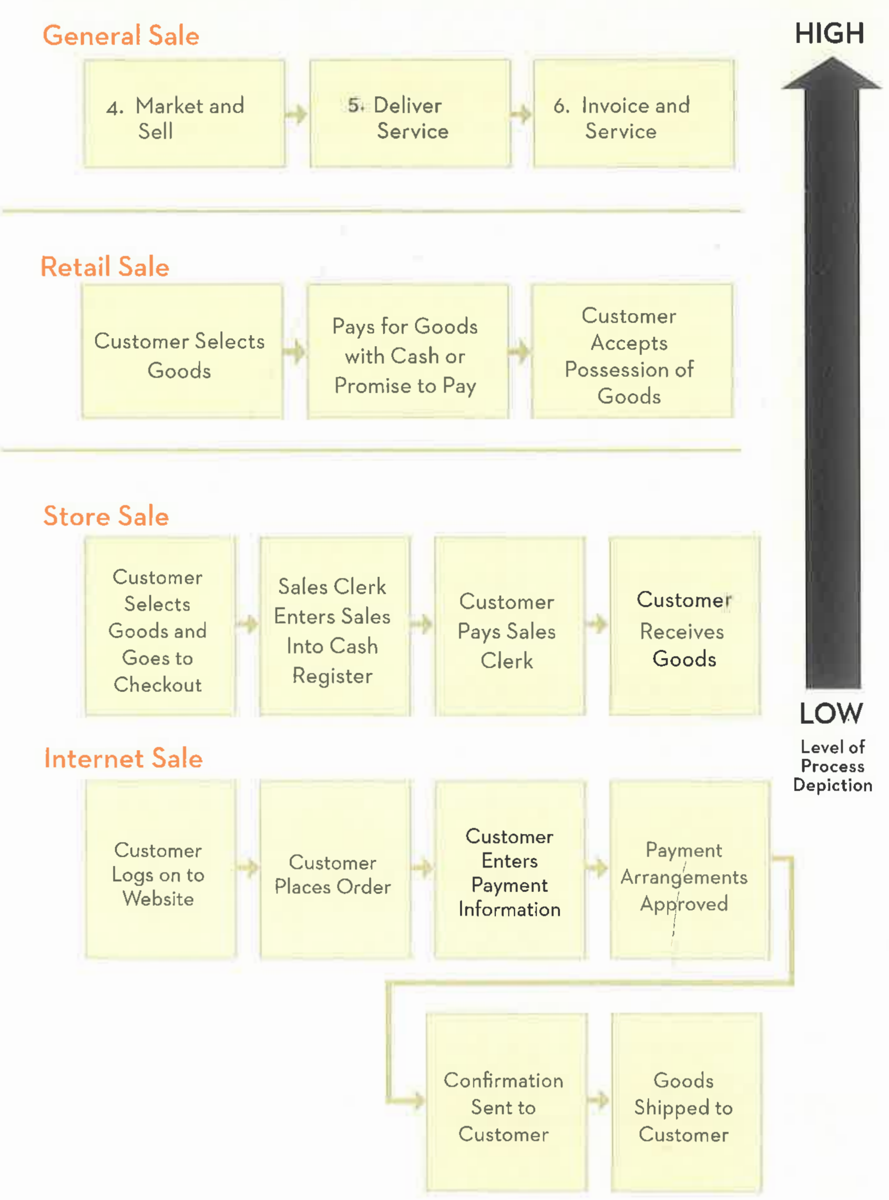
Understanding Business Processes

For internal auditors to add value and improve an organization's operations, they must first understand the organization's business model. The business model includes the objectives of the organization and how its business processes are structured to achieve these objectives. The model is defined by the organization's vision, mission, and values, as well as sets of boundaries for the organization—what products or services it will deliver, what customers or markets it will target, and what supply and delivery channels it will use. While the business model includes high-level strategies and tactical direction for how the organization will implement the model, it also includes the annual goals that set the specific steps the organization intends to undertake in the next year and the measures for their expected accomplishment. Each of these is likely to be part of internal documentation that is available to the internal auditor.

For publicly traded companies, external sources of this information also may be available. For example, regulatory filings in the United States, such as the Form 10-K filing with the U.S. Securities and Exchange Commission (SEC), include information about objectives and key risks. In addition, analysts' reports may contain an external perspective on the organization's strategies. While an organization's vision, mission, values, and objectives are relatively stable from year to year, the internal audit function should still periodically update its understanding of the organization's strategy. Usually, this would be done annually when reviewing the yearly goals for the organization and executive management.

There are two common approaches that can help in understanding business processes and their role in the business model: a top-down approach and a

EXHIBIT 5-3
LEVELS OF PROCESS DEPICTION



General Sale
4. Market and Sell
5. Deliver Service
6. Invoice and Service
Retail Sale
Customer Selects Goods
Pays for Goods with Cash or Promise to Pay
Customer Accepts Possession of Goods
Store Sale
Customer Selects Goods and Goes to Checkout
Sales Clerk Enters Sales Into Cash Register
Customer Pays Sales Clerk
Customer Receives Goods
Internet Sale
Customer Logs on to Website
Customer Places Order
Customer Enters Payment Information
Payment Arrangements Approved
Confirmation Sent to Customer
Goods Shipped to Customer
HIGH
LOW
Level of Process Depiction

bottom-up approach. In the top-down approach, one begins at the organization level with the organization's objectives, and then identifies the key processes critical to the success of each of those objectives. A process is considered *key* relative to a specific objective if failure of the process to function effectively would directly result in the organization not achieving the objective. For example, if a specific objective was to increase shareholder value by consistently delivering growth in operating earnings (historically, 12 percent per year), then—referring to the high-level processes in exhibit 5-2—processes 3, 4, and 5 may be key, whereas some of the support processes, such as process 8, manage financial resources, may not be. It is important to note that, while processes may not be *key* to one specific objective, they may be key to another. Thus, in the example above, while the monthly accounting closing process might not be a key process to the earnings growth objective, it may be a key process for an organizational objective such as "provide reliable and timely financial information." Once the key processes are identified, they are analyzed in more detail, breaking the process into levels of subprocesses and eventually reaching the activity level. This approach is effective because it yields a manageable set of critical processes. It is usually undertaken by a team of individuals with a broad perspective of the organization but not with detailed knowledge of each area. As a result, there is the potential to overlook processes that ultimately prove to be critical but are omitted in the top-down approach.

Top-Down Approach

Begins at the entity level with the organization's objectives, and then identifies the key processes critical to the success of each of the organization's objectives.

The bottom-up approach begins by looking at all processes at the activity level. Such an approach requires each area of the organization to identify and document the business processes in which they are involved. This is done by the people in the area who are responsible for the actual activities. The identified processes are then aggregated across the organization. While this approach works well for smaller organizations with a relatively limited number of processes, it is less effective in large and complex organizations as it becomes cumbersome to prioritize the significance of each process relative to the others as the relative significance changes as one moves to higher levels in the organization.

Bottom-Up Approach

Begins by looking at all processes directly at the activity level, and then aggregates the identified processes across the organization.

Once a process is identified, the next step in either the top-down or bottom-up approach is to determine the key objectives of the process. Determining the key objectives involves getting answers to questions such as:

- Why does the process exist?
- How does the process support the organization's strategy and contribute to its success?
- How are people expected to act?
- What else does the process do that is important to management?[1]

For an internal auditor, or someone not directly involved in the process, the first source of information is the process owner and the existing policy and procedures documentation for the process. Ideally, the process owner has established formal process objectives that provide the answers to the four questions above. If not, the internal auditor will need to work with key people involved with the process to obtain the necessary information.

Once the process objectives are understood, the next step is to understand the inputs to the process, the specific activities needed to achieve the process objectives, and the process outputs. To understand how inputs and activities combine to generate the outputs, existing documents should be reviewed. Such documents may include, for example:

- Process procedural manuals.
- Policies related to the process.
- Job descriptions of people involved in the process.
- Process maps that describe the process flow.

Although existing documents are an important start, it is usually necessary to discuss aspects of the process with the people performing significant activities in the process. The following questions can be asked of the process owner and other key personnel to help gain an understanding of the business process:

1. Why does this process exist?
2. Which of the organization's strategic objectives can the process affect and how?
3. What initiatives does/should the process undertake to help the organization achieve its strategic objectives?
4. What does the process provide the organization, without which the organization would have a difficult time being successful?
5. At the end of the day/week/year, what gives employees a sense of accomplishment with their jobs?
6. What accomplishments tend to get employees recognized by management or internal customers?
7. How are people who are involved with the process expected to act? What happens if they do not meet this expectation?[2]

Key Performance Indicator

A metric or other form of measurement to determine if performance is within an acceptable range.

In addition to identifying the key objectives, understanding the process requires gaining an understanding of how management and the process owner know the process is performing as intended. The process owner should have established key performance indicators (KPIs) that are used to monitor the performance of the process. These indicators should be observable (they can be measured objectively), be relevant to the objective (not just used because they can be quantified), be available on a timely basis, and be communicated to people involved in the process. KPIs or other types of performance metrics should indicate management's tolerance, or the amount of variation in performance that is acceptable, related to the process outcomes.

DOCUMENTING BUSINESS PROCESSES

Business process must be documented. Typically, documentation is prepared by the process owner and people involved in the process. However, there are instances when process owners neglect documentation because of the daily demands of their jobs or because they do not see the value of formal documentation. While not completing the process documentation may have little immediate consequence, maintaining a set of up-to-date process documentation for all key processes is critical because it is used for 1) orienting new personnel, 2) defining areas of responsibility, 3) evaluating the efficiency of processes, 4) determining areas of primary concern, and 5) identifying key risks and controls. Internal auditors also must document their understanding to support their overall assessment of risk and control in the organization and in any specific assurance engagements they conduct on the process.

Two commonly used methods for documenting processes are process maps and process narratives. Process maps are pictorial representations of inputs, steps, workflows, and outputs. They can be prepared at a high level, providing an overview of the process, or at the detailed activity level. Process maps also may include some accompanying narrative.

High-level process maps attempt to depict the broad inputs, activities, workflows, and interactions with other processes and outputs. They provide an overall framework to understand the detailed activities and subprocesses. The goal in the high-level process map is to keep it simple and focus on the forest rather than the trees. Exhibit 5-4 provides an example of a high-level process map of getting to tomorrow's 8:00 a.m. class on time.

Process Map

Pictorial representation of inputs, steps, workflows, and outputs.

There are no absolute standards regarding the format and symbols for process mapping. However, internal audit functions and professional service firms typically strive for consistency and therefore are likely to develop their own internal standards. Exhibit 5-5 presents the basic symbols with typical meanings. The process maps are usually structured so the sequence of activities runs from left to right, as in exhibit 5-4, or from top to bottom.

EXHIBIT 5-4
HIGH-LEVEL PROCESS MAP: GETTING TO AN 8:00 A.M. CLASS ON TIME

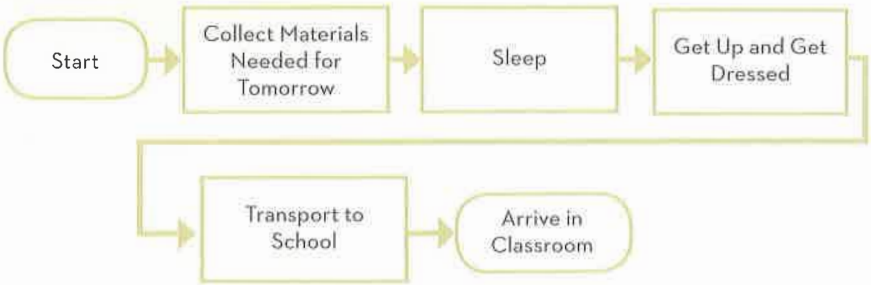
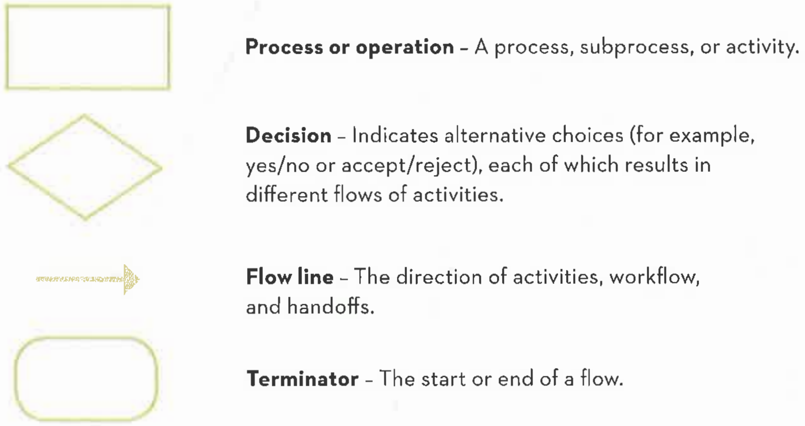


Exhibit 5-6 presents a detailed-level process map for getting to tomorrow's 8:00 a.m. class on time. The high-level process in exhibit 5-4 is broken down to reflect the specific activities or subprocesses. Narrative is often included along with the process map to explain activities in more detail. Exhibit 5-6 illustrates how narrative supports the process map. In this case, the narrative provides more detail about the activity but also could include descriptions of controls.

BUSINESS RISKS

Once the internal auditor obtains an understanding of the organization's objectives and the key processes used to achieve those objectives, the next step is to evaluate the business risks that could impede accomplishing the objectives. The ability of the chief audit executive (CAE) and internal audit management to get a thorough understanding of the organization's business risks will determine the extent to which the internal audit function will be able to fulfill its mission and add value to the organization. It is helpful to develop an overall risk profile of the organization that identifies the critical risks to achieving each strategic objective. For the increasing number of organizations that are implementing ERM, overall risk profiles may be developed by management. In these cases, each internal audit function can build its risk assessment from the organization's risk profile. However, if such a profile does not exist, the internal audit function will need to create the profile as a starting point for its annual audit planning.

EXHIBIT 5-5
COMMON PROCESS MAPPING SYMBOLS



Process or operation – A process, subprocess, or activity.

Decision – Indicates alternative choices (for example, yes/no or accept/reject), each of which results in different flows of activities.

Flow line – The direction of activities, workflow, and handoffs.

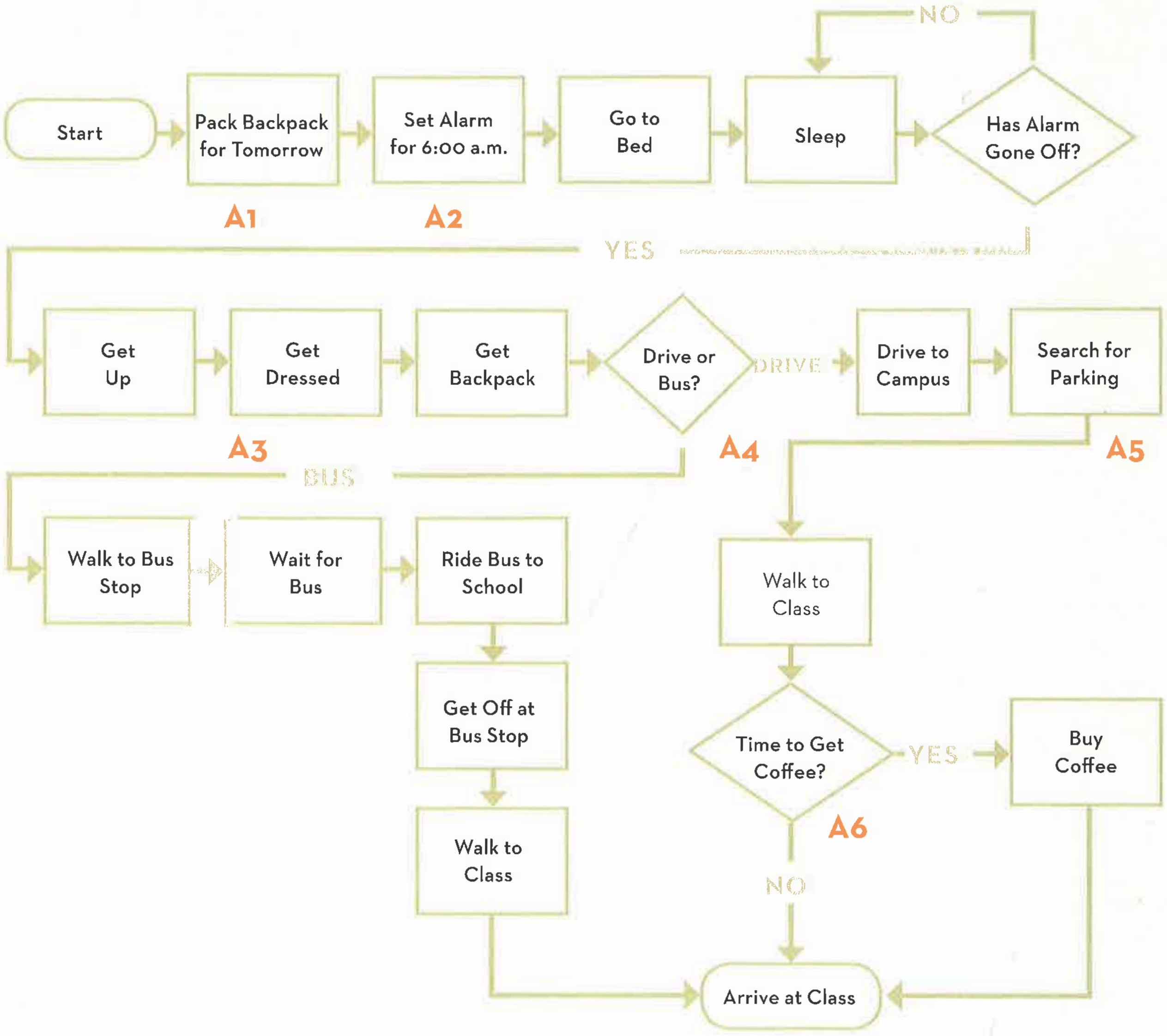
Terminator – The start or end of a flow.

There are a number of different tools and methodologies to assist in developing the risk profile. This chapter looks only at a small set of those. Note also that despite the array of tools available, the assessment of organizational risk remains a very subjective process that requires experience and sound judgment.

A common approach might be to begin by conducting a brainstorming session with senior management or, if they are not available, with members of the internal audit function. The group might start with a generic risk model that depicts the categories and types of risks an organization might encounter. Such a risk model is presented in exhibit 5-7.

The various risks are then assessed in terms of impact and likelihood. Impact, the adverse effect of a risk outcome, is usually assessed on a continuum from low to high. Typically, this is done in terms of categories using three (high, medium,

EXHIBIT 5-6
DETAILED-LEVEL PROCESS MAP: GETTING TO AN 8:00 A.M. CLASS ON TIME



A1 Determine what books and papers will be needed for class. Put cell phone and laptop in backpack.

A2 Set alarm for 6:00 a.m.—5:45 if having breakfast.

A3 Includes showering, brushing teeth, fixing hair, ironing shirt, if necessary.

A4 Evaluate the chance of finding parking and the chance of the bus being late.

A5 Start at lot C1. If no parking space, go to lot C3. If none there, go to remote lot D3.

A6 If 15 minutes remain before class when walking past coffee shop, stop and get coffee. If not, go directly to class.

EXHIBIT 5-7
BASIC BUSINESS RISK MODEL

Strategic Risks

EXTERNAL

- Change in laws and regulations
- Competition
- Change in market dynamics
- Industry
- Technology

INTERNAL

- Reputation
- Strategic focus
- Customer satisfaction
- Governance

Compliance Risks

EXTERNAL

- Contractual
- Regulatory
- Litigation
- Permits

INTERNAL

- Ethics
- Policies
- Fraud and illegal acts

Reporting Risks

EXTERNAL

- Accounting and financial reporting
- Taxation

INTERNAL

- Budgeting
- Performance measures
- Internal control and regulatory reporting

INFORMATION RESOURCES

- Access
- Availability
- Data integrity
- Infrastructure
- Privacy

Operations Risks

PROCESS

- Supply chain capacity
- Process execution
- Health and human safety
- Business continuity
- Cycle time
- Catastrophic events
- Lack of product innovation

PEOPLE

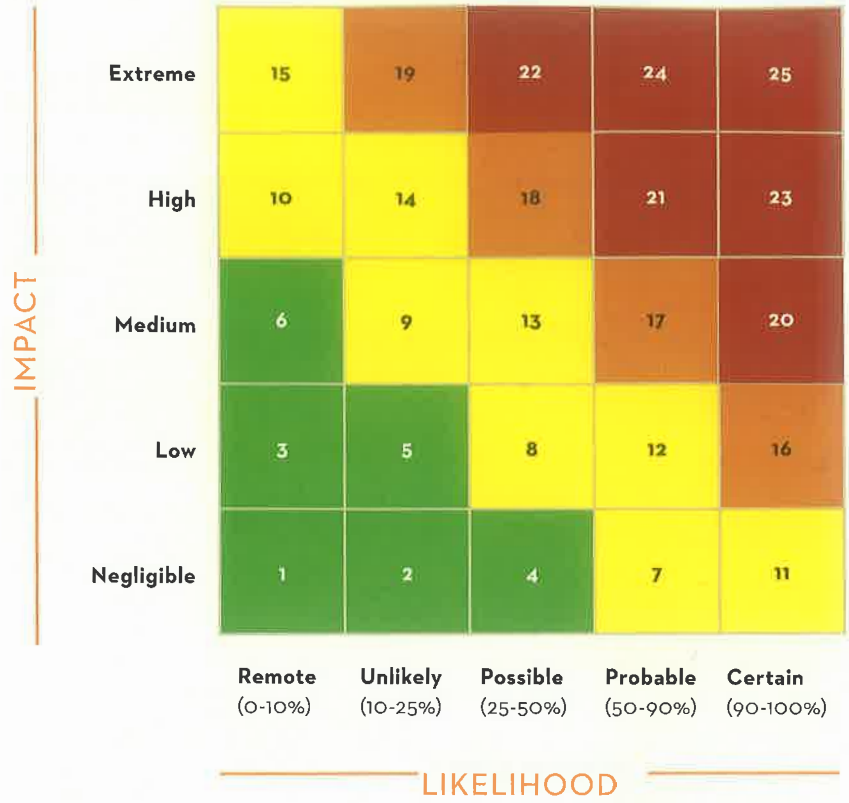
- Manpower supply
- Leadership/key employees
- Performance incentives
- Empowerment
- Change readiness
- Communications

FINANCIAL

- Interest rates
- Foreign currency exchange
- Capacity
- Default
- Concentration
- Capital availability
- Cash management
- Commodity pricing
- Duration

low) or five categories. A basic five-category risk model is presented in exhibit 5-8. Establishing boundaries for each category is useful for gathering input from multiple people. In this model, the boundaries for impact are set in terms of dollar values and impact on business objectives. However, some organizations set boundaries for other measures as well. For instance, some organizations establish impact in terms of reputation, health and safety, legal, or damage to assets. For health and safety, the categories might be slight injury, minor injury, major injury, fatality, and multiple fatalities, with the scale going from negligible to extreme (the impact scale shown in exhibit 5-8), respectively. Each organization will determine the terms used to signify impact. Significance is sometimes used; however, others refer to significance as a combined assessment of impact and likelihood. Less commonly, severity is another term used to signify the adverse effect of a risk outcome. Regardless of the terminology, what is important is that the terms be defined and applied consistently across risks.

EXHIBIT 5-8
RISK ASSESSMENT MODEL



IMPACT	Remote (0-10%)	Unlikely (10-25%)	Possible (25-50%)	Probable (50-90%)	Certain (90-100%)
Extreme	🟨 15	🟧 19	🟥 22	🟥 24	🟥 25
High	🟨 10	🟨 14	🟧 18	🟥 21	🟥 23
Medium	🟩 6	🟨 9	🟨 13	🟧 17	🟥 20
Low	🟩 3	🟩 5	🟨 8	🟨 12	🟧 16
Negligible	🟩 1	🟩 2	🟩 4	🟨 7	🟨 11

Impact

Extreme: >$100m; threatens ongoing existence

High: $25-$100m; difficult to achieve business objectives

Medium: $5-$25m; makes achieving some business objectives challenging

Low: $1-$5m; some undesirable outcomes

Negligible: <$1m; no noticeable impact on objectives

🟥 Critical Risks

🟧 High Risks

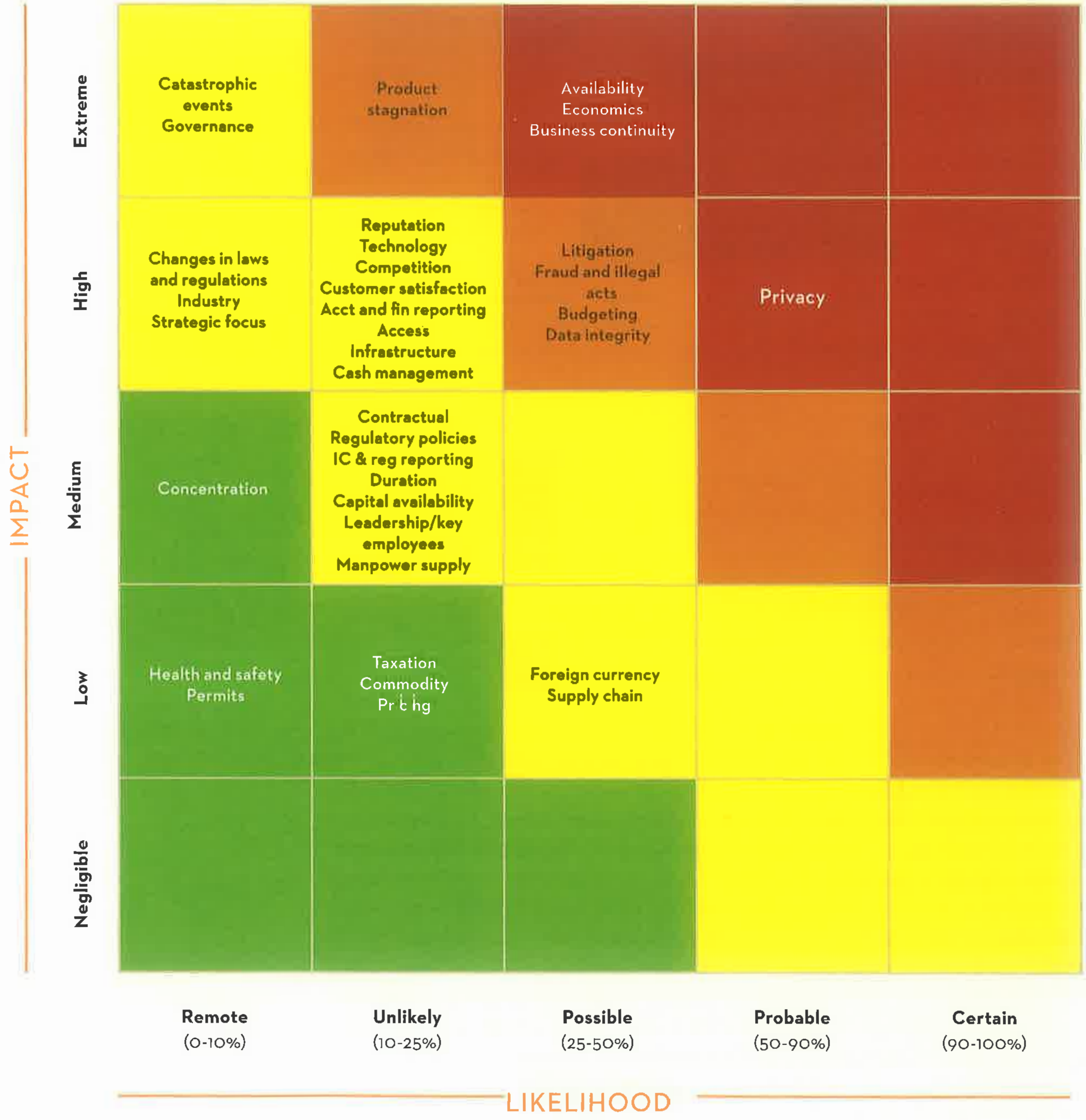
🟨 Moderate Risks

🟩 Low Risks

Likelihood can be evaluated by assessing the odds or probability of the risk occurring. However, given the subjective nature of these assessments, most managers and internal auditors are more comfortable expressing likelihood in less precise categories. Again, a three-category scale (high, medium, low) or a five-category scale (as shown in exhibit 5-8) is often used. As with impact, it does help to specify the category boundaries. This is usually done in terms of specific or ranges of probabilities (as in the scale in exhibit 5-8).

Using the risk assessment model in exhibit 5-8, the various risks from the basic business risk model (exhibit 5-7) can be placed on the matrix. Frequently, this is done in a group session involving senior management or, if they are not available, other levels of management and more experienced individuals from the internal audit function. Using senior management and operations managers is preferable because they have the best understanding of the risks in their areas of responsibility. In this meeting, risks are discussed and consensus is obtained regarding impact, likelihood, and position of the respective risk on the matrix. The combination of impact and likelihood determines the relative importance of the risks. Exhibit 5-8 shows the matrix broken into 25 boxes. In this model, boxes 20 through 25 represent critical risks, and boxes 16 through 19 represent high risks. These risks present the most serious challenge to meeting the organization's objectives. Boxes 7 through 15 are moderate risks and boxes 1 through 6 are low risks.

EXHIBIT 5-9
IDENTIFICATION OF CRITICAL RISKS



IMPACT	Remote (0-10%)	Unlikely (10-25%)	Possible (25-50%)	Probable (50-90%)	Certain (90-100%)
Extreme	🟨 Catastrophic events Governance	🟧 Product stagnation	🟥 Availability Economics Business continuity	🟥	🟥
High	🟨 Changes in laws and regulations Industry Strategic focus	🟨 Reputation Technology Competition Customer satisfaction Acct and fin reporting Access Infrastructure Cash management	🟧 Litigation Fraud and illegal acts Budgeting Data integrity	🟥 Privacy	🟥
Medium	🟩 Concentration	🟨 Contractual Regulatory policies IC & reg reporting Duration Capital availability Leadership/key employees Manpower supply	🟨	🟧	🟥
Low	🟩 Health and safety Permits	🟩 Taxation Commodity Pricing	🟨 Foreign currency Supply chain	🟨	🟧
Negligible	🟩	🟩	🟩	🟨	🟨

LIKELIHOOD

Exhibit 5-9 presents a mapping of the risk model to the risk assessment matrix for an online financial services company. Four risks identified as critical appear in boxes 21 and 22. The risks in boxes 18 and 19 are considered high and, depending on how many objectives they impact, also may require extensive attention.

The next step is to formally link the identified risks to the specific objectives that each risk may impair. This helps to ensure that all key risks, and the resulting impact, have been identified. Returning to the example of getting to class on time, assume the mission this semester is to gain the necessary knowledge and skills to be successful in an entry-level internal audit position. Several specific strategic objectives could be developed to accomplish this mission:

1. Attend all classes.
2. Be on time for each class.
3. Do assigned reading before the class in which it will be discussed.
4. Complete all assignments on time.
5. Obtain a B+ or better on all exams.

The process depicted in exhibits 5-4 and 5-6 that outlines getting to an 8:00 a.m. class on time contributes to objective 2 and, to an extent, objective 1. Other processes, such as study processes, would be critical to objectives 3, 4, and 5. Chapter 4 defines risk as "the possibility that an event will occur and adversely affect the achievement of an objective." Keeping this definition in mind, a number of risks can be identified that could impede the achievement of the five objectives. For instance, becoming sick could impact the achievement of objectives 1, 2, and 4. Exhibit 5-10 presents seven critical risks and their potential to impede these five strategic objectives.

The type of analysis performed to gain the necessary knowledge and skills to be successful in an entry-level internal audit position and the requisite objectives can be applied to organizations as well. As mentioned in our discussion of business processes earlier in the chapter, the objectives can usually be found in regulatory filings, such as the 10-K filing for a publicly traded company in the United States, or in the organization's strategic planning documents.

Risk

The possibility that an event will occur and adversely affect the achievement of objectives.

Mapping Risks to the Business Processes

From the ERM perspective discussed in chapter 4, the next step would be to develop appropriate responses to each risk. There are five responses an organization can take:

- **Acceptance**. No action is taken to decrease risk impact or likelihood. The organization is willing to accept the risk at the current level rather than spend valuable resources deploying one of the other risk response options.
- **Avoidance**. A decision is made to exit or divest of the activities giving rise to the risk. Risk avoidance may involve, for example, exiting a product line, deciding not to expand to a new geographical market, or selling a division.
- **Pursuit**. Exploit the risk if taking such a risk is advantageous to the organization or is necessary to achieve a particular business objective.
- **Reduction**. Action is taken to reduce the risk impact, likelihood, or both. This involves a myriad of everyday business decisions, such as implementing controls.

Risk Response Options:

– Accept
– Avoid
– Pursue
– Reduce
– Share

EXHIBIT 5-10
OBJECTIVES AND CRITICAL RISK MATRIX

		CRITICAL RISKS						
	Mission: Gain the necessary knowledge and skills to be successful in an entry-level internal audit position.	CR1 Becomes ill.	CR2 Forgets deadline.	CR3 Oversleeps or is delayed.	CR4 Does not have needed course materials.	CR5 Does not have time to complete all work.	CR6 Unable to understand material.	CR7 Experiences social or other distractions.
OBJECTIVES	1. Attend all classes.	X		X				
	2. Be on time for each class.	X		X				X
	3. Do assigned reading prior to the class in which it will be discussed.		X		X	X		X
	4. Complete all assignments on time.	X	X		X	X	X	X
	5. Obtain a B+ or better on all exams.		X			X	X	X

- **Sharing.** The risk impact or likelihood is reduced by transferring or otherwise sharing a portion of the risk. Common techniques include purchasing insurance products, engaging in hedging transactions, or outsourcing an activity.

To select appropriate response strategies effectively, an understanding of how risks relate to the organization's business processes is necessary. Internal auditors also must establish the links between risks and business processes to determine whether the risks are being managed to appropriate levels within management's response strategies and to identify where in the organization the critical risks reside. IIA Standard 2010: Planning explicitly requires the CAE to "establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals."

Key Link

The process plays a direct and key role in managing the risk

An effective means of depicting how the processes link to the underlying risks is to create a risk by process matrix (similar to the matrix shown in exhibit 5-10, which linked objectives with critical risks). Risks are listed along the top of the matrix, and processes are listed down the side (see exhibit 5-11). The risks would be those identified in the business risk model (exhibit 5-7). Typically, these will be from 30

EXHIBIT 5-11
RISK BY PROCESS MATRIX

K- Key Link S- Secondary Link	Risk 1	Risk 2	Risk 3	Risk 4	Risk 5	Risk 6	Risk 7	—	Risk m
Process 1		S		K					
Process 2				S					
Process 3			S						
Process 4	K						S		
Process 5				S					
Process 6							S		K
Process 7				S	S	S	K		
Process 8		K							S
Process 9	S				K	K			
Process 10		K							S
Process 11	S		K		S				
...									
Process n		S		K			S		

to 70 risks. The risk assessment process shown in exhibit 5-8 and exhibit 5-9 can be used to shorten the list of risks. For instance, it might be desirable to limit the risks to which processes are linked to only those risks in cells 7 through 25 (see exhibit 5-8).

The next step is to analyze the processes to determine if there are any associations between the processes and the risks. Returning to the initial process example of getting to an 8:00 a.m. class on time, links between that process (exhibit 5-6) and the seven critical risks listed in exhibit 5-10 can be assessed. There is clearly a direct association between this process and critical risk 3 (oversleeps or is delayed). There also would be an association with critical risk 4 (does not have needed course materials) because part of getting to the 8:00 a.m. class on time involves gathering needed materials for classes and studying the rest of the day. Critical risk 5 (does not have time to complete all work) and critical risk 6 (unable to understand material) are clearly not related to this process. They would be related to other processes such as time management, scheduling, and study processes.

Secondary Link

The process helps to manage the risk indirectly.

After identifying the risks with which a particular process is associated, the associations should be evaluated as to whether the links are key or secondary. Key links are those in which the process plays a direct and key role in managing the risk. Secondary links are ones in which the process helps to manage the risk indirectly. In the example above, critical risk 3 would be judged as a key link, while critical risk 4 may only be considered a secondary link. When the links are viewed across a particular risk, there should be one or two processes (at most three) identified as having key links and any number of additional processes identified as having secondary links.

Once the risk by process matrix is complete, it can be used by the internal audit function to determine which engagements should be included in the function's annual audit plan. A first step could be to count the number of key and secondary links for each process. The number and nature of links between risks and process will influence the type of internal audit that may be conducted. For example, a process with key links to several risks may be a good candidate for a comprehensive audit of the entire process. Alternatively, if a risk has key links to several processes, it may be more appropriate to conduct an audit of all such processes to provide assurance regarding the risk as a whole. Considerable experience is necessary to make these judgments. Also, a cycle for auditing each process could be established based on the impact and likelihood of the related risks. For example, processes with a key link to one or more critical risks or to several high and moderate risks may be audited on a one- or two-year cycle, and those with only secondary links to critical and high risks on a three-, four-, or five-year cycle. Consideration also should be given to past audit results. For instance, even a process on a three- or four-year cycle should be audited before its cycle ends if the prior audit identifies significant issues.

Another, more indirect, approach to linking business processes and risks is through the development of basic risk factors used to evaluate risks across processes (risk factor approach). Typically, risk factor models identify seven to 15 factors that can be used to assess each process. These factors are not identical to risks in the earlier basic business risk model (exhibit 5-7). They are a higher level of abstraction, one that can be applied to each process. Most models are composed of two basic types of factors, external risk factors and internal risk factors, although other risk factors also may be included. The external risk factors pertain to factors built into the environment and the nature of the process itself. They can be characteristics such as relative level of activity, amount and liquidity of assets involved in the process, complexity of the process in terms of number of steps and inputs, level of legal and regulatory constraints, and so forth. Internal risk factors relate to the extent controls designed into the process assure the process achieves its objectives, performance of the people involved in the activities and in managing the process, and the degree of change in the process and environment in which it operates. Some models include several additional factors, most commonly: time since the last audit, prior audit results, and specific management concerns.

After the factors have been identified, three other decisions must be made before implementing the model. First, the scale used to assess each factor must be set. Typically, a three-, five-, or seven-point scale is used. For example, in a three-point scale, 1 may be low, 2 medium, and 3 high. The boundaries on the three categories also can be set for each factor. For example, if one factor is "amount of assets involved," then low (a score of 1) might be less than $500,000, medium (a score of 2) from $500,000 to $10 million, and high (a score of 3) more than $10 million. Regardless of which scale is selected (a three-, five-, seven-, or n-point scale), the same scale should be used for the assessment of all factors. Exhibit 5-12 shows an example of a 10-factor model using a three-point scale. The 10 factors are divided among three types of risk factors (external, internal, and other). Exhibit 5-12 shows the name of the risk factor in the first column and explanations of what each of the three scores would mean in the second column.

EXHIBIT 5-12
RISK FACTOR APPROACH

FACTORS, DESCRIPTIONS, WEIGHTINGS, AND SCORES

Risk Factor	Description	Score (1-3)	X Weight	Weighted Score
EXTERNAL FACTORS				
1. Assets at risk	1 - Less than $500,000 2 - From $500,000 to $5 million 3 - Greater than $5 million		10	
2. Visibility	1 - Operating unit/direct customer 2 - Divisional/limited set of customers 3 - Organization/national press		10	
3. Complexity	1 - Simple, routine assignments make up process 2 - Requires several steps and interaction of multiple people 3 - Multiple steps, requiring coordination of multiple individuals both within the process and with other processes		10	
4. Size of process/operation	1 - Process affects less than 3% of the organization's activities 2 - Process affects 3% to 15% of the organization's activities 3 - Process affects more than 15% of the organization's activities		10	
5. Legal/regulatory/external requirements	1 - Few requirements or generally unregulated 2 - Some legal, regulatory, or external requirements 3 - Significant number of and/or complexity of requirements		10	
INTERNAL FACTORS				
6. Internal control stability	1 - Mature risk and control system 2 - Stable risk and control system with moderate changes 3 - Significant changes to risk and control system		5	
7. Internal control effectiveness	1 - No internal control or compliance issues in past two years 2 - Instances of fraud, internal control weakness, or compliance failures, but none significant in the past two years 3 - Significant fraud, internal control weakness, or compliance failures in past two years		10	
8. Significant changes in operations, processes, personnel, or technology	1 - No significant change in last 12 months 2 - Some changes in process or key personnel in last 12 months 3 - Major change in business and process or new IT system in last 12 months		15	
OTHER FACTORS				
9. Management concerns	1 - No concerns expressed 2 - Some concerns expressed by senior management 3 - Notable concerns expressed by senior management or board		10	
10. Prior audit results	1 - No internal control or compliance issues in last audit 2 - Minor internal control or compliance issues in last audit 3 - Significant internal control or compliance weaknesses in last audit		10	
OVERALL RISK SCORE				

The next decision pertains to the relative importance (or weight) of one factor to another. If each risk factor is considered to be of equal importance, they may be given the same numeric weighting. Usually, weighting is done by assigning numbers from 0 through 100, so the sum of weights equals 100. Thus, if there are five risk factors and each of the factors is considered to be of the same importance, each factor will be assigned a weight of 20. In the risk factor model shown in exhibit 5-12, the internal control stability factor is given a weight of 5, which means it is considered only half as important as the assets at risk factor (weight of 10) and only one-third as important as the significant changes factor (weight of 15).

The final decision relates to how the risk factors are combined. Most risk factor approaches use a weighted-additive model—each factor score is multiplied by a factor weight and summed across factors to give an overall risk score (exhibit 5-12). For example, overall scores can range from 100 through 300 and can be interpreted as low risk (scores below 150), medium risk (scores from 150 through 239), and high risk (scores 240 and greater). The ranges of scores may be adjusted once the distribution of scores over all processes is determined. The categories can then be used to assign each process an audit cycle of one, two, three, or more years. Thus, if a process is assigned to a two-year cycle, it would be scheduled for audit every two years.

As an alternative to assigning each process to an audit cycle, prioritizing processes can be done by sorting the processes by their risk scores and selecting the ones with the highest scores to include in the internal audit plan until available hours for the planning period have been exhausted. If such an approach is used, it is important to note when the process was last audited. One technique for doing this is to add *time since the last audit* as one of the risk factors. For example, in the model presented in exhibit 5-12, this factor would be added as a factor under *Other Factors* and could be scored *1 - process audited in the past 12 months, 2 - process audited in the past 12 to 36 months, and 3 - process has not been audited in the past 36 months.*

Some internal audit functions prefer not to make judgments using total scores, but they look at the scores by factor (external, internal, other). This can be done by assigning a low, medium, or high rating to each factor. Note that the range of scores varies based on the number of individual factors in each category (5, 3, and 2 in the current example) and differences in weightings. Thus, in the model presented in exhibit 5-12, the total external risk score can range from 50 through 150, the total internal risk score from 30 through 90, and the total other factors score from 20 through 60. Given these ranges, a low rating for external risks may be scores of less than 90 and a high rating may be scores of 125 or greater. A low rating for internal risks may be scores of less than 50 and a high rating may be scores of 75 or greater. A low rating for other factors may be scores of less than 35 while a high rating may be scores of 50 or greater. Exhibit 5-13 illustrates visually how this might be displayed to help determine the audit cycle. As before, the process can be placed on a cycle of one, two, three, or more years.

Business Processes and Risks in the Assurance Engagement

The approach to identifying business processes and risks discussed up to this point also applies at the engagement level. Recall the example presented earlier in this chapter (exhibit 5-10)—the mission to gain the necessary knowledge and skills to be successful in an entry-level internal audit position and the five objectives established to accomplish this mission. Suppose a student's parents wanted

EXHIBIT 5-13
RISK FACTOR APPROACH

RISK ANALYSIS BY BUSINESS PROCESS

	External	Internal	Other
Process 1	🟥	🟥	🟥
Process 2	🟨	🟩	🟩
Process 3	🟥	🟥	🟨
Process 4	🟩	🟨	🟨
Process 5	🟨	🟨	🟩
Process 6	🟩	🟥	🟩
Process 7	🟩	🟨	🟩
Process 8	🟨	🟨	🟨
Process 9	🟥	🟨	🟥
Process 10	🟥	🟨	🟨
Process 11	🟩	🟩	🟩
...			
Process n	🟥	🟩	🟨

RISK LEVEL	EXTERNAL	INTERNAL	OTHER
Potential Range of Scores	50 to 150	30 to 90	20 to 60
🟩 Low	≤90	≤50	≤35
🟨 Meduim	90-124	50-74	35-49
🟥 High	≥125	≥75	≥50

some assurance that the mission and objectives would be accomplished and asked an older sibling, recently graduated and working as an internal auditor, to visit the student and perform an internal audit. This begins with the student and the sibling sitting down and listing a number of activities and processes the student carries out to achieve the mission:

1. Studying for exams.
2. Reading the assigned materials.
3. Completing class assignments and projects.
4. Eating meals.
5. Paying tuition and other bills.
6. Listening and taking notes in class.
7. Selecting and registering for the appropriate classes.
8. Exercising.
9. Cleaning the apartment.
10. Getting to the first class of the day on time.

Process 10, getting to the first class of the day on time, will be the focus of this example. The internal auditor/sibling begins by asking the student a series of questions about how preparations for the next day are conducted and about getting up in the morning and going to class. The student explains that, although classes are held only on Monday, Wednesday, and Friday this semester, the first class begins at 8:00 a.m. After answering all the questions asked, the internal auditor/sibling creates a process map and asks if it represents the information provided. The student suggests a few changes, producing the process map shown in exhibit 5-6.

Assurance Engagement

An objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization.

The next step is to identify and evaluate specific risks in each activity or subprocess within the key process. The internal auditor/sibling does this by placing each activity on a matrix and listing a description of each risk down the side of the page as shown in exhibit 5-14. Each risk statement describes an event that may adversely affect the activity's or subprocess's ability to achieve its goals. The potential impact of the event is then identified and evaluated by its seriousness. Finally, the likelihood of the event is assessed. The first five columns of exhibit 5-14 depict this information in a partially completed risk/control matrix for the first four activities and nine associated risks involved in getting to campus on time for class.

Risk evaluation also can be displayed using a risk map to prioritize risks within the key process. Those in the upper right quadrant of the risk map would be the most critical, while those in the lower left quadrant would be of relatively low concern. A risk map for the risks identified in exhibit 5-14 is shown in exhibit 5-15. On the risk map, impact and likelihood are combined to determine if the risk is of critical, moderate, or low significance.

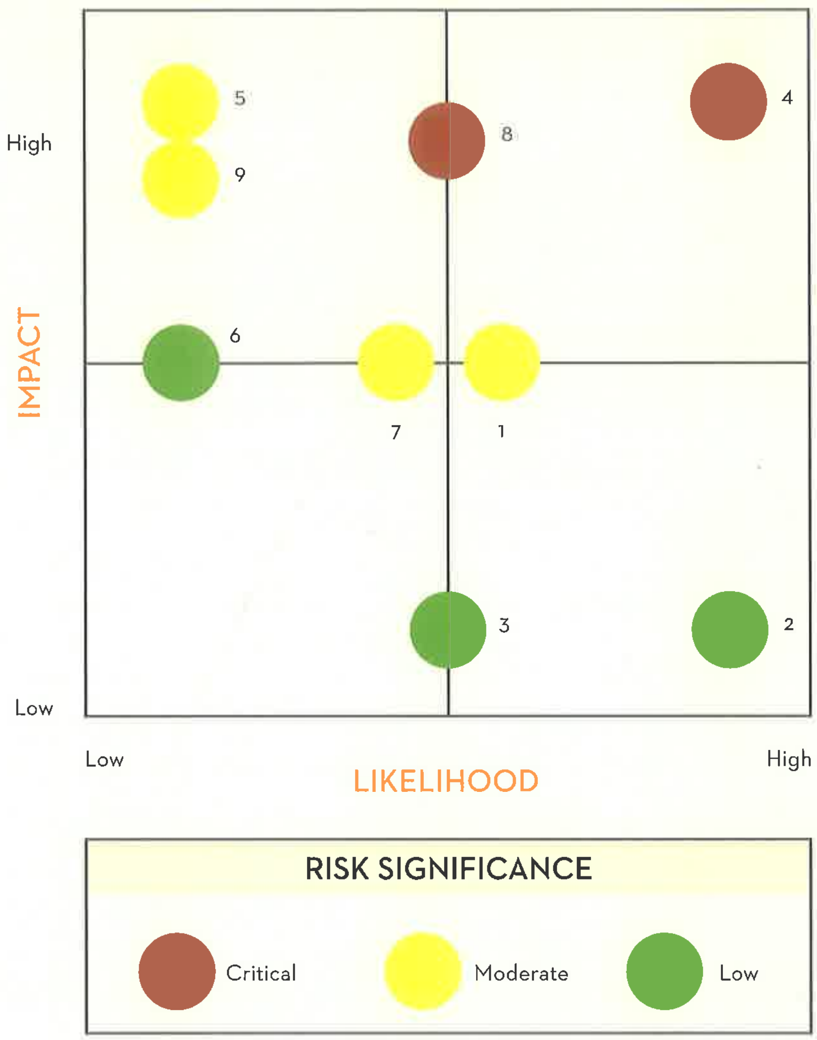
Once specific risks have been identified, the next step is to determine how these risks are managed and if the response is effective in reducing them to an acceptable level. As mentioned earlier, there are four general responses: avoid, reduce, share, and accept. Within processes, most often the response to a specific risk is either to accept the risk or attempt to reduce it through controls. The topic of controls is addressed in more detail in chapter 6, "Internal Control," and subsequent chapters. However, to complete the discussion of the risks in our process example, exhibit 5-14 shows two additional columns in the risk matrix. The sixth column indicates the risk response strategy and the seventh specifies how one might gain assurance that the response strategy (in particular, the control) was effective at managing the risks.

After the response strategies have been determined, and both before and after the strategies have been tested for effectiveness, an overview of the risk response strategies can be obtained by creating a risk control map, which plots risk significance (in this example, impact and likelihood are combined to create low, moderate, and critical significance) against control effectiveness. This is illustrated in exhibit 5-16 using the specific risks from exhibit 5-14 for process 10 (getting to the first class of the day on time). The risk control map shows where there is an appropriate balance between risk and the control; that is, more effective controls over critical risks (high-impact and likelihood) than low risks (low-impact and low chance of occurrence). Risks falling between the two dashed parallel lines (risks 4, 8, 1, 3, and 6) are shown to be appropriately balanced. Above and left of the dashed lines on the map (risk 7), the control/risk relationship is not appropriately balanced; the response strategy does not appropriately mitigate the risks. On the other hand, below and right of the dashed lines are a number of risks that may be over-controlled (5, 9, and 2). They represent situations in which efficiencies might be gained by reducing the resources devoted to the related controls.

EXHIBIT 5-14
RISK/CONTROL MATRIX FOR PROCESS 10: GETTING TO AN 8:00 A.M. CLASS ON TIME

Activity or Subprocess Within Key Process	Risk Statement	Potential Impact	Impact Rating	Likelihood Rating	Risk Response	Technique for Assessing Effectiveness
Pack Backpack for Tomorrow	1. Forgets to pack homework assignments	• Loss of points for late work	Medium	Medium	Accept	–
	2. Forgets to put in cell phone	• Unable to receive or make calls	Low	High	Always keep cell phone in backpack	Call phone to test location
	3. Forgets to shut down and pack laptop	• Late because of delay with shutdown	Low	Medium	Accept	–
Set Alarm for 6:00 a.m.	4. Forgets to turn on alarm	• Oversleep and miss class	H gh	High	Turn on alarm in morning when getting up	Inquire and observe to find out if this is being done
	5. Power goes out during the night	• Oversleep and miss class	H gh	Low	Second battery-powered alarm clock	Observe
Go to Bed	6. Unable to get to sleep	• Tired next day	Med um	Low	Accept	–
	7. Goes to bed too late to get sufficient sleep	• Tired next day	Med um	Med um	Accept	–
Sleep/Get Up	8. Turns off alarm and goes back to sleep	• Miss class	H gh	Med um	Put a arm across room	Investigate to see if there is an alarm across the room
	9. Pushes snooze repeatedly	• Miss or be late to class	H gh	Low	Second alarm	Observe

EXHIBIT 5-15
RISK MAP PARTIALLY COMPLETED FOR PROCESS 10: GETTING TO AN 8:00 A.M. CLASS ON TIME

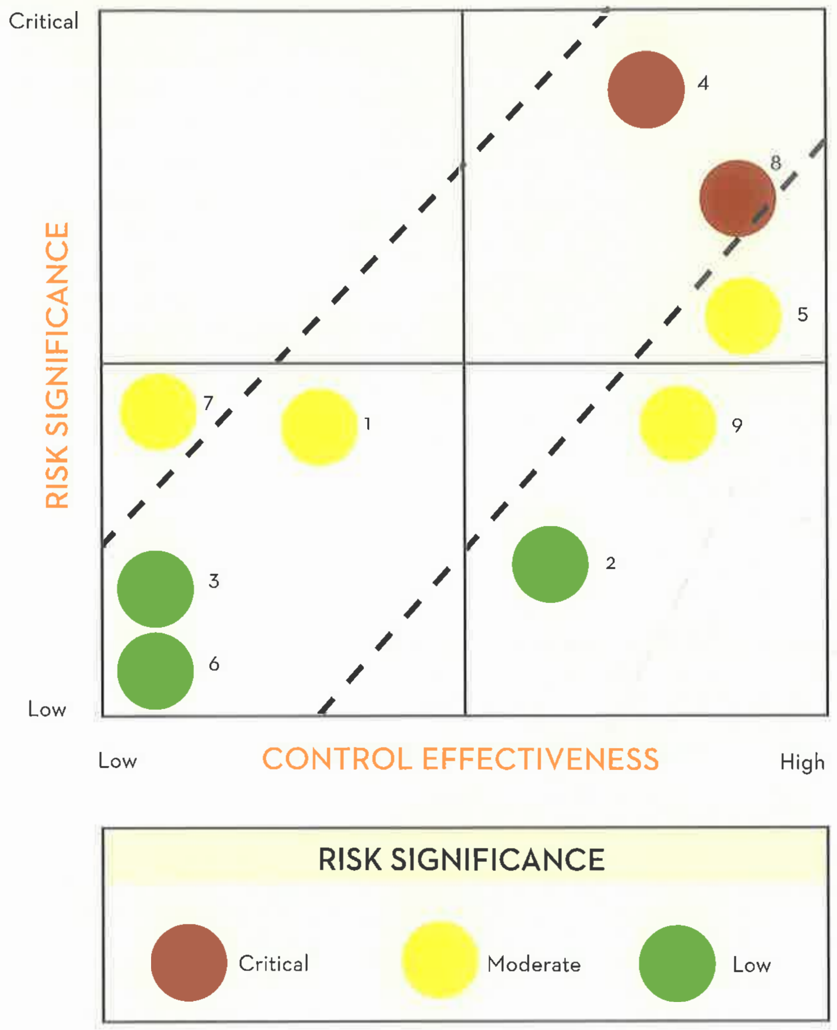


BUSINESS PROCESS OUTSOURCING

Before concluding the discussion of business processes and risks, it is important to discuss situations in which the process is not executed by employees of the organization. In an effort to streamline operations and reduce costs, many organizations are increasing the degree to which they are outsourcing specific business processes. Because these processes play an important role in helping organizations achieve their objectives, these outsourced processes should be included in an organization's risk assessment and internal audit universe.

Business process outsourcing (BPO) is the act of transferring some of an organization's business processes to an outside provider to achieve cost reductions while improving service quality and efficiency. Because the processes are repeated and a long-term contract is used, outsourcing goes far beyond the use of consultants.

EXHIBIT 5-16
RISK CONTROL MAP PARTIALLY COMPLETED FOR PROCESS 10: GETTING TO AN 8:00 A.M. CLASS ON TIME



Historically, payroll and IT functions were the first critical business processes outsourced. However, the trend has grown to include human resources, engineering, customer service, finance and accounting, and logistics as organizations seek to reduce costs through the leverage and economies of scale gained by those in the outsourcing business.[3]

Even though functions may be outsourced, management is still accountable for the risk. It is critical that management and the internal audit function ensure an adequate system of internal controls exists with the outsourced vendor. In many cases, the system of internal controls may be better and more efficient than if the processes were kept internally. However, there are new risks, particularly those encountered in the transition phase of either outsourcing business functions or bringing them back to be managed internally. The following list presents some

Business Process Outsourcing

The act of transferring some of an organization's business processes to an outside provider to achieve cost reductions, operating effectiveness, or operating efficiency while improving service quality of the recommended practices that organizations should follow for effective risk management and control of outsourced business processes:

- Document the outsourced process and indicate which key controls have been outsourced.
- Ensure there are means of monitoring the effectiveness of the outsourced process.
- Obtain assurance that the internal controls embedded in the outsourced process are operating effectively, either through internal audits of such controls or an external review of these controls (such as an SSAE 16 SOC 1 or SOC 2 report in the United States).
- Periodically reevaluate whether the business case for outsourcing the process remains valid.[4]

OPPORTUNITIES TO PROVIDE INSIGHT

The proficiency of internal audit staff in analyzing business processes and their related risks provides the internal audit function the opportunity to add significant value to the organization through the insights their work can provide to management at the operational and executive level. The opportunity to apply these skills may come as a result of the work performed to provide assurance on risk management and internal control in the course of the traditional assurance engagements or in special engagements such as business process reengineering initiatives, outsourcing/off-shoring studies, due-diligence review in mergers and acquisitions, or pre-implementation systems review. Exhibit 5-17 describes 10 opportunities for the internal audit function to provide insight regarding business processes and their related risks.

EXHIBIT 5-17
10 OPPORTUNITIES FOR THE INTERNAL AUDIT FUNCTION TO PROVIDE INSIGHT RELATING TO THE ANALYSIS OF BUSINESS PROCESS AND BUSINESS RISKS

1. Educate line staff and middle management on the identification and assessment of risk.
2. Identify areas where processes are over-controlled and control activities can be reduced to gain efficiency.
3. Identify specific risks in processes that need additional controls or where the controls can be performed more effectively.
4. Determine areas where KPIs can be implemented or improved to increase managements' oversight of business processes.
5. Align management and the internal audit function's approach to and assessment of risk within each business process.
6. Assist management in assessing the strategy for outsourced business processes on a periodic basis.
7. Provide insight to management on controls and operations surrounding outsourced processes during the vendor selection process and after.
8. Facilitate discussions around ERM and assurance mapping activities to improve the organization's understanding of the key business processes and risks and how they fit into the various tools that are used by management.
9. Advise management during significant downsizing and realignment activities regarding the impact to major business processes related to risks, controls, and efficiency.
10. Evaluate opportunities for use of technology to improve the efficiency and effectiveness of controls within business processes.

SUMMARY

The business process and risk concepts discussed in this chapter provide the foundation for understanding how organizations structure their activities to achieve their business objectives. First, it is important to obtain a high-level understanding of these processes and how they support the objectives. Next, the risks that may impact the achievement of the objectives must be identified and assessed. Finally, key processes and subprocesses that are designed to manage the risks consistent with the desired strategies can be identified as potential candidates for internal audits.

However, these concepts are not limited to use by internal auditors. They can be fundamental tools used by other organization personnel, or even individuals in everyday life, to support decision-making. This is illustrated earlier in the chapter through the example of the student with the mission of becoming an internal auditor. Refer to appendix 5-A for another example of how these principles can be applied.

APPENDIX 5-A[4]

Applying the Concepts: Risk Assessment for Student Organizations

The concepts covered in this chapter are applicable not only to internal auditors but also to managers and members at various levels of the organization. The following example further illustrates the concepts covered in this chapter by presenting a methodology that can be immediately put into practice by members and leaders in student and civic organizations to help manage the risks relative to their organization's activities and events. This particular methodology was developed by the Office of the Dean of Students at The University of Texas at Austin, but draws from similar risk management practices used at several other universities, corporations, and government entities.

The methodology involves a six-step process that the officers or committees of student organizations are encouraged to go through when planning events (for example, a concert or dance) or activities (for example, a field trip to visit businesses in another city or a softball tournament). The steps are:

1. List all aspects of the event/activity on part 1 of the managing risk worksheet (exhibit 5-A1).
2. Identify risks associated with each event/activity, thinking broadly about potential risks (exhibit 5-A2).
3. Use the matrix (exhibit 5-A3) to determine the level of risk associated with each activity before applying any risk management strategies and document the risk level in exhibit 5-A2.
4. Brainstorm methods to manage risks. Find strategies that can be applied to reduce the impact and/or likelihood of significant risks. Document these in exhibit 5-A2.
5. Use the matrix (exhibit 5-A3) to reassess the activities now that risk management strategies have been applied and document the new risk level in exhibit 5-A2.
6. Determine whether the application of risk management strategies has resulted in an acceptable level of residual risk. Consider modifying or eliminating activities with unacceptable risks. Remember to consider how the activity relates to the mission and purpose of the organization. Document decisions reached in exhibit 5-A2.

Exhibit 5-A3 shows the link between impact and likelihood. It uses slightly different scales and definitions but is conceptually identical with other models discussed in this chapter.

Whether it is a student organization or a multinational corporation, achievement of an organization's mission and objectives involves taking necessary risks. In today's competitive environment, those who best manage risks and focus on improved business processes will outperform the competition.

APPENDIX 5-A[4]

EXHIBIT 5-A1 MANAGING RISK WORKSHEET, PART 1

STEP 1: LIST ALL ASPECTS OF THE EVENT

Name of event/activity.

What is involved (examples: driving, sports/recreation, collecting money, concerts, outdoor events, etc.)?

How will the event /activity be conducted?

Purpose of the event/activity.

When does the event/activity take place?

Where will the event/activity be held?

APPENDIX 5-A[4]

EXHIBIT 5-A2
MANAGING RISK WORKSHEET, PART 2

STEP 2: IDENTIFY RISKS	STEP 3: DETERMINE THE LEVEL OF EACH RISK	STEP 4: DEVELOP RISK MANAGEMENT STRATEGIES	STEP 5: REASSESS THE ACTIVITY APPLYING YOUR RISK MANAGEMENT STRATEGIES	STEP 6: DETERMINE WHETHER YOUR ORGANIZATION HAS SUCCESSFULLY MANAGED THE RISKS
Use the knowledge and experience of your organization's officers, advisers, and members to identify the risks associated with the event or activity.	Use the matrix to determine the level of risk associated with each activity before applying any risk management strategies.	Use risk definitions to develop appropriate strategies.	Considering mitigating factors, re-chart the risks back on the matrix to de termine if you can reduce the original level of risk. Analyze the overall level of risk based on this information.	Determine whether the strategies chosen appropriately manage the risks. If not, reconsider conducting the activity or further modify the activity using this process.
Physical				
Psychological				
Financial				
Reputational				
Environmental				
Other				

APPENDIX 5-A[4]

EXHIBIT 5-A3
RISK MODEL FOR STUDENT ORGANIZATIONS AND ACTIVITIES

Likelihood that Something Will Go Wrong

Impact of Risk

Category	**Unlikely** Unlikely to occur.	**Seldom** Not likely to occur but possible.	**Occasional** May occur at times.	**Likely** Quite likely to occur in time.	**Frequent** Likely to occur immediately or in a short period of time.
Catastrophic May result in death.	M	H	H	E	E
Critical May cause severe injury, major property damage, significant financial loss, and/or result in negative publicity for the organization and/or institution.	L	M	H	H	E
Marginal May cause minor injury, illness, property damage, financial loss, and/or result in negative publicity for the organization or institution.	L	L	M	M	H
Negligible Hazard presents a minimal threat to safety, health, and well-being of participants.	L	L	L	L	M

E	**Extremely High Risk**	Activities in this category contain unacceptable levels of risk, including catastrophic and critical injury that are likely to occur. Organizations should consider whether they should eliminate or modify activities that still have an "E" rating after applying all reasonable risk management strategies.
H	**High Risk**	Activities in this category contain potentially serious risks that are likely to occur. Application of proactive risk management strategies to reduce risk is advised. Organizations should consider ways to modify or eliminate unacceptable risks.
M	**Moderate Risk**	Activities in this category contain some level of risk that is unlikely to occur. Organizations should consider what can be done to manage the risk to prevent negative outcomes.
L	**Low Risk**	Activities in this category contain minimal risk that is unlikely to occur. Organizations can proceed with these activities as planned.

REVIEW QUESTIONS

1. What is a business process? What are operating processes?

2. What is a project and how is it different from a business process?

3. What are the management and support processes that are common to most organizations?

4. What is included in an organization's business model?

5. What is the difference between a top-down and bottom-up approach to understanding business processes?

6. How does an organization determine the key objectives of a business process?

7. What are two commonly used methods for documenting processes? Describe each.

8. What are the two common factors used when assessing risks?

9. After a risk assessment is completed, the next steps involve linking the risks to what two things?

10. What are the four responses an organization can take toward a risk?

11. What is the difference between a key link and a secondary link?

12. How can the risk factor approach be used to identify areas of high risk in an organization?

13. What are the two basic types of factors typically used when following the risk factor approach? What other factors are commonly considered?

14. When conducting an assurance engagement, once the objectives are known, what are the three primary steps involved in determining the tests to perform to assess whether the risks threatening the objectives are effectively managed?

15. What two axes are typically used in a risk control map? Explain what the two parallel dashed lines in exhibit 5-16 signify.

16. What practices should organizations follow to ensure effective risk management and control of outsourced business processes?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. In assessing organizational risk in a manufacturing organization, which of the following would have the greatest long-range impact on the organization?

   a. Advertising budget.

   b. Production scheduling.

   c. Inventory policy.

   d. Product quality.

2. Internal auditors often prepare process maps and reference portions of these maps to narrative descriptions of certain activities. This is an appropriate procedure to:

   a. Determine the ability of the activities to produce reliable information.

   b. Obtain the understanding necessary to test the process.

   c. Document that the process meets internal audit standards.

   d. Determine whether the process meets established management objectives.

3. What is a business process?

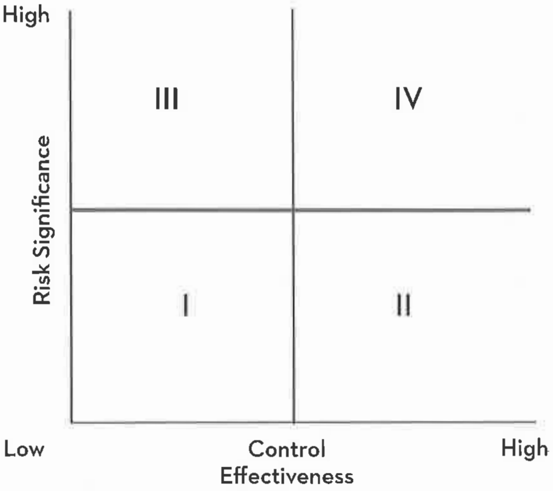
   a. How management plans to achieve the organization's objectives.

   b. The set of connected activities linked with each other for the purpose of achieving an objective or goal.

   c. A group of interacting, interrelated, or interdependent elements forming a complex whole.

   d. A finite endeavor (having specific start and completion dates) undertaken to create a unique product or service that brings about beneficial change or added value.

Use the chart to answer questions 4 through 6.



4. If a risk appears in the bottom right of quadrant II in the above risk control map, it means that:

   a. There is an appropriate balance between risk and control.

   b. The controls may be excessive relative to the risk.

   c. The controls may be inadequate relative to the risk.

   d. There is not enough information to make a judgment.

5. If a risk appears in the middle of quadrant IV in the above risk control map, it means that:

   a. There is an appropriate balance between risk and control.

   b. The controls may be excessive relative to the risk.

   c. The controls may be inadequate relative to the risk.

   d. There is not enough information to make a judgment.

6. Which of the following circumstances would concern the internal auditor the most?

   a. A risk in the lower left corner of quadrant I.

   b. A risk in the lower right corner of quadrant II.

   c. A risk in the upper left corner of quadrant III.

   d. A risk in the upper right corner of quadrant IV.

MULTIPLE-CHOICE QUESTIONS

7. Which of the following are business processes?

   I. Strategic planning.
   II. Review and write-off of delinquent loans.
   III. Safeguarding of assets.
   IV. Remittance of payroll taxes to the respective tax authorities.

   a. I and III.
   b. II and IV.
   c. I, II, and IV.
   d. I, II, III, and IV.

8. Which of the following symbols in a process map will most likely contain a question?

   a. Rectangle.
   b. Diamond.
   c. Arrow.
   d. Oval.

9. After business risks have been identified, they should be assessed in terms of their inherent:

   a. Impact and likelihood.
   b. Likelihood and probability.
   c. Significance and severity.
   d. Significance and control effectiveness.

10. In a risk by process matrix, a process that helps to manage a risk indirectly would be shown to have:

    a. A key link.
    b. A secondary link.
    c. An indirect link.
    d. No link at all.

11. A major upgrade to an important information system would most likely represent a high:

    a. External risk factor.
    b. Internal risk factor.
    c. Other risk factor.
    d. Likelihood of future systems problems.

12. Which of the following is true regarding business process outsourcing?

    a. Outsourcing a core, high-risk business process reduces the overall operational risk.
    b. Outsourced processes should not be included in the internal audit universe.
    c. The independent outside auditor is required to review all significant outsourced business processes.
    d. Management's controls to ensure the outsourcing provider meets contractual performance requirements should be tested by the internal audit function.

13. A company has recently outsourced its payroll process to a third-party service provider. An audit team was scheduled to audit payroll controls in the annual audit plan prepared prior to the outsourcing. What action should the audit team take, considering the outsourcing decision?

    a. Cancel the engagement, because the processing is being performed outside the organization.
    b. Review only the controls over payments to the third-party provider based on the contract.
    c. Review only the company's controls over data sent to and received from the third-party service provider.
    d. Review the controls over payroll processing in both the company and the third-party service provider.

14. Which flowcharting symbol indicates the start or end of a process?

    a. Arrow.
    b. Diamond
    c. Oval.
    d. Rectangle.

15. How does a control manage a specific risk?

    a. It reduces the likelihood of the event giving rise to the risk.
    b. It reduces the impact of the event giving rise to the risk.
    c. It reduces either likelihood or impact or both.
    d. It prevents the occurrence of the event.

DISCUSSION QUESTIONS

1. How would an oil exploration and production company differ from a global retail company like Wal-Mart in terms of how it organizes business processes?

2. What are five of the most important business processes and business risks for a large automobile manufacturer like Toyota?

3. If internal audit resources are limited to conducting only one audit at a divisional location, should a high-risk process that was audited last year at this location be audited in lieu of a moderately risky process that was last audited four years ago? Explain.

4. The objectives of Sargon Products' purchasing process are to obtain the right goods, at the right price, at the right time. What are the significant risks to achievement of these objectives?

5. Think about the sales and cash receipts process of a men's or women's clothing store where you shop.

   a. What are the key objectives of this process?

   b. What are the key risks that threaten the achievement of those objectives? Key risks are those that have the highest significance (that is, combination of impact and likelihood).

   c. Identify and map the major activities of the process in the order in which they occur.

   d. Based on your review of the major activities, which of the risks identified in b. likely have the greatest inherent significance?

6. Payswell Company, a small manufacturer, has been in business for 10 years. Senior management is thinking about outsourcing the company's payroll process.

   a. What are three important objectives of a payroll process?

   b. What are the key risks that threaten the achievement of those objectives?

   c. What are the potential benefits of outsourcing the payroll process?

   d. What new risks may arise if the process is outsourced?

   e. How should Payswell's management:

      1. Identify the key controls over the outsourced payroll process?

      2. Determine whether those controls are designed adequately and operating effectively?

CASES

CASE 1

Pizza Inc., a pizza take-out and delivery chain, is experiencing decreasing revenues and steadily losing market share despite favorable market testing of its products/recipes. The company's strategy has traditionally been defined as gaining increased market share through customer satisfaction. Management has asked your internal audit function to help them understand the reasons for declining sales at the Uptown location and how the decline might be related to internal operations. Your prior internal audit experience and direct observation of work performed at the troubled location identified the following information:

- In 20XX, Pizza Inc.'s corporate office screened this site location prior to construction to ensure that neighborhood demographics supported the ideal business environment. This resulted in locating the chain near a suburb where typical residents were in the mid- to upper-middle class income range and who owned homes with three to four bedrooms. Despite the favorable location, the site you are reviewing continues to have gross and operating margins lower than their local competitors.
- On-the-job training is the primary method used by managers to communicate company policy and procedures. However, documented policies and detailed procedures do exist for each key process and are available by request from the shift manager. Employees are typically male (comprising 65 percent of total staff), 17 to 23 years old, with little or no prior work experience at the time of hire. Unscheduled absenteeism is high and part-time shift assignments are rotated frequently to reward those individuals who regularly work as scheduled. The internal audit team noted in last year's review that management has documented an average annual turnover rate of 18 percent.
- The shift manager is responsible for ensuring that all pizza orders are completed within the advertised time deadlines, a long-held competitive advantage. Drivers are required to record on a delivery ticket the time of their arrival at the delivery location. This time is compared with the time recorded on the order ticket to calculate total elapsed minutes. Review of the last six month's delivery tickets indicates that the company benchmark delivery cycle time of 25 minutes from "placing the order to when we're on the doorbell" has slipped to an average of 43.8 minutes. For months there have been persistent rumors about bets placed on one driver's notorious reputation for beating the delivery deadline every time.
- Delivery promptness is also dependent on the volume of completed pizzas at any given time and the neighborhood traffic pattern. Drivers are initially screened at hire for outstanding traffic violations or other infractions (such as driving while intoxicated). The original site manager posted a large map on the wall so drivers can identify their routes. Mileage is reimbursed as part of the compensation for using their own vehicles so each driver turns in a mileage log at the end of the shift to indicate both starting and ending mileage. The manager randomly checks the recorded starting or ending mileage against the cars' odometers.
- Pizza Inc.'s company policy requires that each location restrict itself to a five-mile service area; however, if an order comes in, the work is never refused. Phone orders occur in predictable patterns, but walk-in orders are more random and less frequent. Scheduling staff to match the anticipated workload is done one week in advance. The average workload during peak hours is 29 orders taken per hour. Orders are manually written on pre-numbered pads. When mistakes are made, the original order ticket is tossed out and a new order form is created to avoid confusion. Information captured includes: date, time of call (or walk in), name, address, phone number, type of crust, and toppings requested. Hand calculators are available to assist with pricing quotes that are told to the customer and recorded on the delivery ticket. Shift managers check every order to ensure that information is complete prior to processing the order.
- Employees who make the pizza are instructed in the proper quantity of ingredients for various standard topping combinations. Frequently, special request orders are received that add items to the standard recipe. Measuring cups are available, but your internal audit team noted on prior visits that when activity reaches peak load, employees generally "know" how much of key ingredients to use. The manager monitors the supply cabinets and refrigerators at the end of the shift to ensure adequate inventory is on hand. Several months ago, the evening shift manager determined that inventory deliveries should be increased to four per week, up from the usual three. Oven temperatures

are monitored closely to ensure that pizzas are properly cooked. Employees who bake the pizza rely on a centrally located wall clock to time the various combinations. There are cooking guidelines posted for each standard topping combination with instructions on what to do if a pizza is overcooked. Generally these are available to employees for snacking.

- All employees are responsible for ensuring the baked pizzas are cut, boxed, hand-labeled for delivery, and assigned to the next available driver. (Drivers work in a first-in/first-out method.)

Your internal audit team determined, after reviewing information received from various external sources and reading Pizza Inc.'s internal communications on strategy, mission, and vision, that linking the business risks to business processes will assist Pizza Inc.'s CEO, chief financial officer, and chief operating officer with identifying the critical business processes and key success factors for each process.

As leader of the internal audit team, you have agreed to:

A. Identify and list the key processes used by Pizza Inc. at their individual site locations.

B. Determine 10 business risks for the typical site location and assess the impact and likelihood of these risks.

C. Link the business processes to the business risks. Determine which are key versus secondary links. (Complete a risk by process matrix—exhibit 5-11.)

D. Select a key process (one you consider critical to the success of an individual site location) and create a detailed-level process map of the activities.

E. Identify the specific risks associated with the activities of the key process (that is, the process you selected for process mapping). (Complete the risk portion of a risk/control matrix—exhibit 5-14.)

F. Map the identified risks according to their inherent impact and likelihood of occurrence. (Complete a risk map—exhibit 5-15.)

G. Based on the case facts provided above, identify controls (actions management currently takes) to mitigate the identified risks and put them on the risk/control matrix (in the risk response column—exhibit 5-14).

H. Determine techniques for assessing the effectiveness of the existing controls. (Complete the last column in the risk/control matrix—exhibit 5-14.)

I. Based on your observations and opinion of the potential effectiveness of the current risk response activities to address risks in the critical process you selected, create recommendations to mitigate the existing risks and improve performance.

CASE 2

Select a company that has undergone an initial public offering within the last five years and obtain the prospectus (these are usually available on the company's website, EDGAR for companies listed on the U.S. stock exchanges, or other information services).

A. What is the business strategy and business model?

B. Identify the strategic objectives.

C. Identify the key risks.

D. Construct a matrix with the strategic objectives on the Y axis and the critical risks on the X axis. For each objective, indicate which key risk applies.

E. Discuss which risk you think the internal audit function should set as the highest priority.

CASE 3

TeamMate Practice Case Exercise 1: Assessment

CPI's internal audit function uses the Assessment area in TeamMate+ to develop its annual risk-based internal audit plan. The planning process begins with the internal audit function's understanding of the organization, which is documented in Assessment using the Dimension viewer. The Primary Dimension is a representation of the audit universe, that is, all the organizational units (entities) the internal audit function can audit. Secondary Dimensions of Accounts and the COSO Framework allow audit management to look at the Risk Assessment in different ways.

The internal audit function then uses the Assessment to complete and document the following tasks:

- Identify CPI's entity objectives and the risks that threaten the achievement of those objectives.
- Link the identified objectives and risks, as well as controls designed to mitigate the risks, with the identified entities included in the Primary Dimension.

- Assign Objectives or Risks to other dimensions.
- Assess the inherent and/or residual risks for each entity and determine a total risk score.
- Develop an internal audit plan that includes those entities that pose the highest risks to CPI.

Review the TeamMate+ Student Reference Guide and perform the following tasks:

- Using the assessment within TeamMate+, select an entity to identify objective(s) as well as any risks threatening those objective(s). These items should be obtained from the TeamStore, using the "Get" option.
- Change the Perspective of the Assessment to Risk Rating and score the identified risks.
- After completion, be prepared to discuss the riskiest identified areas within the assessment.
- Create a project from the Risk Assessment.

Note: The steps performed within the Case will be used for subsequent cases.

CASE 4

KnowledgeLeader Practice Case: Reporting on Controls at a Service Organization

Background Information

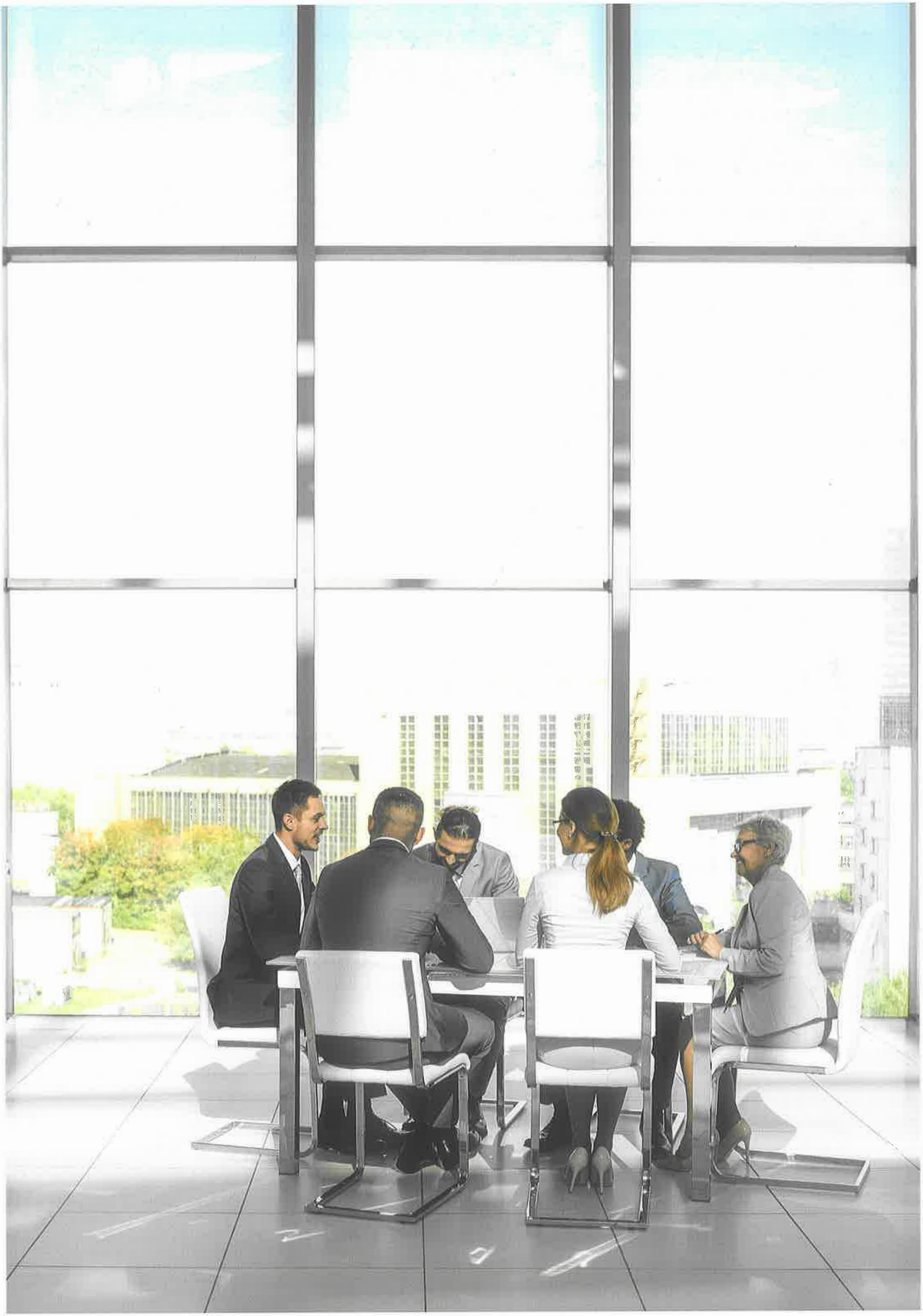
Statement on Standards for Attestation Engagements (SSAE) 16, Reporting on Controls at a Service Organization, is an auditing standard for service organizations. SSAE 16 was issued in April 2010, and became effective in June 2011. SSAE 16 is largely an American standard, but it mirrors International Standards for Assurance Engagements (ISAE) 3402, Assurance Reports on Controls at a Service Organization. SSAE 16 provides guidance to service auditors when assessing the internal control of a service organization and issuing a Service Organization Controls (SOC) report. There are two types of service organization controls reports. A Type 1 SOC report includes the service auditor's opinion on the fairness of the presentation of the service organization's description of controls in operation and the suitability of the design of the controls to achieve the specified control objectives. A Type 2 SOC report includes the information contained in a Type 1 service report and also includes the service auditor's opinion on whether the specific controls were operating effectively during the period under review (usually six months). SSAE 16 reporting can help service organizations comply with Sarbanes-Oxley's requirement (section 404) to show effective internal controls covering financial reporting. It can also be applied to data centers or any other service that might be used in the delivery of financial reporting. Examples of service organizations are insurance and medical claims processors, trust companies, hosted data centers, application service providers (ASPs), managed security providers, credit processing organizations, and clearinghouses.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and identify the circumstances under which obtaining a SOC report is justified. Explain the differences between a SOC 1 and a SOC 2 report. Determine when it would be appropriate to obtain a SOC 1 report versus a SOC 2 report.

Submit a brief write-up indicating the results of your research to your instructor.



CHAPTER 6

Internal Control

LEARNING OBJECTIVES

- Understand what is meant by internal control in a variety of frameworks.
- Identify the objectives, components, and principles of an effective internal control framework.
- Know the roles and responsibilities each group in an organization has regarding internal control.
- Identify the different types of controls and the appropriate application for each of them.
- Obtain an awareness of the process for evaluating the system of internal controls.

"We can think of few activities within an organization that are more important to its success than maintaining internal control. Internal auditing provides management with genuine assurance that adequate controls are in place, that they are being performed as intended, and that any failures are investigated and remedied on a timely basis."[1]

Every organization has business objectives that it intends to achieve, and every organization has risks that threaten the achievement of those objectives. In this chapter, we discuss the various components of the system of internal controls that organizations develop to mitigate and manage those risks. You will come away from this chapter with an understanding of what is meant by internal control and be able to identify a variety of frameworks that consider internal control. Additionally, you will be able to identify the components that must be present for an adequately designed and effectively operating system of internal controls. Everybody within an organization has responsibility for internal control, and this chapter outlines the specific roles and responsibilities each group of people in the organization has in that respect, including management's process for evaluating the organization's system of internal controls. Most importantly for the purpose of this chapter, we delineate the specific roles the internal audit function has relative to evaluating the system of internal controls. There are several different types of controls employed to mitigate the many varieties of risks facing an organization. By the end of this chapter, you will be able to identify the different types of controls available, as well as the appropriate application of each one. Finally, a high-level overview of the process for evaluating the system of internal controls is covered. This concept is covered in greater detail in the Conducting Internal Audit Engagements chapters (chapters 12 through 15), as well as the case studies that accompany this textbook.

EXHIBIT 6-1
IPPF GUIDANCE RELEVANT TO CHAPTER 6

Standard 2100 – Nature of Work

Standard 2130 – Control

FRAMEWORKS

A framework is a body of guiding principles that form a template against which organizations can evaluate a multitude of business practices. These principles are comprised of various concepts, values, assumptions, and practices intended to provide a benchmark against which an organization can assess or evaluate a particular structure, process, or environment, or a group of practices or procedures. Specific to the practice of internal auditing, various frameworks are used to assess the design adequacy and operating effectiveness of controls.

Framework

A body of guiding principles that form a template against which organizations can evaluate a multitude of business practices.

Frameworks provide a structure within which a body of knowledge and guidance fit together. This system facilitates consistent development, interpretation, and application of concepts, methodologies, and techniques useful to a discipline or profession.

It is important to begin by making a few distinctions so that there is no confusion regarding the different frameworks discussed in this chapter—specifically, enterprise risk management (ERM) frameworks and frameworks more specifically designed to address internal control. Both deal with risk mitigation and aspects of internal control, however, those frameworks that focus on internal control alone are more narrowly defined and tend to be less strategic in nature. While this chapter deals specifically with the subject of internal control and focuses on internal control frameworks, it would be incomplete without identifying ERM frameworks and other globally recognized frameworks dealing with governance, risk management, and internal control that also have been developed or have evolved over time. Chapter 3, "Governance," addresses the governance, risk management, and internal control hierarchy, while chapter 4, "Risk Management," specifically discusses the Committee of Sponsoring Organizations of the Treadway Commission (COSO) ERM framework, "Aligning Risk with Strategy and Performance," in more detail. Exhibit 6-2 presents these frameworks.

Internal Control Frameworks

Although the frameworks discussed in exhibit 6-2 contain elements of internal control, there are currently only three internal control frameworks recognized globally by management, independent outside accountants/auditors, and internal audit professionals: *Internal Control – Integrated Framework*, issued by COSO originally in 1992 and updated in 2013; *Guidance on Control* (often referred to as the CoCo framework), published in 1995 by the Canadian Institute of Chartered Accountants (CICA), and Guidance on Risk Management, Internal Control and Related Financial and Business Reporting (this report replaced *Internal Control: Revised Guide for Directors on the Combined Code*, referred to as the Turnbull Report), published by the Financial Reporting Council in 2014. COBIT, the information technology (IT) internal control framework referenced in exhibit 6-2, is specifically designed to provide guidance on the development and assessment of proper IT governance. As such, it supplements COSO, CoCo, and Guidance on Risk Management, Internal Control and Related Financial and Business Reporting in terms of IT controls, but it is not a comprehensive internal control framework itself.

ICFR

Internal Control over Financial Reporting

There are no substantive differences between COSO and CoCo. Both frameworks include definitions of internal control that describe a process that provides reasonable assurance for achieving the objectives of an organization in three specific categories: effectiveness and efficiency of operations, reliability of reporting, and compliance. The frameworks also agree regarding responsibility for internal control, specifically putting responsibility not only on the board of directors, senior

EXHIBIT 6-2 GLOBALLY RECOGNIZED FRAMEWORKS

Internal Control Frameworks

Internal Control – Integrated Framework (COSO), Committee of Sponsoring Organizations of the Treadway Commission, United States, 2013

Guidance on Control (CoCo), The Canadian Institute of Chartered Accountants, Canada, 1995

Guidance on Risk Management, Internal Control and Related Financial and Business Reporting (FRC Internal Control Guidance), Financial Reporting Council (FRC), England, 2014

COBIT 5, IT Governance Institute, United States, 2012

Governance Frameworks

Report of the Committee on the Financial Aspects of Corporate Governance (Cadbury), England, 1992

King Committee on Corporate Governance, Institute of Directors, South Africa, 2009

Enterprise Risk Management Frameworks

Enterprise Risk Management – Aligning Risk with Strategy and Performance, Committee of Sponsoring Organizations of the Treadway Commission, United States, 2016

Risk Management – Principles and Guidelines (ISO 31000) of International Organisations for Standardisation (ISO), Switzerland, 2009

Other Globally Recognized Risk Mitigation Frameworks

International Convergence of Capital Measurement and Capital Standards (Basel Accord), Basel Committee on Banking Supervision, 1988

International Convergence of Capital Measurement and Capital Standards: A Revised Framework (Basel II & III), Basel Committee on Banking Supervision, 2005 & 2011

EXHIBIT 6-3
U.S. SARBANES-OXLEY ACT OF 2002 COMPLIANCE

The U.S. Securities and Exchange Commission (SEC) in the United States specifically refers to the COSO framework as an example of a framework suitable for organizations to compare their system of internal controls against in order to be compliant with Section 404 of the U.S. Sarbanes-Oxley Act of 2002, which governs all entities, foreign or domestic, wishing to access the United States of America (USA) capital market. The SEC also recognizes the CoCo framework of Canada and the Turnbull Report of England and Wales as suitable frameworks. However, as the Turnbull Report was subsequently replaced by the FCR Guidance on Risk Management, Internal Control and Related Financial and Business Reporting, unless and until the SEC specifically indicates that the FCR guidance is acceptable, COSO and CoCo remain the only frameworks explicitly deemed suitable by the SEC. COSO represents the primary framework used to assess an organization's system of internal controls in the United States.

management, and internal auditors, but also on each individual within the organization. Although the frameworks use different titles for them, the components of each internal control framework are basically the same and can be examined using the COSO titles for each component. They are: Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring.

COSO

Committee of Sponsoring Organizations of the Treadway Commission, a voluntary private-sector organization dedicated to improving the quality of financial reporting through business ethics, effective internal controls, and corporate governance.

In the United States, the U.S. Sarbanes-Oxley Act of 2002 legislation put responsibility for the design, maintenance, and effective operation of internal control squarely on the shoulders of senior management, specifically, the CEO and the chief financial officer (CFO). To comply with this legislation, the U.S. Securities and Exchange Commission (SEC) requires the CEO and CFO of publicly traded companies over a certain size to opine on the design adequacy and operating effectiveness of internal control over financial reporting (ICFR) as part of the annual filing of financial statements with the SEC, as well as report substantial changes in ICFR, if any, on a quarterly basis. Specifically, the SEC requires evidence of compliance, ruling that " . . . management must base its evaluation [or, opinion] of the effectiveness of the company's internal control over financial reporting on a suitable, recognized control framework that is established by a body or group that has followed due-process procedures, including the broad distribution of the framework for public comment."[2] For details regarding the SEC's evaluation of appropriate internal control frameworks, see exhibit 6-3.

The SE C further ruled, "The COSO framework satisfies our criteria and may be used as an evaluation framework for purposes of management's annual internal control evaluation and disclosure requirements. However, the final rules do not mandate use of a particular framework, such as the COSO framework, in recognition of the fact that other evaluation standards exist outside the United States . . . "[3] The SEC, in footnote 67 of the final ruling, specifically identified the *Guidance on Control* and the Turnbull Report as examples of other suitable frameworks (although the FCR Guidance that replaced the Turnbull Report in 2014 is not). In addition to the three frameworks specifically referred to, the SEC recognizes " . . . that frameworks other than COSO may be developed within the United States in the future, that satisfy the intent of the statute without diminishing the benefits to investors. The use of standard measures that are publicly available will enhance the quality of the internal control report and will promote comparability of the internal control reports of different companies. The final rules require management's report to identify the evaluation framework used by management to assess the effectiveness of the company's internal control over financial reporting. Specifically, a suitable framework must: be free from bias; permit reasonably consistent qualitative and quantitative measurements of a company's internal control; be sufficiently complete so that those relevant factors that would alter a conclusion [or opinion] about the effectiveness of a company's internal controls are not omitted; and be relevant to an evaluation of internal control over financial reporting [ICFR]" (SEC final ruling 33-8238).[4]

Many organizations were able to successfully apply these frameworks in their efforts to comply with Section 404 of Sarbanes-Oxley, despite encountering significant unanticipated costs. Smaller publicly held companies (as defined in exhibit 6-4), on the other hand, struggled to comply due to the prohibitive costs as well as several other challenges unique to smaller organizations, including:

- Obtaining sufficient resources to achieve adequate segregation of duties,
- Balancing management's ability to dominate activities, with significant opportunities for improper management override of processes in order to appear that business performance goals have been met [management override of control],
- Recruiting individuals with requisite expertise to serve effectively on the board of directors and committee,
- Recruiting and retaining personnel with sufficient experience and skill in operations, reporting, compliance, and other disciplines,
- Taking critical management attention from running the business in order to provide sufficient focus on internal control, [and]
- Controlling information technology and maintaining appropriate general and application controls over computer information systems with limited technical resources.[5]

Supplemental Publications to COSO's *Internal Control - Integrated Framework*:

– *Internal Control Over Financial Reporting - Guidance for Smaller Public Companies*

– *Guidance on Monitoring Internal Control Systems*

– *Internal Control Over External Financial Reporting: A Compendium of Approaches and Examples*

EXHIBIT 6-4
CHARACTERISTICS OF "SMALLER" ENTITIES

There is a wide range of entities that can be classified as "smaller." Many have the following characteristics in common:

- Fewer lines of business and fewer products within lines.
- Concentration of marketing focus, by channel or geography.
- Leadership by management with significant ownership interest or rights.
- Fewer levels of management, with wider spans of control.
- Less complex transaction processing systems and protocols.
- Fewer personnel, many having a wider range of duties.
- Limited ability to maintain deep resources in line as well as support staff positions, such as legal, human resources, accounting, and internal auditing.

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To assist organizations in complying with Section 404 of Sarbanes-Oxley, including smaller public companies, COSO issued *Internal Control Over External Financial Reporting – A Compendium of Approaches and Examples (Compendium)* in 2013 as a supplement to the COSO framework. "The focus of this publication is the external financial reporting category of objectives, a subset of the reporting category. External financial reporting objectives address the preparation of financial reports for external parties, including:

- Financial statements for external purposes, and
- Other external financial reporting derived from an entity's financial and accounting books and records."[6]

Primarily designed to provide guidance to companies of all sizes with cost effective means to comply with Section 404 of Sarbanes-Oxley, the *Compendium* provides the added benefit of supplying direction to smaller public companies on the application of the COSO framework when evaluating the effectiveness of ICFR.

In addition, COSO's updated framework provides significantly more detail regarding the use of monitoring activities to support conclusions on internal control effectiveness, including ICFR, which is of particular importance for smaller public companies working to comply with Section 404 of Sarbanes-Oxley. As with the principles relative to the other components of internal control, the updated framework elaborates on the two principles relative to monitoring activities (see exhibit 6-9 for all 17 principles):

- The organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning (principle 16).[7]
- The organization evaluates and communicates internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the board of directors, as appropriate (principle 17).[8]

The monitoring activities component of COSO's updated framework is discussed in more detail later in the chapter.

As a result of the increased public scrutiny over ICFR that ensued from Sarbanes-Oxley, the subject of internal control has been elevated to the prominence formerly reserved for topics such as sales, marketing, profits (EPS), and capital adequacy in many organizations. In addition to using COSO, CoCo, and FRC Internal Control Guidance as vehicles to assess ICFR, many organizations also are using these frameworks to more broadly evaluate the entire system of internal controls.

The IIA acknowledged how these frameworks contributed to the shift in thinking about controls in terms of their alignment with the organization's objectives: "Control had long been a component of the 'unique' franchise of internal auditing. The emergence of broad management control frameworks such as *Internal Control – Integrated Framework* from the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and *Criteria of Control* from the Canadian Institute of Chartered Accountants (CoCo) has elevated the internal auditor's focus from financial and compliance-oriented controls to management controls and governance processes that address broad organizational risks. The COSO and CoCo focus widens the spectrum of controls addressed by internal auditors and more closely aligns their control activities with an organization's objectives and core value-creating processes."[9]

As previously indicated, these two frameworks include similar definitions of internal control describing a process that provides reasonable assurance for achieving the entity objectives of an organization in three specific categories: operations, reporting, and compliance. Again, they are called by different titles between the frameworks, but the components of each internal control framework are basically the same. Therefore, throughout the remainder of this chapter, the COSO framework will be used to study the various components of the system of internal controls in more depth, since it reflects the concepts from all three frameworks.

The COSO and CoCo Frameworks

Are used by an increasing number of organizations to evaluate the entire system of internal controls, not just internal controls over financial reporting.

DEFINITION OF INTERNAL CONTROL

COSO broadly defines internal control as:

> . . . a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance.

This definition emphasizes that internal control is:

- *Geared to the achievement of objectives* in one or more separate but overlapping categories—operations, reporting, and compliance.
- *A process* consisting of ongoing tasks and activities—a means to an end, not an end in itself.
- *Effected by people*—not merely about policy and procedure manuals, systems, and forms, but about people and the actions they take at every level of an organization to effect internal control.
- Able to *provide reasonable assurance*, but not absolute assurance, to an entity's senior management and board of directors.
- *Adaptable to the entity structure*—flexible in application for the entire entity or for a particular subsidiary, division, operating unit, or business process.[10]

Internal Control (COSO's Definition)

A process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance.

Although this definition may seem very general, broadly defining internal control accommodates the exploration of its categories individually or taken as a whole. When internal control categories are looked at as a whole, they are collectively referred to as the system of internal controls. COSO indicates, "This definition of internal control is intentionally broad for two reasons. First, it captures important concepts that are fundamental to how organizations design, implement, and conduct internal control and assess effectiveness of their system of internal control[s], providing a basis for application across various types of organizations, industries, and geographic regions. Second, the definition accommodates subsets of internal control."[11] COSO also indicates, "Those who want to may focus separately, for example, on internal control over reporting or controls relating to complying with laws and regulations. Similarly, a directed focus on controls in particular units or activities of an entity can be accommodated."[12] Likewise, an organization can choose to focus on its overall system of internal controls. Exhibit 6-6 illustrates the internal control components with emphasis on how they interrelate.

Note that while COSO defines achievement of compliance objectives strictly as "adherence to laws and regulations to which the entity is subject,"[13] The IIA's International Professional Practices Framework (IPPF) defines it more broadly as "adherence to policies, plans, procedures, laws, regulations, contracts, or other requirements." COSO considers compliance with those additional governance-related requirements a part of the achievement of operations objectives instead of compliance objectives. The classification is much less important than the actual achievement of the objectives no matter how an organization chooses to classify them. This distinction is, however, an important consideration when the internal audit function is planning and determining the scope of an assurance engagement. For a detailed review of assurance engagement planning, scope setting, and communications, see chapter 12, "Introduction to the Engagement Process," chapter 13, "Conducting the Assurance Engagement," and chapter 14, "Communicating Assurance Engagement Outcomes and Performing Follow-up Procedures."

THE OBJECTIVES, COMPONENTS, AND PRINCIPLES OF INTERNAL CONTROL

COSO explains, "A direct relationship exists between objectives, which are what an entity strives to achieve, components [and principles], which represent what is required to achieve the objectives, and entity structure (the operating units, legal entities, and other structures). The relationship can be depicted in the form of a cube."[14] See exhibit 6-5.

In addition to the five integrated components, COSO also defines 17 supporting principles representing the fundamental concepts associated with each component of internal control. These 17 principles are outlined in exhibit 6-9 and discussed further later in this chapter.

The Components of Internal Control:

– Control Environment

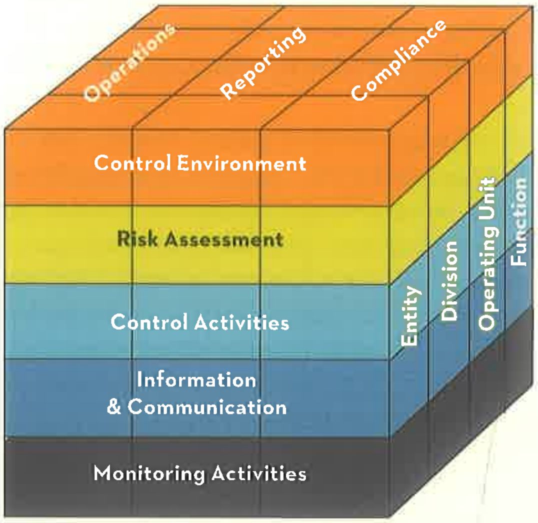
– Risk Assessment

– Control Activities

– Information and Communication

– Monitoring Activities

EXHIBIT 6-5
COSO CUBE



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Objectives

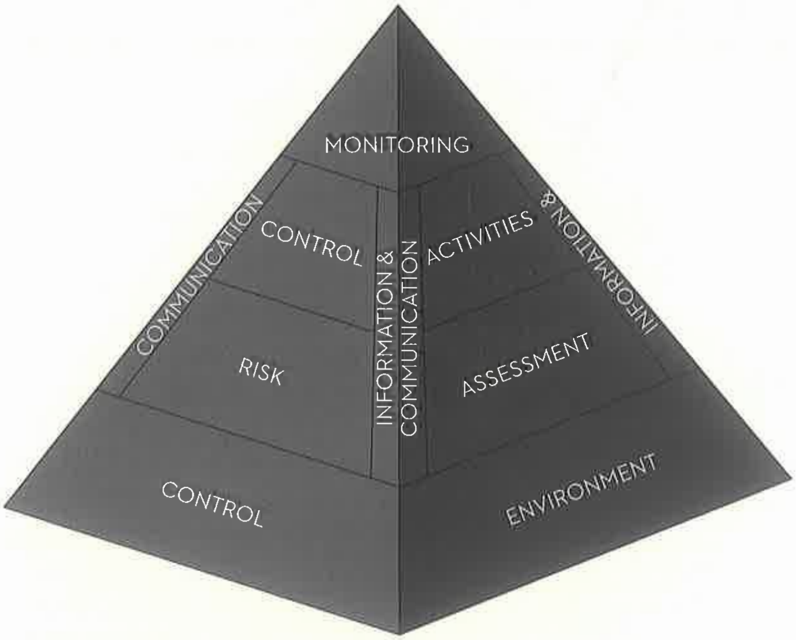
The [COSO] [f]ramework sets forth three categories of objectives, which allow organizations to focus on differing aspects of internal control:

- Operations Objectives—These pertain to effectiveness and efficiency of the entity's operations, including operational and financial performance goals, and safeguarding assets against loss.

- Reporting Objectives—These pertain to internal and external financial and non-financial reporting and may encompass reliability, timeliness, transparency, or other terms as set forth by regulators, standard setters, or the entity's policies.
- Compliance Objectives—These pertain to adherence to laws and regulations to which the entity is subject.[15]

COSO continues, "A system of internal control is expected to provide an organization with reasonable assurance that those objectives relating to external reporting and compliance with laws and regulations will be achieved. Achieving those objectives, which are based largely on laws, rules, regulations, or standards established by legislators, regulators, and standard setters, depends on how activities within the organization's control are performed. Generally, management and/or the board have greater discretion in setting internal reporting objectives that are not driven primarily by such external parties. However, the organization may choose to align its internal and external reporting objectives to allow internal reporting to better support the entity's external reporting."[16]

EXHIBIT 6-6
INTERNAL CONTROL COMPONENTS



The *control environment* provides an atmosphere in which people conduct their activities and carry out their control responsibilities. It serves as the foundation for the other components. Within this environment, management *assesses risks* to the achievement of specified objectives. *Control activities* are implemented to help ensure that management directives to address the risks are carried out. Meanwhile, relevant *information* is captured and *communicated* throughout the organization. The entire process is *monitored* and modified as conditions warrant.

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Components

COSO indicates, "Supporting the organization in its efforts to achieve objectives are five components of internal control:

- Control Environment
- Risk Assessment
- Control Activities
- Information and Communication
- Monitoring Activities

These components are relevant to an entire entity and to the entity level, its subsidiaries, divisions, or any of its individual operating units, functions, or other subsets of the entity."[17] The components, as defined by COSO, are explained below.

Control Environment

The control environment of an organization permeates all areas of the organization and influences the way individuals approach internal control. This foundational component of internal control creates the context within which the other components of internal control exist.

COSO indicates that "the control environment is the set of standards, processes, and structures that provide the basis for carrying out internal control across the organization. The board of directors and senior management establish the tone at the top regarding the importance of internal control including expected standards of conduct. Management reinforces expectations at the various levels of the organization. The control environment comprises the integrity and ethical values of the organization, the parameters enabling the board of directors to carry out its governance oversight responsibilities, the organizational structure and assignment of authority and responsibility, the process for attracting, developing, and retaining competent individuals, and the rigor around performance measures, incentives, and rewards to drive accountability for performance. The resulting control environment has a pervasive impact on the overall system of internal control."[18]

Critical Success Factors

Successes that must be accomplished for objectives to be achieved.

The history and culture of the organization directly influence its control environment. The organization's objectives are achieved, in part, through the control environment which, if effectively implemented, results in an organizationwide culture that encourages integrity and prioritizes control consciousness. Such a control environment typically includes a positive tone at the top, appropriate policies and procedures, and, often, a written code of conduct. These aspects of the control environment foster shared values and often result in a collaborative pursuit of the entity's objectives.

Risk Assessment

All organizations encounter risks, that is, threats to the achievement of objectives. All risks, both internal and external, need to be assessed. According to COSO, "Every entity faces a variety of risks from external and internal sources. Risk is defined as the possibility that an event will occur and adversely affect the achievement of objectives. Risk assessment involves a dynamic and iterative process for identifying and assessing risks to the achievement of objectives. Risks to the achievement of these objectives from across the entity are considered relative to established tolerance levels. Thus, risk assessment forms the basis for determining how risks will be managed. A precondition to risk assessment is the establishment of objectives, linked at different levels of the entity. Management specifies objectives within categories relating to operations, reporting, and compliance with sufficient clarity to be able to identify and analyze risks to those objectives. Management also considers the suitability of the objectives for the entity. Risk assessment also requires management to consider the impact of possible changes in the external environment and within its own business model that may render internal control ineffective."[19] Risk identification and analysis, both of which are important to effective risk assessment, are discussed in more detail later in the chapter.

Setting clear objectives is the precondition to effective identification of, assessment of, and response to risks. There must first be objectives, established in a strategy-setting environment, before management can identify risks that might impede the achievement of the objectives and take necessary actions to manage those risks. As discussed in chapter 4, objective setting, event identification, risk assessment, and risk response are key elements of the risk management process. Accordingly, objective setting is a prerequisite to, and enabler of, internal control.

Processes for setting objectives can range from highly structured to very informal. An organization's mission statement often drives entity-level objectives. Together with assessments of the strengths, weaknesses, risks, and opportunities, objectives establish a context for defining an organization's strategy. Typically, the strategic plan that results is general in nature.

From the general strategic plan, objectives are identified that are more specific than the entity-level objectives discussed above. The entity-level objectives are then linked to the specific objectives that have been established for the different activities within the organization. The specific objectives of those activities must align with the entity-level objectives identified by the organization.

Setting objectives at both the entity and process levels is important for the organization to be able to identify *critical success factors* (successes that must be accomplished for objectives to be achieved). Critical success factors are present at all levels of an organization and facilitate the creation of measurable criteria against which performance can be assessed.

Control Activities

Control activities are the actions taken by management, the board, and other parties to mitigate risk and increase the likelihood that established objectives and goals will be achieved. Management plans, organizes, and directs the performance of sufficient actions to provide reasonable assurance that objectives and goals will be achieved. Like the critical success factors described above, control activities are present at all levels of the organization. And, like the objectives they are designed to help achieve, control activities can be separated into the three categories of operations, reporting, and compliance. However, control activities often are designed to mitigate multiple risks that may threaten objectives in more than one category. Remember that it is less important which category a control activity is in than its ability to mitigate the risk(s) to which it corresponds.

Segregation of Duties

Dividing control activities among different people to reduce the risk of error or inappropriate actions taken by any single individual.

Every organization has its own set of entity objectives and implementation strategies. Because each organization is managed by different people who use individual judgments in unique operating environments with varying complexity, no two organizations have the same set of control activities, even though they might have very similar business strategies. Control activities, therefore, serve a vital role in the management process of an organization by ensuring that its uniquely identified risks are mitigated, allowing the organization to achieve its entity objectives.

As indicated by COSO, "Control activities are performed at all levels of the [organization], at various stages within business processes, and over the technology environment. They may be preventative or detective in nature and may encompass a range of manual and automated activities, such as authorizations and approvals, verifications, reconciliations, and business performance reviews."[20]

COSO continues by exploring business performance reviews by stating, "Supervisory controls assess whether other transaction control activities ([that is], particular verifications, reconciliations, authorizations and approvals, controls over standing data, and physical control activities) are being performed completely, accurately, and according to policy and procedures. Management normally uses judgment to select and develop supervisory controls over higher risk transactions. For instance, a supervisor may review whether an accounting clerk performs a reconciliation according to policy. This can be a high-level review [monitoring activity] ([for example], checking if the reconciliation spreadsheet has been completed), or a more detailed review [control activity] ([for example], checking if any reconciling items have been followed up and corrected or an appropriate explanation is provided)."[21]

COSO further explains, "When distinguishing between a monitoring activity and a control activity, organizations need to consider underlying details of the activity, especially where the activity involves some level of supervisory review. Supervisory reviews are not automatically classified as monitoring activities and it may be a matter of judgment whether a review is classified as a control activity or a monitoring activity. For example, the intent of a monthly completeness control activity would be to detect and correct errors, where a monitoring activity would ask why there were errors in the first place and assign management the responsibility of fixing the process to prevent future errors. In simple terms, a control activity responds to a specific risk, whereas a monitoring activity assesses whether controls within each of the five components of internal control are operating as intended."[22]

One critical concept common to all control activities is the concept that COSO defines as segregation of duties. Segregation of duties is the concept of dividing, or segregating, control activities related to the authorization of transactions from the processing of those transactions from physical access to the assets related to those underlying transactions. The primary purpose of segregating duties (dividing control activities) among different people is to reduce the risk of error or inappropriate actions taken by any single individual.

In addition to segregation of duties, there are many commonly recognized control activities that are present in a well-designed system of internal controls, including:

- Performance reviews and follow-up activities.
- Authorizations (approvals).
- IT access control activities.
- Documentation (rigorous and comprehensive).

- Physical access control activities.
- IT application (input, processing, output) control activities.
- Independent verifications and reconciliations.

Information and Communication

High-quality information must be communicated appropriately. This interdependency is why COSO combines information and communication in this component. Relevant, accurate, and timely information must be available to individuals at all levels of an organization who need such information to run the business effectively. Information must be provided to specific personnel as appropriate to support achievement of their operating, reporting, and compliance responsibilities. Additionally, communication must take place more broadly relative to expectations, responsibilities of individuals and groups, and other important matters. Communications with external parties also are important and can provide critical information on the functioning of controls. These parties include, but are not limited to, customers, suppliers, service providers, regulators, external auditors, and shareholders.

Actions Speak Louder Than Words

In addition to hardcopy, electronic, and oral communication formats, management's actions powerfully communicate what is important to the organization.

It is especially important to make sure information remains aligned with current business needs during periods of change. It is equally important to ensure that this information is communicated timely to all interested parties.

There are many ways organizations can choose to communicate. Hardcopy forms of communication include manuals, memoranda, and bulletin boards located in areas where individuals congregate. Communication also can take place in face-to-face meetings or electronically through emails, intranet sites, video conferencing, or electronic bulletin boards. The culture of the organization, as well as the content of the information shared, will dictate the best methods of communication. Because individuals accept and process information differently, most organizations will use a combination of media to ensure all individuals can process and understand the information provided to them. Management's actions powerfully communicate what is important to the organization as actions speak louder than words.

Clearly, the culture of an organization plays an important role in communicating its priorities. Typically, organizations that have established a culture of integrity and transparency have an easier time with communication than do other organizations.

Monitoring Activities

To remain reliable, internal control systems must be monitored. As COSO indicates, monitoring activities consist of "ongoing evaluations built into business processes at different levels of the entity [that] provide timely information. Separate evaluations, conducted periodically, will vary in scope and frequency depending on assessment of risks, effectiveness of ongoing evaluations, and other management considerations. Findings are evaluated against criteria established by regulators, standard-setting bodies or management and the board of directors, and deficiencies are communicated to management and the board of directors as appropriate."[23] While not part of the organization's day-to-day operations per se, monitoring activities are performed concurrently with those operations on an ongoing basis. The more robust and comprehensive the supervisory and verification procedures, the more confidence management can place in the effectiveness of those procedures to ensure consistent and reliable ongoing operations. With effective ongoing monitoring activities, coupled with accurate and dependable risk assessments, the frequency of separate evaluations may be reduced.

Monitoring activities are most effective when a layered approach is implemented. The first layer includes the everyday activities performed by management of a given area as described above. The second layer is a separate (nonindependent) evaluation of the area's internal controls performed by management on a regular basis to ensure that any deficiencies that exist are identified and resolved timely. The third layer is an independent assessment by an outside area or function, frequently the internal audit function, performed to validate the results (accuracy and reliability) of management's self-assessment of the effectiveness of controls in their area. While the internal audit function provides a valuable form of assurance, as described above, most organizations have other groups that also provide some form of assurance (for example, environmental and safety departments, quality assurance groups, or trading control activities). These groups may provide assurance directly to the board, or they may communicate to members of management who provide the assurance to the board. This layered approach provides the organization with a higher level of confidence that the system of internal controls remains effective and helps ensure internal control deficiencies are identified and addressed timely. Often this strategy is referred to as a "multiple lines of defense" model. One common example of this strategy is the Three Lines of Defense model. The model is discussed in more detail in chapter 3, which also includes a visual depiction of the model.

Deficiency (COSO's Definition)

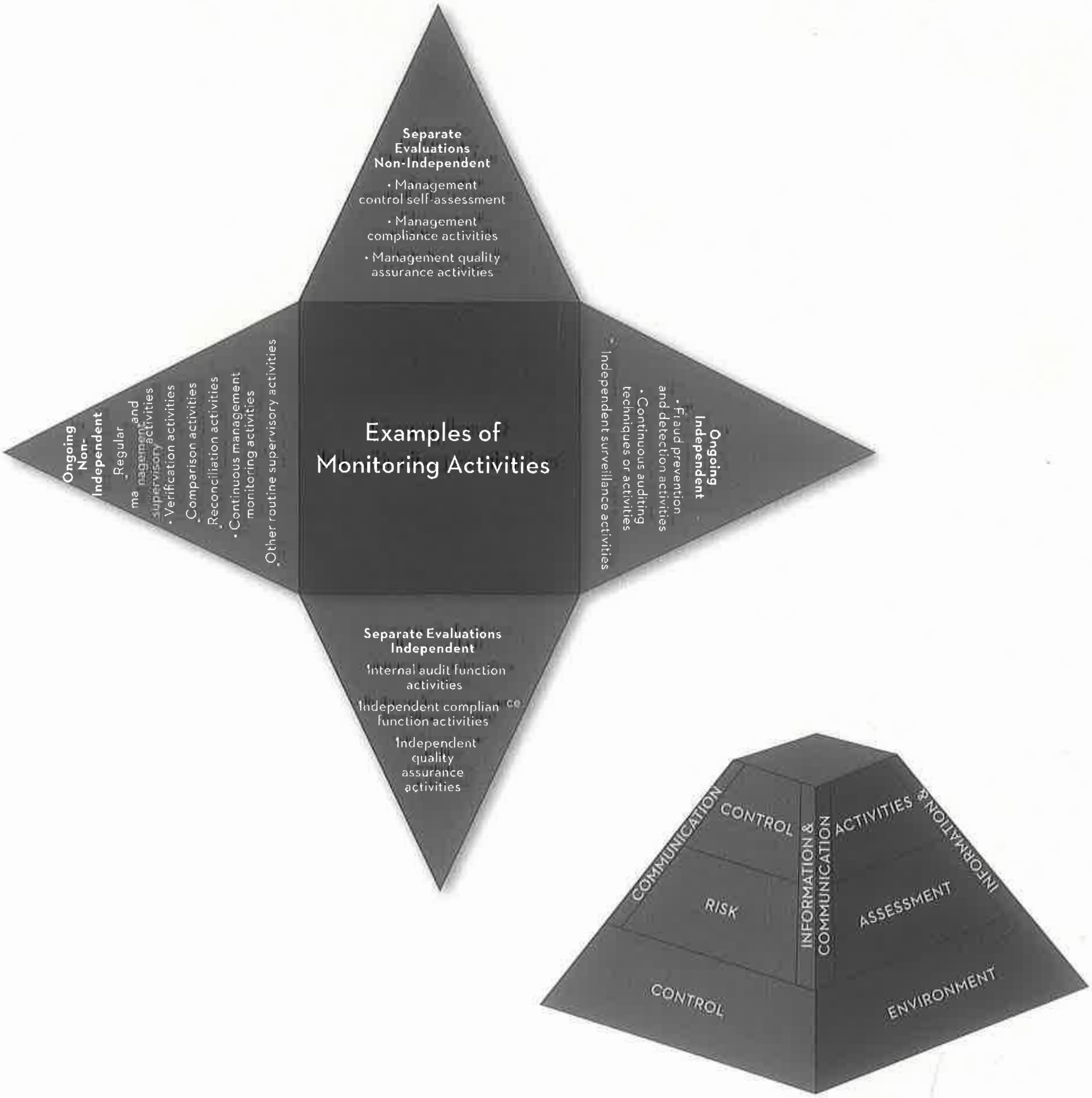
"A condition within an internal control system worthy of attention" that may represent a perceived, potential, or real shortcoming, or opportunity to strengthen the internal control system to provide a greater likelihood that the entity's objectives will be achieved.

It is important to note that monitoring activities occur in each of the five components of internal control (Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring Activities), not just as a stand-alone component. Embedding monitoring activities into processes performed during day-to-day business operations allows monitoring activities to occur regularly, catching problems before they become unmanageable. Separate evaluations lack this advantage due to the timing of their performance, which is later in the process, and because they are performed less frequently. Separate evaluations provide for a supplemental look at the system of internal controls, catch problems that might have been missed during ongoing monitoring activities, and evaluate the effectiveness of the ongoing monitoring activities embedded in the day-to-day activities of the area. Despite the various advantages of the two different methods for monitoring, both are needed for a robust monitoring process to exist. Exhibit 6-7 provides examples of different types of monitoring activities.

As previously indicated, management has primary responsibility for the effectiveness of the organization's system of internal controls, including monitoring activities. As responsibility for performing certain controls rises in the organization to higher levels of management, traditional supervisory monitoring becomes more challenging. Monitoring activities performed by subordinates in an organization are much less effective than those performed by superiors. In those situations in which senior management performs controls, it might be appropriate for other members of senior management to monitor those controls. In cases that carry the risk of management override, board-level monitoring might be necessary.

Ultimately, the board of directors is responsible for overseeing whether management has implemented an effective system of internal controls. This responsibility is fulfilled by the board through an understanding of the risks to the

EXHIBIT 6-7
EXAMPLES OF MONITORING


Separate Evaluations Non-Independent
• Management control self-assessment
• Management compliance activities
• Management quality assurance activities
Ongoing Non-Independent
• Regular management and supervisory activities
• Verification activities
• Comparison activities
• Reconciliation activities
• Continuous management monitoring activities
• Other routine supervisory activities
Examples of Monitoring Activities
Ongoing Independent
• Fraud prevention and detection activities
• Continuous auditing techniques or activities
• Independent surveillance activities
Separate Evaluations Independent
• Internal audit function activities
• Independent compliance function activities
• Independent quality assurance activities
COMMUNICATION
CONTROL
RISK
CONTROL
INFORMATION & COMMUNICATION
ACTIVITIES
INFORMATION &
ASSESSMENT
ENVIRONMENT

organization and by understanding how management mitigates those risks to an acceptable level.

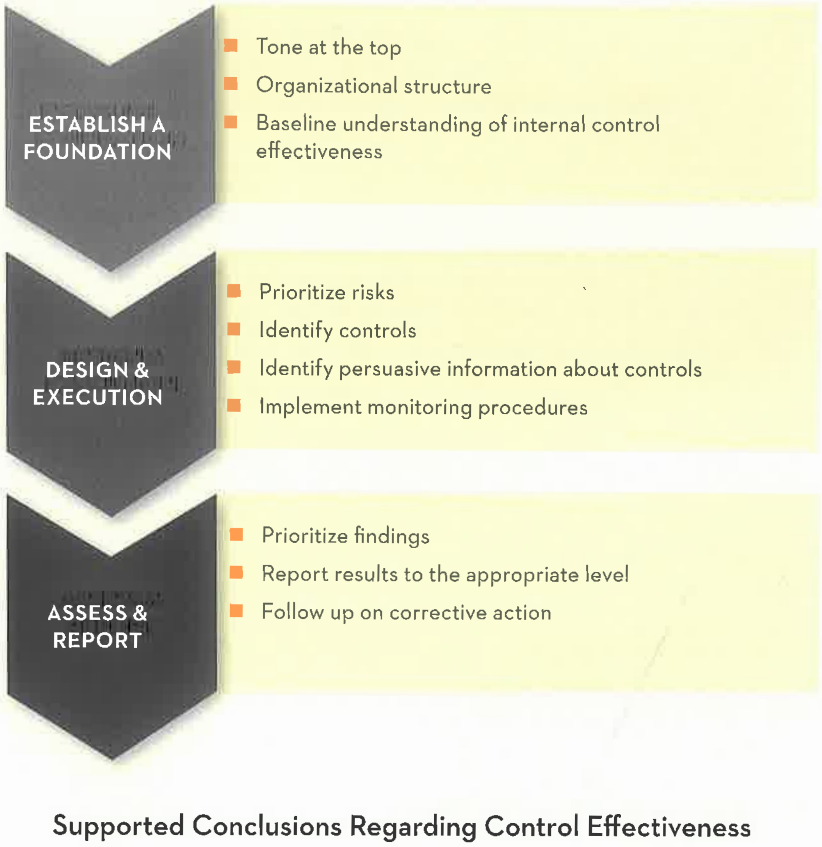
Deficiencies in an organization's system of internal controls might be identified during the performance of either ongoing monitoring activities or separate evaluations. COSO broadly defines a deficiency as "a shortcoming in a component and relevant principle that reduces the likelihood that the entity can achieve its objectives." COSO elaborates:

> There are many potential sources for identifying internal control deficiencies, including the entity's monitoring activities, other components, and external parties that provide input relative to the presence and functioning of components and relevant principles.
>
> An internal control deficiency or combination of deficiencies that severely reduces the likelihood that the entity can achieve its objectives is referred to as a "major deficiency." [A] major deficiency is a subset of internal control deficiencies. As such, a major deficiency is by definition also an internal control deficiency.
>
> Management exercises judgment to assess the severity of an internal control deficiency, or combination of deficiencies, in determining whether components and relevant principles are present and functioning, and components are operating together, and ultimately in determining the effectiveness of the entity's system of internal control. Further, these judgments may vary depending on the category of objectives.
>
> Regulators, standard-setting bodies, and other relevant third parties may establish criteria for defining the severity of, evaluating, and reporting internal control deficiencies. The Framework recognizes and accommodates their authority and responsibility as established through laws, rules, regulations, and external standards.
>
> In those instances where an entity is applying a law, rule, regulation, or external standard, management should use only the relevant criteria contained in those documents to classify the severity of internal control deficiencies, rather than relying on the classifications set forth in the *Framework*. The *Framework* recognizes that any internal control deficiency that results in a system of internal control not being effective pursuant to such criteria would also preclude management from concluding that the entity has met the requirements for effective internal control in accordance with the *Framework* (e.g., a major nonconformity relating to operations or compliance objectives, or a material weakness relating to compliance or external reporting objectives).[24]

Deficiencies identified as a result of ongoing monitoring activities and separate evaluations must be reported timely to the appropriate parties within the organization. Depending on the impact a specific deficiency has on the potential effectiveness of the system of internal controls, it should be reported to business unit management, senior management, and/or the board of directors. Reported deficiencies are important considerations in the evaluation of the system of internal controls. Evaluating the system of internal controls will be explored in more detail later in this chapter. Formal communications relative to assurance engagements completed by the internal audit function are addressed in detail in chapter 14.

As mentioned earlier in the chapter, some organizations underutilize monitoring activities, particularly with regard to financial reporting requirements. Monitoring can be an effective tool for validating internal control assertions when designed with that end in mind. Organizations worldwide that must report on the effectiveness of their system of internal controls to external parties can design the type, timing, and extent of monitoring activities that are performed to provide support for assertions that internal control operated effectively at a specific point in time or over a particular period of time. Exhibit 6-8 is COSO's representation of the monitoring process relative to supporting conclusions regarding control effectiveness.

EXHIBIT 6-8
THE MONITORING PROCESS


ESTABLISH A FOUNDATION
Tone at the top
Organizational structure
Baseline understanding of internal control effectiveness
DESIGN & EXECUTION
Prioritize risks
Identify controls
Identify persuasive information about controls
Implement monitoring procedures
ASSESS & REPORT
Prioritize findings
Report results to the appropriate level
Follow up on corrective action
Supported Conclusions Regarding Control Effectiveness

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Principles

In addition to the five integrated components, COSO also defines 17 principles representing the fundamental concepts associated with each component of internal control. COSO indicates, "[b]ecause these principles are drawn directly from the components, an entity can achieve effective internal control by applying all principles. All principles apply to operations, reporting and compliance objectives."[25] The principles supporting the five components of internal control are outlined in exhibit 6-9.

Chief Executive Officer (CEO)

The CEO has primary responsibility for setting the "tone at the top" and establishing a positive control environment

INTERNAL CONTROL ROLES AND RESPONSIBILITIES

Everyone in an organization has responsibility for internal control:

Management

The CEO assumes primary responsibility for the system of internal controls. The "tone at the top" (how ethical or how much integrity an organization has) is set

Tone at the Top

The entitywide attitude of integrity and control consciousness, as exhibited by the most senior executives of an organization.

EXHIBIT 6-9
17 PRINCIPLES FOR ACHIEVING EFFECTIVE INTERNAL CONTROL

Control Environment

1. The organization demonstrates a commitment to integrity and ethical values.
2. The board of directors demonstrates independence from management and exercises oversight of the development and performance of internal control.
3. Management establishes, with board oversight, structures, reporting lines, and appropriate authorities and responsibilities in the pursuit of objectives.
4. The organization demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives.
5. The organization holds individuals accountable for their internal control responsibilities in the pursuit of objectives.

Risk Assessment

6. The organization specifies objectives with sufficient clarity to enable the identification and assessment of risks relating to objectives.
7. The organization identifies risks to the achievement of its objectives across the entity and analyzes risks as a basis for determining how the risks should be managed.
8. The organization considers the potential for fraud in assessing risks to the achievement of objectives.
9. The organization identifies and assesses changes that could significantly impact the system of internal control.

Control Activities

10. The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels.
11. The organization selects and develops general control activities over technology to support the achievement of objectives.
12. The organization deploys control activities through policies that establish what is expected and procedures that put policies into action.

Information and Communication

13. The organization obtains or generates and uses relevant, quality information to support the functioning of other components of internal control.
14. The organization internally communicates information, including objectives and responsibilities for internal control, necessary to support the functioning of other components of internal control.
15. The organization communicates with external parties regarding matters affecting the functioning of internal control.

Monitoring

16. The organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning.
17. The organization evaluates and communicates internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the board of directors, as appropriate.

by the CEO and rolls down from there to senior management, line management, and ultimately to all of the individuals in an organization. The CEO is more or less visible and has more or less of a direct impact depending on the size of the organization. In smaller organizations, the CEO very directly affects the system of internal controls. In larger organizations, the CEO has the greatest impact on senior management who in turn influence their subordinates. In this way, senior and line managers act as "CEOs" over the areas for which they are responsible.

Board of Directors

The board of directors oversees management, provides direction regarding internal control, and ultimately has responsibility for overseeing the system of internal controls. COSO describes effective board members as "objective, capable, and inquisitive . . ." with "knowledge of the [organization's] activities and environment, and [who] commit the time necessary to fulfill their governance responsibilities."[26] Effective board members are essential to an effective system of internal controls because management has the capability to override controls and suppress evidence of unethical behavior or fraud. Such behavior has a greater likelihood of discovery or prevention when the organization has a board that is actively engaged. As previously mentioned, the board of directors has ultimate responsibility for ensuring management has established an effective system of internal controls.

The board of directors' roles and responsibilities as described by COSO form an effective governance "umbrella" for an organization. For a visual depiction of this process, see exhibit 3-3 in chapter 3. Chapter 3 describes governance as the process conducted by the board of directors to authorize, direct, and oversee management toward the achievement of the organization's business objectives.

Internal Auditors

While management, under the leadership of the CEO, has ultimate responsibility for the adequate design and effective operation of the system of internal controls, internal auditors play a significant role in verifying that management has met its responsibility. Initially, management performs the primary assessment of the system of internal controls, and then the internal audit function independently validates management's assertions. The internal audit function provides reasonable assurance that the system of internal controls is designed adequately and operating effectively, increasing the likelihood that the organization's business objectives and goals will be met. The COSO framework defines the role of the internal auditor similarly, although in more general terms: "...internal auditors provide assurance and advisory support to management on internal control... the internal audit [function] includes evaluating the adequacy and effectiveness of controls in responding to risks within the organization's oversight, operations, and information systems..."[27] "[Moreover,] [t]he scope of internal auditing is typically expected to include oversight, risk management, and internal control, and assist the organization in maintaining effective control by evaluating their effectiveness and efficiency and by promoting continual improvement. Internal audit communicates findings and interacts directly with management, the audit committee, and/or the board of directors."[28] Because of its organizational position and authority in an entity, an internal audit function often plays a significant monitoring role. The relationship between management and the internal audit function relative to evaluating the system of internal controls and reporting on such is further explored later in this chapter and in chapter 9, "Managing the Internal Audit Function."

Other Personnel

COSO clearly indicates that everyone in an organization has responsibility for internal control: "Internal control is the responsibility of everyone in an entity and therefore constitutes an explicit or implicit part of everyone's job description. Front-line personnel constitute the first line of defense in the performance of internal control responsibilities."[29] Virtually all employees produce information used in the internal control system or take other actions needed to effect control. COSO also clearly indicates that all associates bear the responsibility of communicating problems in operations, code of conduct violations, or other policy infractions or illegal activity to management or other appropriate bodies.

COSO points out that external parties can be important factors relative to an organization's ability to achieve its objectives. For example, independent outside auditors, while not responsible for the organization's system of internal controls, contribute independence and objectivity through their opinions covering the fairness of the financial statements and the effectiveness of internal control over financial reporting. Other external parties that are not part of an organization's internal control, such as legislators and regulators, customers and others transacting business with the enterprise, financial analysts, bond raters, and the news media can provide useful information to the organization in effecting internal control.

In many cases, outside vendors are used to perform elements of the internal control system. However, in those cases, ownership and accountability for those outsourced elements remain with internal management, who has the ultimate responsibility for testing and certifying outsourced key controls. Activities commonly outsourced include, for example, data processing, payroll, or even the internal audit function itself. Business process outsourcing is discussed further in chapter 5, "Business Processes and Risks."

LIMITATIONS OF INTERNAL CONTROL

Internal control is implemented to mitigate risks that threaten the achievement of an organization's objectives or to enable an organization to successfully pursue opportunities. Although management, the board of directors, internal auditors, and other personnel work together to facilitate internal control, no internal control system can ensure that objectives will be achieved. This is due to the inherent limitations of internal control. Specifically, COSO "...recognizes that while internal control provides reasonable assurance of achieving the entity's objectives, limitations do exist. Internal control cannot prevent bad judgments or decisions, or external events that can cause an organization to fail to achieve its operational goals. In other words, even an effective system of internal control can experience a failure. Limitations may result from the:

- Suitability of objectives established as a precondition to internal control.
- Reality that human judgment in decision-making can be faulty and subject to bias.
- Breakdowns that can occur because of human failures such as simple errors.
- Ability of management to override internal control.
- Ability of management, other personnel, and/or third parties to circumvent controls through collusion.
- External events beyond the organization's control.[30]

Reasonable Assurance

A level of assurance that is supported by generally accepted auditing procedures and judgments.

While a well-designed system of internal controls can provide reasonable assurance to management relative to achievement of the organization's objectives, no system of internal controls can provide absolute assurance for the reasons listed above. This is true regardless of whether objectives fall into the operations, reporting, or compliance categories. As previously indicated, establishing entity objectives is a prerequisite to designing an effective system of internal controls. Entity objectives provide the measurable targets for which an organization conducts its operations. A key to understanding the concepts of inherent limitations and reasonable assurance lies in also understanding the linkage and interdependency of the business objectives and risks that directly or indirectly affect an organization's ability to achieve its entity objectives. Only then can an organization properly design and implement an effective system of internal controls.

Inherent Risk, Controllable Risk, and Residual Risk

An organization's ability to achieve established entity objectives is affected by both internal and external risks. The combination of internal and external risks in their pure, uncontrolled state is referred to as inherent risk. Said another way, inherent risk is the gross risk that exists assuming there are no internal controls in place. Acknowledgement of the existence of inherent risk and that certain events or conditions are simply outside of management's control (external risks) is critical to recognizing the inherent limitations of internal control.

Inherent Limitations of Internal Control

The confines that relate to the limits of human judgment, resource constraints and the need to consider the cost of controls in relation to expected benefits, the reality that breakdowns can occur, and the possibility of collusion or management override.

Identifying external and internal risks at an entity and activity (process and transaction) level is fundamental to effective risk assessment. As discussed in chapter 5, once key risks have been identified, management can link them to business objectives and the related business processes.

Once entity-level and activity-level risks have been identified, they must be assessed in terms of impact and likelihood. Risk analysis processes vary depending on many factors specific to an organization, but typically they include:

- Estimating the impact (or severity) of a risk.
- Assessing the likelihood (or frequency) of the risk occurring (probability).
- Considering how to manage the risk—that is, assessing what actions to take.

The results of the risk analysis allow management to consider how best to respond to the risks threatening achievement of the organization's objectives. Risks that are not significant and do not have a high likelihood of occurring will receive little attention. Risks that are significant and/or are likely to occur will receive much greater attention. The risks that fall somewhere in the middle, however, generally require further analysis as care in judgment is necessary to adequately mitigate these risks without using resources inefficiently.

Inherent Risk

The combination of internal and external risk factors in their pure, uncontrolled state, or the gross risk that exists assuming there are no internal controls in place.

Controls are risk responses management takes to reduce the impact and/or likelihood of threats to objective achievement. Management must consider its overall risk appetite and tolerance levels. COSO's *Enterprise Risk Management – Aligning Risk with Strategy and Performance* describes risk appetite as the types and amount of risk, on a broad level, an organization is willing to accept in pursuit of value, and tolerance as acceptable variation in performance, which are the boundaries of acceptable outcomes related to achieving a business objective (both the boundary of exceeding the target and the boundary of trailing the target). Those boundaries must align with the risk appetite.

Risk Appetite

The types and amount of risk, on a broad level, an organization is willing to accept in pursuit of value.

Additionally, the amount of variation in performance that is acceptable takes into consideration the amount of risk that management consciously accepts after balancing the cost and benefits of implementing controls to manage the variation to the desired level. It is important to recognize that there is a direct relationship between the amount of risk mitigated and the cost associated with implementing controls designed to achieve that level of mitigation. Consequently, an organization must ensure it has neither excessive risk nor excessive internal control. Exhibit 6-10 lists some of the possible consequences of accepting excessive risk or implementing excessive internal control. The balance that management is able to achieve results in an organization accepting a higher or lower level of risk and depends on the nature of the risk, the regulatory environment in which the organization operates, the amount of variation in performance it is willing to accept, and management's philosophy.

EXHIBIT 6-10
BALANCING RISKS AND CONTROLS

Consequences of Accepting Excessive Risk

- Potential loss of assets
- Poor or ineffective business decision-making
- Potential noncompliance with laws and regulations
- Potential for fraud to occur

Consequences of Implementing Excessive Internal Control

- Increased bureaucracy
- Excess cost
- Unnecessary complexity of controls
- Increased cycle time
- Non-value-added activities

Tolerance

The boundaries of acceptable outcomes related to achieving business objectives

With that said, there are many factors management must consider when determining the specific actions (controls) they should take to manage inherent risks to an acceptably low level and establish tolerance parameters. To begin with, management must consider controllable risk.

Controllable risk is that portion of inherent risk that management can directly influence and reduce through day-to-day business activities. Once management has implemented cost-effective controls to address controllable risks, then and only then can they determine if the organization is operating within the overall risk appetite established by senior management and the board of directors. The portion of inherent risk that remains after mitigating all controllable risks is defined as *residual risk*. If the remaining uncontrolled risk (residual risk) is less than the established risk appetite, then the system of internal controls is operating at an acceptable level and within an organization's defined risk appetite.

If, however, residual risk exceeds the organization's established risk appetite, it is necessary to reevaluate the system of internal controls to determine if additional cost-effective controls can be implemented to further reduce residual risk to a level within management's risk appetite. If not, management must consider other options such as sharing or transferring a portion of the uncontrolled risk to a willing independent third party through insurance or outsourcing. If the uncontrolled risk cannot be effectively transferred or shared, management can either accept the higher level of risk (and adjust their risk appetite accordingly), or the organization must decide if it wants to remain engaged in the activity causing the risk. Refer to chapter 4 for an in-depth discussion of risk management and related mitigation techniques.

An adequately designed and effectively operating system of internal controls, by definition, is designed to manage risk within the organization's established risk appetite. It should mitigate inherent risk related to the three COSO categories of objectives (operations, reporting, and compliance) within management's risk appetite.

Controllable Risk

The portion of inherent risk that management can reduce through day-to-day operations and management activities.

Residual Risk

The portion of inherent risk that remains after management executes its risk responses (sometimes referred to as net risk).

VIEWING INTERNAL CONTROL FROM DIFFERENT PERSPECTIVES

Because everyone in an organization has some responsibility for internal control, there naturally will be different perspectives from which individuals in the organization approach internal control. It is not undesirable to have different perspectives on internal control. Entity objectives are the primary concern of internal control and there are legitimate reasons for different groups to be interested in different objectives. Likewise, different groups, because of their different perspectives, will perceive the benefits and related costs of internal control very differently, which is valuable to the organization when assessing the adequate design and effective operation of internal control.

Management

Because management is responsible for setting the organization's objectives, they naturally view internal control from that perspective. Management must consider internal control in terms of the related costs and benefits and allocate the resources necessary to achieve those objectives.

From management's perspective, internal control includes a number of activities designed to mitigate risks or enable opportunities that affect the achievement of an organization's objectives. Management's involvement with the system of internal controls allows them to react quickly when conditions warrant. It also assists management in terms of complying with national, local, and industry-specific laws and regulations.

Internal Auditors

Like management, internal auditors look at internal control in terms of its role in the achievement of organizational objectives. Whereas management is responsible for the system of internal controls itself, internal auditors are charged with independently verifying that the organization's controls are designed adequately and operating effectively as management intends. This independent validation, which takes into account all of the systems, processes, operations, functions, and activities of an entity, increases the probability of the organization's objectives being achieved. Additionally, internal auditors are well positioned to offer their perspective on the costs versus the benefits of specific control activities and can provide insight to management on internal controls that can be considered for elimination because they are redundant or because the benefits they provide do not exceed the costs of implementing them.

Independent Outside Auditors

The primary responsibility of an organization's independent outside auditors is to attest to the fairness of the financial statements and, in certain countries, the effectiveness of internal control over financial reporting. For this reason, their perspective is focused on internal control relative to how it affects the organization's financial reporting. While independent outside auditors take the organization's objectives and strategy into consideration when fulfilling their role, they do not take the same broad perspective of internal control that is taken by management and internal auditors.

Other External Parties

External parties that have an interest in an organization's internal control include legislators, regulators, investors, and creditors. Because their interests vary, so too will their perspective of internal control. Consequently, various internal control definitions have been developed by legislators and regulatory agencies to correspond with their specific responsibilities relative to the types of activities they monitor. Their internal control definitions may encompass achievement of the organization's goals and objectives, reporting requirements, use of resources in compliance with laws and regulations, and safeguarding resources against waste, loss, and misuse. Investors and creditors, on the other hand, primarily need the kind of financial information that the organization's independent outside auditors validate.

TYPES OF CONTROLS

The COSO framework acknowledges that control activities exist at all levels of an organization and can generally be classified as either entitywide control activities or business process control activities. The COSO internal control framework also includes transaction or application controls as a part of business process control activities, which represent "...the most fundamental control activities in an [organization] since they directly address risk responses in the business processes in place to meet management's objectives."[31]

There are many types of controls that are used by an organization to increase the likelihood that objectives will be met. It is important to note that specific controls can be referred to by different organizations (and even different individuals within an organization) by different names. More significant than the name used to describe a particular control is the type of control it is. This can create confusion because many controls fit into more than one category simultaneously. This is addressed in more detail later in the chapter.

Depending on the specific application of these controls, they can be classified any number of ways and may take on multiple classifications simultaneously. The following sections outline the various types of controls and their individual purposes.

Entity-Level, Process-Level, and Transaction-Level Controls

All controls are designed to mitigate risk either at the enterprise level or at the operational level within an organization. As indicated above, the COSO framework uses the terms "entitywide" and "business process" control activities to generally describe these controls. Although it is not uncommon for organizations within the internal audit profession to use different terminology such as "companywide" or "entitywide," the more common term "entity-level" is used in this chapter. This chapter also describes process-level controls and transaction-level controls, which together comprise business process control activities in the COSO framework. More important than the specific terms used when discussing these types of controls, however, is the purpose of the control and its operating effectiveness. For a visual depiction of these controls, which are discussed below, refer to the funnel in exhibit 4-3.

Entity-Level Control

A control that operates across an entire entity and, as such, is not bound by, or associated with, individual processes.

Entity-level controls are very broadly focused and often deal with the organizational environment or atmosphere. They are designed to directly mitigate risks that exist at the organizationwide level, including those that arise internally as well as externally, and may indirectly mitigate risks at the process and transaction levels. These controls have a pervasive effect on the achievement of many overall objectives. The U.S. Public Company Accounting Oversight Board (PCAOB) states in its Auditing Standard No. 5, "Entity-level controls include:

- Controls related to the control environment;
- Controls over management override;
- The company's risk assessment process;
- Centralized processing and controls, including shared service environments;
- Controls to monitor results of operations;
- Controls to monitor other controls, including activities of the internal audit function, the audit committee, and self-assessment programs;
- Controls over the period-end financial reporting process; and
- Policies that address significant business control and risk management practices."[32]

Process-Level Control

An activity that operates within a specific process for the purpose of achieving process-level objectives.

Entity-level controls can be divided into two categories: governance controls and management-oversight controls. Governance controls are established by the board and executive management to institute the organization's control culture and provide guidance that supports strategic objectives. Management-oversight controls are established by management at the business unit and line level of the organization to reduce risks to the business unit and increase the probability that business unit objectives are achieved.

Transaction-Level Control

An activity that reduces risk relative to a group or variety of operational-level tasks or transactions within an organization.

Process-level controls are more detailed in their focus than entity-level controls. They are established by process owners to reduce the risk that threatens the achievement of process objectives. While consistent in nature, these controls may vary in their execution between processes. Examples of process-level controls include:

- Reconciliations of key accounts.

- Physical verifications of assets (such as inventory counts).
- Process employee supervision and performance evaluations.
- Process-level risk assessments.
- Monitoring/oversight of specific transactions.

Transaction-level controls are even more detailed in their focus than process-level controls and reduce risk relative to a group or variety of operational-level activities (tasks) or transactions within an organization. They are designed to ensure that individual operational activities, tasks, or transactions, as well as related groups of operational activities (tasks) or transactions, are accurately processed timely. Examples of transaction-level controls include:

- Authorizations.
- Documentation (such as source documents).
- Segregation of duties.
- IT application controls (input, processing, output).

Adequately designed and effectively operating entity-level, process-level, and transaction-level controls work in unison and serve as an organization's defense against the risks that threaten the achievement of business objectives. Entity-level, process-level, and transaction-level controls are discussed in greater detail in case study 1, "Auditing Entity-Level Controls," which accompanies this textbook.

Key Controls and Secondary Controls

Controls also can be categorized in terms of their importance. As such, a control can be categorized either as a key control or as a secondary control.

Key Control

An activity designed to reduce risk associated with a critical business objective.

A key control (often referred to as the "primary" control) is designed to reduce key risks associated with business objectives. Failure to implement adequately designed and effectively operating key controls can result in the failure of the organization not only to achieve critical business objectives but to survive.

Secondary Control

An activity designed to either reduce risk associated with business objectives that are not critical to the organization's survival or success or serve as a backup to a key control.

A secondary control is one that is designed to either 1) mitigate risks that are not key to business objectives, or 2) partially reduce the level of risk when a key control does not operate effectively. Secondary controls reduce the level of residual risk when key controls do not operate effectively, but they are not adequate, by themselves, to mitigate a particular key risk to an acceptable level. They are typically a subset of compensating controls.

Compensating Controls

Compensating Control

An activity that, if key controls do not fully operate effectively, may help to reduce the related risk. A compensating control will not, by itself, reduce risk to an acceptable level.

Compensating controls are designed to supplement key controls that are either ineffective or cannot fully mitigate a risk or group of risks by themselves to an acceptable level within the risk appetite established by management and the board. For example, close supervision in instances when adequate segregation of duties cannot be achieved may be a compensating control. Such controls also can back up or duplicate multiple controls and may operate across multiple processes and risks.

As previously mentioned, secondary controls and compensating controls are necessary when an effective key control cannot be created or designed to adequately mitigate a risk or group of risks within management's established risk appetite. This may be a result of economic constraints or operational complexity or both. No matter the reason, secondary and compensating controls are required for which no effective key control exists. Often, compensating controls work concurrently with related or overlapping key controls, while serving as a secondary control for a specific key control.

Preventive and Detective Controls

Often, the many different controls that exist are referred to by labels that describe what they are intended to do in an attempt to differentiate between them. Included here is a short list of these types of controls and their definitions.

A *preventive control* is designed to deter unintended events from occurring in the first place. Because of the dynamic nature and complexity of day-to-day business operations, it is difficult to design a preventive control that is both economical and efficient. As a result, most organizations use a combination of preventive controls and detective controls when designing both an effective and efficient system of internal controls. Examples of preventive controls include physical and logical access controls, such as locked doors and user IDs with unique passwords.

Conversely, a *detective control* is designed to discover undesirable events that have already occurred. A detective control must occur timely (before the undesirable event has had an unacceptably negative impact on the organization) to be considered effective. Examples of detective controls include security cameras to identify unauthorized physical access and review of computer logs listing unauthorized access attempts.

Information Systems (Technology) Controls

Due to the prevalent dependence on information systems, controls must be implemented to mitigate the risks associated with automated systems necessary to run the core business of an organization.

Sometimes generally referred to as "technology" controls, there are two types of information systems controls that can be used to mitigate these risks:

1. **General computing controls.** These "apply to many if not all application systems and help ensure their continued, proper operation."
2. **Application controls.** These "include computerized steps within the application software and related manual procedures to control the processing of various types of transactions."[33]

These two types of controls work together "to ensure completeness, accuracy, and validity of the financial and other information in the system."[34]

General computing controls are considered entity-level controls because they apply across the organization and its many computer applications. Application controls, on the other hand, are most often considered process-level or transaction-level controls. Additional discussion and examples of general computing and application controls can be found in chapter 7, "Information Technology Risks and Controls," and case study 1.

Simultaneous Categorization of Controls

As alluded to earlier in the chapter, specific controls can fit into several categories at the same time. For example, a control can be an entity-level control at the same time that it is a key control. That same control also can be a detective control. It could not, however, be a secondary control or a transaction-level control at the same time that it is a key control and an entity-level control. While these nuances can be confusing in the beginning, time spent working with controls will lead to a better understanding of how the various categories can exist in a single control.

EVALUATING THE SYSTEM OF INTERNAL CONTROLS: AN OVERVIEW

As previously mentioned, management, under the leadership of the CEO, has ultimate responsibility for the adequate design and effective operation of the system of internal controls. As such, management is responsible for putting in place adequately designed and effectively operating entity-level and activity-level controls to mitigate risks associated with the achievement of business objectives in each of the three COSO-defined categories: operations, reporting, and compliance.

Internal auditors play a significant role in the verification that management has met its responsibility. Initially, management performs the primary assessment of internal controls using a formalized process developed for that purpose. The internal audit function then independently validates management's results. Additionally, a report is typically submitted to the audit committee by either senior management or the chief audit executive (CAE) outlining the results of management's assessment regarding the design adequacy and operating effectiveness of the organization's system of internal controls.

As indicated in The IIA's *International Standards for the Professional Practice of Internal Auditing,* the internal audit function is responsible for assessing an organization's controls (either elements of, or the entirety of, the system of internal controls). The IPPF provides guidance on the internal audit function's responsibility for assessing the adequacy of an organization's control processes by indicating that the CAE must consider whether significant discrepancies (weaknesses) were identified (and by whom), if corrections or improvements were made after the discovery of discrepancies, and if the discoveries and their potential consequences indicate that a pervasive condition exists, resulting in an unacceptable level of risk or operating ineffectiveness.

Sarbanes-Oxley additionally requires management of organizations registered with the SEC to publicly report on the reliability of ICFR. As previously indicated, in the United States, Sarbanes-Oxley places responsibility for the design, maintenance, and effective operation of ICFR squarely on the shoulders of senior management, specifically, the CEO and CFO. To comply with this legislation, the SEC requires the CEO and CFO of publicly traded companies to opine on the reliability of financial reporting (that is, the adequate design and effective operation of ICFR) as part of the annual filing of financial statements with the SEC, as well as report any substantial changes, if any, in ICFR on a quarterly basis. Many other countries have similar requirements.

In the interest of reliable financial reporting, "[m]anagement makes assertions regarding the recognition, measurement, presentation, and disclosure of accounts, transactions, and events included in the entity's financial statements."[35] Five basic financial statement assertions are:

- *Existence or occurrence.* Assets, liabilities, and ownership interests exist at a specific date, and recorded transactions represent events that actually occurred during a certain period.
- *Completeness.* All transactions and other events and circumstances that occurred during a specific period, and that should have been recognized in that period, have in fact been recorded.
- *Rights and obligations.* Assets are the rights, and liabilities are the obligations, of the entity at a given date.
- *Valuation or allocation.* Asset, liability, revenue, and expense components are recorded at appropriate amounts in conformity with relevant and appropriate accounting principles. Transactions are mathematically correct and appropriately summarized and recorded in the entity's books and records.
- *Presentation and disclosure.* Items in the statements are properly described, sorted, and classified.[36]

Entitywide and business process control activities specifically designed to provide reasonable assurance that external reporting objectives are achieved and support management's related assertions possess certain common elements. To be designed adequately and operating effectively, these controls should address the concepts of initiation, authorization, recording, processing, and reporting. As mentioned earlier in the chapter, these controls are collectively referred to as ICFR.

The PCAOB was created to establish guidelines to which independent outside auditors and, indirectly, management must adhere in order to comply with these reporting requirements. In response, on June 12, 2007, the PCAOB issued Auditing Standard No. 5, An Audit of Internal Control Over Financial Reporting That is Integrated with an Audit of Financial Statements. For additional specific guidelines, refer to Auditing Standard No. 5 itself.

PCAOB

The U.S. Public Company Accounting Oversight Board

OPPORTUNITIES TO PROVIDE INSIGHT

Because internal auditors perform audit engagements in all areas of the organization, they are uniquely positioned to provide insight on the effectiveness of the organization's system of internal control. Exhibit 6-11 provides 10 examples of the specific opportunities internal auditors have to provide such insight.

EXHIBIT 6-11
10 OPPORTUNITIES FOR THE INTERNAL AUDIT FUNCTION TO PROVIDE INSIGHT ON EFFECTIVE INTERNAL CONTROL

1. Help the organization develop a comprehensive framework for assessing the adequate design and effective operation of internal control.
2. Help management establish a logical structure for analyzing, documenting, and assessing the organization's design and operation of internal control.
3. Help the organization develop a process for identifying, evaluating, and remediating internal control deficiencies.
4. Provide independent assurance on the adequate design and effective operation of internal control.
5. Act decisively when potentially significant or material internal control changes or deficiencies are identified.
6. Assist in postmortem analysis when internal control deficiencies occur.
7. Inform management of potential breakdowns in internal control that present increased risk to the organization.
8. Assist management in developing a culture of ethical behavior ("tone at the top") and low tolerance of ineffective internal control.
9. Stay abreast and inform management of emerging issues, regulations, and laws related to the effectiveness of internal control.
10. Provide internal control awareness training throughout the organization.

SUMMARY

This chapter discussed the controls that organizations develop to mitigate the risks that could potentially threaten the achievement of business objectives. Beginning with a definition of internal control, the chapter moved on to explain what a framework is and how concepts like internal control and ERM are more effectively put into practice when they are implemented using well-developed and generally accepted frameworks. Additionally, the variety of frameworks that consider internal control should now be easily identifiable. From there, the components that must be present for an adequately designed and effectively operating system of internal controls were identified and defined. Everybody within an organization has some responsibility for internal control and this chapter outlined the specific roles and responsibilities each group of people in the organization has in that respect, including management's process for evaluating the organization's overall system of internal controls. Additionally, the specific roles and responsibilities the internal audit function has relative to the system of internal controls were discussed. The different types of controls employed to mitigate the many varieties of risks facing an organization were addressed and should now be easily identifiable. The appropriate application of each one also should be well understood. Finally, an overview of the process for evaluating the system of internal controls was presented in this chapter, which will be built on later in the textbook.

REVIEW QUESTIONS

1. What is a framework? What are the internal control frameworks recognized globally by management, independent outside accountants/ auditors, and internal audit professionals?

2. What must the CEO and CFO of a publicly traded company do to comply with the U.S. Sarbanes-Oxley Act of 2002?

3. How does COSO define internal control?

4. What are objectives? What three categories of objectives are set forth in the COSO framework?

5. What are the five components of internal control covered in the COSO framework?

6. What does the control environment comprise?

7. What does risk assessment involve?

8. What are control activities? What types of control activities are present in a well-designed system of internal controls?

9. What is high-quality information? Why must high-quality information be communicated?

10. When are monitoring activities most effective? Who performs monitoring activities? What distinguishes separate evaluations from ongoing monitoring activities?

11. What are the 17 principles of internal control defined by COSO?

12. What responsibilities do the following groups of people have regarding internal control?

- Management.
- The board of directors.
- Internal auditors.
- Others in the organization.
- The independent outside auditor.

13. What does "limitations of internal control" mean? Provide examples of limitations that are inherent to internal control.

14. What is inherent risk? What is controllable risk? What is residual risk?

15. How does internal auditors' perspective of internal control differ from management's perspective?

16. How do entity-level controls differ from process-level and transaction-level controls?

17. What is a key control? What is a secondary control? What is a compensating control?

18. What is the difference between a preventive and a detective control?

19. What are the two broad types of information systems (technology) controls?

20. How is the system of internal controls evaluated?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. Which of the following best describes an internal auditor's purpose in reviewing the organization's existing governance, risk management, and control processes?

   a. To help determine the nature, timing, and extent of tests necessary to achieve engagement objectives.
   b. To ensure that weaknesses in the internal control system are corrected.
   c. To provide reasonable assurance that the processes will enable the organization's objectives and goals to be met efficiently and economically.
   d. To determine whether the processes ensure that the accounting records are correct and that financial statements are fairly stated.

2. What is residual risk?

   a. Impact of risk.
   b. Risk that is under control.
   c. Risk that is not managed.
   d. Underlying risk in the environment.

3. The requirement that purchases be made from suppliers on an approved vendor list is an example of a:

   a. Preventive control.
   b. Detective control.
   c. Compensating control.
   d. Monitoring control.

4. An effective system of internal controls is most likely to detect a fraud perpetrated by a:

   a. Group of employees in collusion.
   b. Single employee.
   c. Group of managers in collusion.
   d. Single manager.

5. The control that would most likely ensure that payroll checks are written only for authorized amounts is to:

   a. Conduct periodic floor verification of employees on the payroll.
   b. Require the return of undelivered checks to the cashier.
   c. Require supervisory approval of employee time cards.
   d. Periodically witness the distribution of payroll checks.

6. An internal auditor plans to conduct an audit of the adequacy of controls over investments in new financial instruments. Which of the following would not be required as part of such an engagement?

   a. Determine whether policies exist that describe the risks the treasurer may take and the types of instruments in which the treasurer may invest.
   b. Determine the extent of management oversight over investments in sophisticated instruments.
   c. Determine whether the treasurer is getting higher or lower rates of return on investments than treasurers in comparable organizations.
   d. Determine the nature of monitoring activities related to the investment portfolio.

7. Appropriate internal control for a multinational corporation's branch office that has a department responsible for the transfer of money requires that:

   a. The individual who initiates wire transfers does not reconcile the bank statement.
   b. The branch manager must receive all wire transfers.
   c. Foreign currency rates must be computed separately by two different employees.
   d. Corporate management approves the hiring of employees in this department.

8. Who has primary responsibility for the monitoring component of internal control?

   a. The organization's independent outside auditor.
   b. The organization's internal audit function.
   c. The organization's management.
   d. The organization's board of directors.

9. Reasonable assurance, as it pertains to internal control, means that:

   a. The objectives of internal control vary depending on the method of data processing used.

MULTIPLE-CHOICE QUESTIONS

b. A well-designed system of internal controls will prevent or detect all errors and fraud.

c. Inherent limitations of internal control preclude a system of internal control from providing absolute assurance that objectives will be achieved.

d. Management cannot override controls, and employees cannot circumvent controls through collusion.

10. Which of the following best exemplifies a control activity referred to as independent verification?

a. Reconciliation of bank accounts by someone who does not handle cash or record cash transactions.

b. Identification badges and security codes used to restrict entry to the production facility.

c. Accounting records and documents that provide a trail of sales and cash receipt transactions.

d. Separating the physical custody of inventory from inventory accounting.

11. The risk assessment component of internal control involves the:

a. Independent outside auditor's assessment of residual risk.

b. Internal audit function's assessment of control deficiencies.

c. Organization's identification and analysis of the risks that threaten the achievement of its objectives.

d. Organization's monitoring of financial information for potential material misstatements.

12. COSO's Internal Control Framework consists of five internal control components and 17 principles for achieving effective internal control. Which of the following is/are (a) principle(s)?

I. The organization demonstrates a commitment to integrity and ethical values.

II. Monitoring activities.

III. A level of assurance that is supported by generally accepted auditing procedures and judgments.

IV. A body of guiding principles that form a template against which organizations can evaluate a multitude of business practices.

V. The organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning.

a. II only.

b. I and V only.

c. II and IV only.

d. I, II, III, IV, and V.

13. When assessing the risk associated with an activity, an internal auditor should:

a. Determine how the risk should best be managed.

b. Provide assurance on the management of the risk.

c. Update the risk management process based on risk exposures.

d. Design controls to mitigate the identified risks.

14. Determining that engagement objectives have been met is ultimately the responsibility of the:

a. Internal auditor.

b. Audit committee.

c. Internal audit supervisor.

d. CAE.

15. An adequate system of internal controls is most likely to detect an irregularity perpetrated by a:

a. Group of employees in collusion.

b. Single employee.

c. Group of managers in collusion.

d. Single manager.

DISCUSSION QUESTIONS

1. An audit report contains the following observations:

    a. A service department's location is not well suited to allow adequate service to other units.

    b. Employees hired for sensitive positions are not subjected to background checks.

    c. Managers do not have access to reports that profile overall performance in relation to other benchmarked organizations.

    d. Management has not taken corrective action to resolve past engagement observations related to inventory controls.

    Which two of these observations are most likely to indicate the existence of control weaknesses over safeguarding of assets? Why?

2. To meet waste discharge standards, a factory implements a control system designed to prevent the release of wastewater that does not meet those standards. One of the controls requires chemical analysis of the water, prior to discharge, for components specified in the permit. Is this an appropriate control? Why or why not?

3. An organization has a goal to prevent the ordering of inventory quantities in excess of its needs. One individual in the organization wants to design a control that requires a review of all purchase requisitions by a supervisor in the user department prior to submitting them to the purchasing department. Another individual wants to institute a policy requiring agreement of the receiving report and packing slip before storage of new inventory receipts. Which of these controls is (are) relevant in achieving the stated goal? Explain your answer.

4. COSO is quoted in this chapter as follows: "... internal auditors provide assurance and advisory support to management on internal control... the internal audit function includes evaluating the adequacy and effectiveness of controls in responding to risks within the organization's oversight, operations, and information systems... [Moreover,] [t]he scope of internal auditing is typically expected to include oversight, risk management, and internal control, and assist the organization in maintaining effective control by evaluating their effectiveness and efficiency and by promoting continual improvement. Internal audit communicates findings and interacts directly with management, the audit committee, and/or the board of directors." Answer the following questions related to this quote.

    a. Is an organization's internal audit function part of its system of internal controls? If your answer is yes, explain how the internal audit function can evaluate the design adequacy and operating effectiveness of internal controls and at the same time remain independent of the organization's system of internal controls. If your answer is no, explain the internal audit function's role relative to the organization's system of internal controls.

    b. If monitoring is, by definition, a component of internal control for which management is responsible, is it really appropriate for the internal audit function to perform monitoring activities? Explain your answer.

CASES

CASE 1[37]

Controls mitigate risks that threaten objectives and thus provide reasonable assurance that objectives will be achieved. Risks encompass both threats of bad things happening and threats of good things not happening. Some controls are visible and therefore can be photographed.

A. Choose one or two classmates you want to work with on this assignment.

B. As a team, photograph five different controls you observe around campus and/or the surrounding community. Use your imagination and ingenuity. Each team must work independently to produce a unique set of pictures. At least two of the controls photographed must be controls designed to mitigate risks of something good not happening (that is, controls designed to help something good happen).

C. For each control photographed:

1. Clearly indicate whether the control is designed to mitigate the threat of bad things happening or the threat of good things not happening.
2. Then briefly and separately describe:
   a. An objective the control is designed to help achieve.
   b. A risk the control is designed to mitigate. (Note: The risk you describe must be something other than merely the inverse of the objective.)
   c. How the control is meant to operate (that is, how the control works).
   d. How you would test the control to determine whether it is operating effectively.

To be submitted:

A. The set of five pictures.

B. The descriptions of the five controls the pictures represent, as called for in requirement C.

CASE 2

TeamMate Practice Case Exercise 2: TeamEWP and Internal Controls

Complete Exercise 2: TeamEWP and Internal Controls in the TeamMate Practice Case Workbook.

CASE 3

KnowledgeLeader Practice Case: Cost-Effective Approaches to Validating ICFR

Background Information

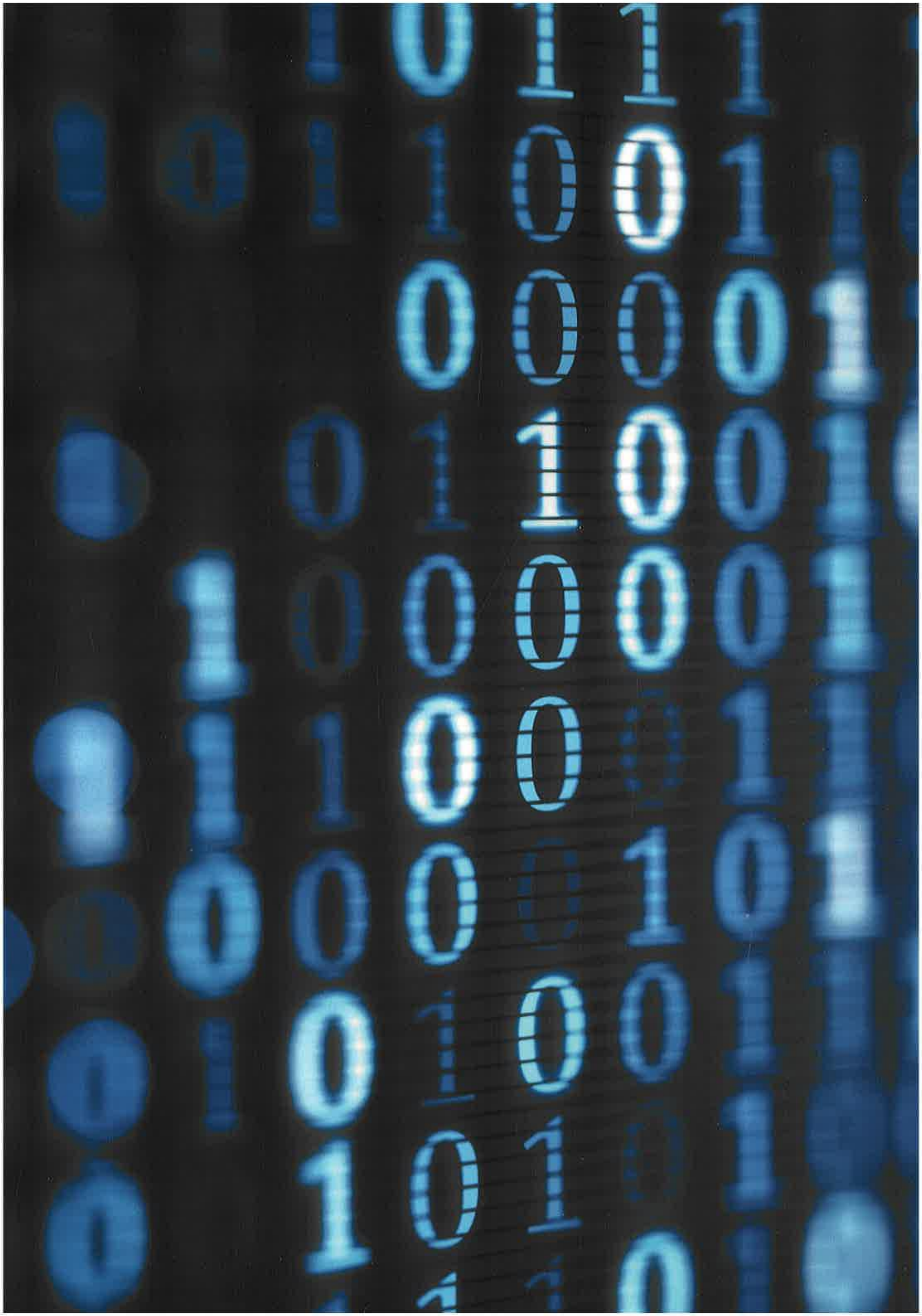
In the United States, Sarbanes-Oxley legislation put responsibility for the design, maintenance, and effective operation of internal control squarely on the shoulders of senior management, specifically, the CEO and the CFO. To comply with this legislation, the SEC requires the CEO and CFO of publicly traded companies over a certain size to opine on the design adequacy and operating effectiveness of ICFR as part of the annual filing of financial statements with the SEC, as well as report substantial changes in ICFR, if any, on a quarterly basis. Organizations have been able to successfully apply the COSO framework in their efforts to comply with Section 404 of Sarbanes-Oxley, despite encountering significant unanticipated costs. In an effort to reduce the cost to comply with Section 404 of Sarbanes-Oxley, many organizations are evaluating and pursuing more cost-effective approaches to validating their system of ICFR.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and identify alternative approaches to more cost-effectively validate an organization's operating effectiveness of their ICFR.

C. Submit a brief write-up indicating the results of your research to your instructor.



CHAPTER 7

Information Technology Risks and Controls

LEARNING OBJECTIVES

- Understand how IT is intertwined with business objectives, strategies, and operations.
- Describe the key components of modern information systems.
- Explain the nature of IT opportunities and risks.
- Understand fundamental IT governance, risk management, and control concepts.
- Understand the implications of IT for internal auditors.
- Describe the skills and IT talents required for internal auditors for the future.
- Identify sources of IT audit guidance.
- Describe the top 10 technology risks.
- Explain why cybersecurity is one of the most significant risks to the organization.
- Understand the implications the introduction of new technology has on the business environment.
- Understand how internal audit can provide guidance during IT projects.

EXHIBIT 7-1
IPPF GUIDANCE RELEVANT TO CHAPTER 7

Standard 1210 – Proficiency

Standard 1210.A3

Standard 1220 – Due Professional Care

Standard 1220.A2

Standard 2110 – Governance

Standard 2110.A2

Standard 2120 – Risk Management

Standard 2130 – Control

GTAG: Information Technology Risks and Controls, 2nd Edition

GTAG: Change and Patch Management Controls: Critical for Organizational Success, 2nd Edition

GTAG: Continuous Auditing: Coordinating Continuous Auditing and Monitoring to Provide Continuous Assurance

GTAG: Management of IT Auditing

GTAG: Information Technology Outsourcing, 2nd Edition

GTAG: Auditing Application Controls

GTAG: Identity and Access Management

GTAG: Business Continuity Management

GTAG: Developing the IT Audit Plan

GTAG: Auditing IT Projects

GTAG: Fraud Prevention and Detection in an Automated World

GTAG: Auditing User-Developed Applications

GTAG: Information Security Governance

GTAG: Data Analysis Technologies

GTAG: Auditing IT Governance

GTAG: Assessing Cybersecurity Risk: Roles of the Three Lines of Defense

GTAG: Auditing Smart Devices: An Internal Auditor's Guide to Understanding and Auditing Smart Devices

IT changes at a rapid pace and presents new challenges that all organizations must address even if they make the decision not to adopt similar changes in the way they deploy IT in-house. For example, the growing use of social media, such as Twitter and Facebook, means that negative information can be posted about an organization online even if the organization has no online presence nor participates in social media at all. As a result, some organizations have created groups to deal with the business implications of how they are characterized by individuals using social media. Organizations must navigate this new terrain carefully since negative posts are instant and cannot be undone once they are made. Experts in the social media field are quick to point out that there are risks and opportunities for organizations in this rapidly growing space.

Cybersecurity is an ever-increasing risk that requires increasing controls. In fact, leaders in the profession have identified cybersecurity as the number one technology risk, which is consistent with the findings in *Navigating Technology's Top 10 Risks: Internal Audit's Role*, one of the reports that came out of the 2015 Global Internal Audit Common Body of Knowledge (CBOK) Practitioner Survey.[1] (See exhibit 7-2 for the full list of risks identified in the study.) It has become more important than ever that all internal auditors become familiar with technology and those areas in which IT presents risks to the organization. Information security has also been high on the risk list for technology professionals for years. Reports of ransomware events are becoming front page news as these events cause organizations major system outages.

The term "cybersecurity" refers to the technologies, processes, and practices designed to protect an organization's information assets—computers, networks, programs, and data—from unauthorized access. With the frequency and severity of cyberattacks on the rise, there is a significant need for improved cybersecurity risk management. Effective controls to address cybersecurity include:

- Strong security frameworks.
- Identifying and controlling top risks to the organization related to cybersecurity.
- Cybersecurity awareness programs directed to all employees.
- Consideration of external and internal threats when planning the cybersecurity program.
- Strong information security governance within the organization.
- Robust response protocol in case of a serious cybersecurity breach.[2]

The proliferation of technology today enables more user access to an organization's information than ever before. Third parties are increasingly provided access to organizational information through the supply chain, customers, and service providers. A greater variety of data has become readily available as organizations often store large volumes of sensitive and confidential information in virtualized infrastructure accessible through cloud computing. Another factor that affects the internal audit approach is the increasing number of devices that can be connected and always engaged in data exchange (a phenomenon known as the "internet of things"). As organizations globalize and the organization's web of employees, customers, and third-party providers expands, expectations for constant access to the organization's information also increases.

IT Change Management Risk

Pace and type of IT change increases business risk:
– System enhancements.
– New technologies.
– Patches and system upgrades.
– Application code revisions.

EXHIBIT 7-2
NAVIGATING TECHNOLOGY'S TOP 10 RISKS THE GLOBAL INTERNAL AUDIT COMMON BODY OF KNOWLEDGE

1. Cybersecurity
2. Information Security
3. IT Systems Development Projects
4. IT Governance
5. Outsourced IT Services
6. Social Media Use
7. Mobile Computing
8. IT Skills Among Internal Auditors
9. Emerging Technologies
10. Board and Audit Committee Technology Awareness

Cyberattacks are perpetrated for varied reasons, including but not limited to financial fraud, information theft or misuse, activist causes, to render computer systems inoperable, and to disrupt critical infrastructure and vital services of a government or organization. Five common sources of cyber threats include nation-states, cybercriminals, hacktivists, insiders and service providers, and developers of substandard products and services.

As noted in "GTAG: Assessing Cybersecurity Risk: Roles of the Three Lines of Defense" (part of The IIA's Global Technology Audit Guide [GTAG] series), all three lines of defense play a significant role in monitoring the organization and protecting it from potential cybersecurity risks. As the first line of defense, management owns and manages the data, processes, risks, and controls. For cybersecurity, this function often resides with system administrators and others charged with safeguarding the assets of the organization. The second line of defense comprises risk, control, and compliance oversight functions responsible for ensuring that first line processes and controls exist and are effectively operating. These functions may include groups responsible for ensuring effective risk management and monitoring risks and threats in the cybersecurity space. As the third line of defense, the internal audit function provides senior management and the board with independent and objective assurance on governance, risk management, and controls. This includes assessing the overall effectiveness of the activities performed by the first and second lines of defense to manage and mitigate cybersecurity risks and threats. Specific examples related to the three lines of defense in addition to internal audit approaches are included in this GTAG.

Use of social media provides many opportunities for organizations to increase the likelihood of achieving business objectives. Used effectively, social media can help organizations:

- Increase revenue.
- Improve customer satisfaction and loyalty.
- Recruit and retain the best talent.
- Enhance product development and innovation.
- Enhance brand awareness and customer perception.[3]

At the same time, use of social media without appropriate oversight can introduce additional risks, including:

- Lack of or ineffective corporate governance around social media use.
- Lack of consideration of regulatory requirements.
- Failure to establish or monitor metrics around social media.
- Failure to establish an effective social networking policy.[4]

Social media is just one example of how technology must be reviewed and evaluated on an ongoing basis to determine both the relative benefits and risks. Even though an organization may not wish to deal with the adoption of a new technology, society's adoption of that technology can still have a long-lasting impact on every organization. The internal audit function has an opportunity to be involved early in the process when emerging issues surface and provide insight to the organization regarding optimization of the opportunities and mitigation of the risks.

Bring Your Own Device (BYOD)

A policy whereby organizations allow associates to access business email, calendars, and other data on their personal laptops, smartphones, tablets, or other devices.

While organizations have long been exploring the best way for employees to securely access work email, calendars, and information remotely, the consumerization of IT has led to the proliferation of bring your own device (BYOD) policies and it is becoming common business practice for employees to choose their own personal laptops, tablets, smartphones, or other computing devices to access email and other proprietary data. This rapidly increasing use of smartphones and other devices has increased the risk of business information on unsecure, nonbusiness assets.

Although many organizations have established policies and procedures related to the use of personal devices, many have not. Even those that have established such policies find it very difficult for their IT function to monitor and control the migration of company information to the portable devices. Information security and data confidentiality and privacy have become more critical as it is difficult to ensure corporate and personal data are protected on these devices.

Regardless of how quickly organizations adopt new technology as it emerges, all invest heavily in IT. They do so for several reasons, all of which pertain directly to achieving the organizations' business objectives. For example, IT enables business strategies, enhances the performance of business processes, and facilitates decision-making. In fact, IT has reached the point of being so intertwined with organizations' business objectives, strategies, and operations that IT initiatives must be considered in tandem with business initiatives to ensure alignment between the two.

Consider, for example, that:

- A retail company wants to expand its sales by selling directly to customers via its website. Pursuing a strategy of online sales would not even be an option if e-commerce technology, including the internet, did not exist.
- A company wants to begin selling overseas, but its information system does not have the capability to handle customer purchases in foreign currencies. With the currency capabilities integrated into many of the shopping cart applications, a company can quickly adapt to handling foreign currencies.
- A manufacturing company wants to streamline its purchasing process to make it more cost-effective. Electronic data interchange (EDI), which would enable the manufacturer's computer to transact business directly with suppliers' computers, is a technology solution management may consider.
- A large floral company wants to evaluate the day-to-day operating performance of its geographically dispersed stores more precisely. A data warehouse in which pertinent historical information is stored would facilitate calculations of day-by-day, store-by-store performance metrics, analysis of performance trends by product line, and what-if scenario analysis of projected performance.

The increasingly pervasive impact of IT on organizations' business strategies and day-to-day operations has significantly affected the internal audit profession. IT has changed the competencies that internal audit functions must possess and how they perform assurance and consulting services. It is virtually impossible in today's business world for any internal audit function to provide value-adding services to its organization unless the function is highly proficient in its knowledge of IT risks and controls and has the capability to effectively apply technology-based audit techniques. This includes extensive experience and adoption of data analytics in audit processes. The top IT skills all internal auditors should possess include:

- Data analytics—how to analyze data and use audit software tools.
- Cybersecurity—key components of information security, including terminology and key risks.
- Business continuity and disaster recovery—understanding the most significant business areas and practices for recovery.
- Change management—knowledge of project management and change processes and the corresponding impact to the organization.

Information Systems (IS) Auditor

An auditor who works extensively in the area of computerized information systems and has deep IT risk, control, and audit expertise

- Newer technologies—being tech savvy with current issues on emerging technologies and their potential impact on the business.

An internal auditor who works extensively in the area of computerized information systems must possess deep IT risk, control, and audit expertise. Such auditors are commonly referred to as IT auditors or information systems (IS) auditors. Although all internal auditors need not have the expertise of an IT audit specialist, at minimum, every internal auditor must have a sound understanding of certain fundamental IT concepts. For example, all internal auditors need to understand the basic components of their organizations' information systems, the IT risks that threaten the achievement of their organizations' business objectives, and their organizations' IT governance, risk management, and control processes. Additionally, they need to have an understanding of the applications and technology used by the business units that they are auditing.

KEY COMPONENTS OF MODERN INFORMATION SYSTEMS

Modern information systems vary significantly among organizations and it is beyond the scope of this textbook to cover the wide variety of system configurations that exist in today's business world. There are, however, common key components of information systems that internal auditors need to understand. These components include computer hardware, networks, computer software, databases, information, and people. Exhibit 7-3 illustrates a simple information system configuration that will serve as the context for providing examples of the key components as they are described below.

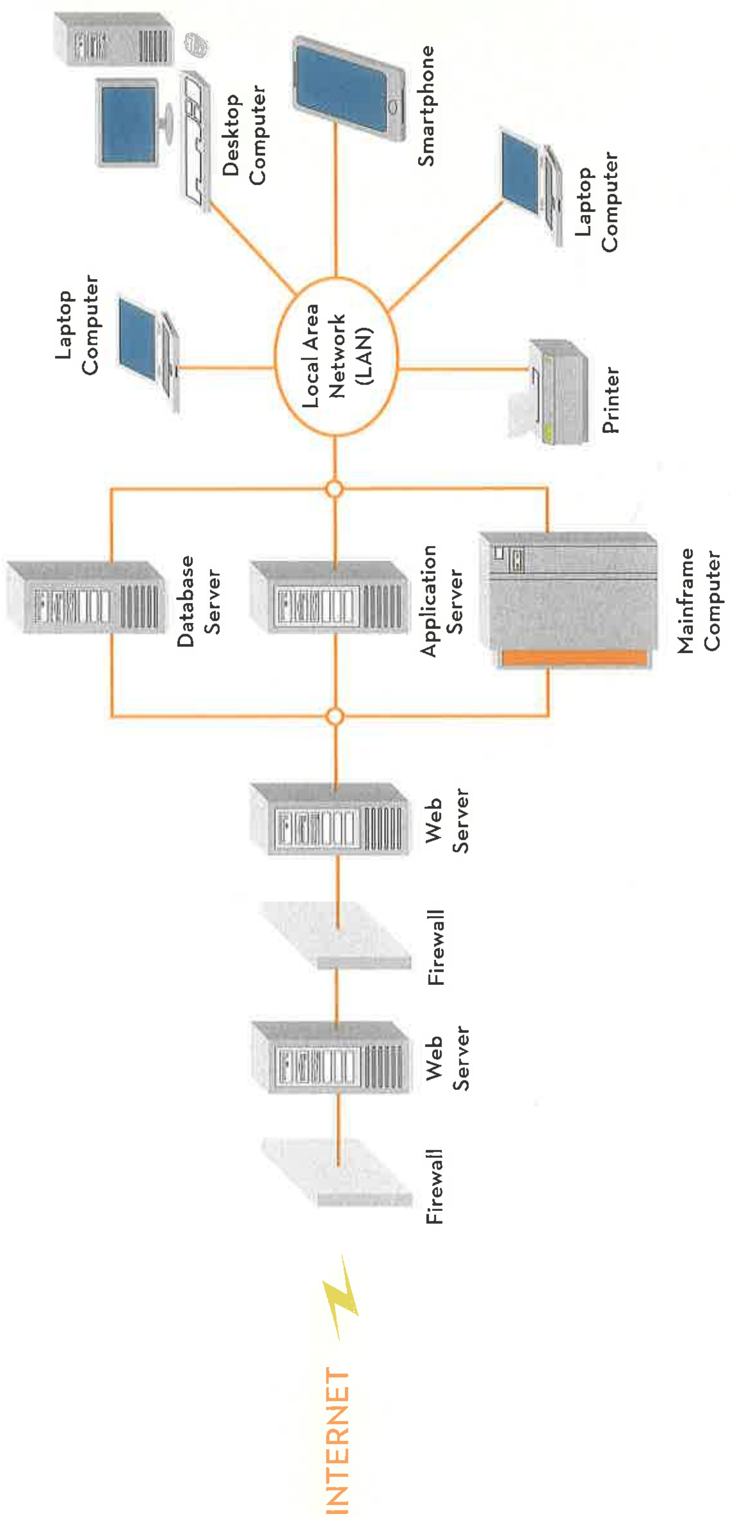
Computer hardware. Computer hardware comprises the physical components of an information system. Hardware includes, for example, central processing units (CPUs), servers, workstations and terminals, computer chips, input/output devices such as scanners and printers, 3-D printers, storage devices such as disk drives, and communication devices such as modems, mobile devices, and wireless routers.

> **Example**: The computer hardware depicted in exhibit 7-3 includes a smartphone, a desktop computer, two laptop computers, a printer, a mainframe computer, four servers, and two firewalls. Additional devices that are unknown to the organization could also be accessing data and updating databases behind the firewall. This is why information security rules are critical to the organization. Depending on the controls in place and the strength of the firewall, cybersecurity becomes even more significant.

Networks. A computer network links two or more computers or devices so they can share information and/or workloads. There are many types of networks:

- A client-server network connects one or more client computers with a server, and information processing is shared between the client(s) and the server in a manner that optimizes processing efficiency.
- A local area network (LAN) spans a relatively small area such as a building or group of adjacent buildings.
- A wide area network (WAN) comprises a system of LANs connected together to span a regional, national, or global area.

EXHIBIT 7-3
ILLUSTRATION OF A SIMPLE INFORMATION SYSTEM CONFIGURATION



- An intranet is an organization's private network accessible only to that organization's personnel.
- An extranet is accessible to selected third parties such as authorized suppliers and/or customers.
- A value-added network (VAN) is a third-party network that connects an organization with its trading partners.
- The internet (*inter*connected *net*works) is the very large and complex public system of computer networks that enables users to communicate globally.
- Two devices can share information just between themselves without being attached to other networks through numerous electronic conventions, including secured virtual private networks, near field communications (NFC), and mashup technologies.

Example: Exhibit 7-3 depicts the interconnection between the LAN, the organization's intranet, and the internet.

Computer software. Computer software includes operating system software, utility software, database management system (DBMS) software, application software, and firewall software. The operating system controls the basic input, processing, and output of the computer and manages the interconnectivity of the system hardware devices. Utility software augments the operating system with functionality such as encryption, disk space optimization, and protection against viruses. The DBMS software manages the data stored in the database, controls access to the database, and automatically backs up the database. Application software includes accounting software that is used to process transactions as well as other types of software (such as word processing and spreadsheet software) that enable end users to perform their assigned tasks. Firewall software enforces access control between two networks by allowing only authorized data transmissions to pass through the firewall in both directions.

Database

A large depository of data, typically contained in many linked files, and stored in a manner that allows the data to be easily accessed, retrieved, and manipulated.

Example: Each desktop, laptop, smart device, mainframe, and server computer depicted in exhibit 7-3 contains operating and utility software needed for the computer to function properly and for information to be exchanged among the computers and the printer. Basic application software may reside on each desktop and laptop computer or be stored on the application server to be shared among the users of the desktop and laptop computers. Larger application programs may reside on either the application server or the mainframe and process data as requested by the users. The database server and the mainframe contain database software that manages the stored data and specifies the access and processing privileges of each user. The Web servers contain software that directs the flow of information between the internet and the organization's intranet. The firewalls contain two layers of software that prevent unauthorized transmissions of information into and out of the organization.

Databases. A database is a large repository of data typically contained in many linked files and stored in a manner that allows the data to be easily accessed, retrieved, and manipulated. An operating database supports day-to-day transaction processing and is continuously updated as transactions are processed. A data warehouse is a large assemblage of data stored over time to support online data analysis and decision-making. Organizations are exploring concepts such as "big data" to create ways to leverage all information available, not just transaction data, to accelerate sales, improve business processes, identify new products, and gather data intelligence.

Example: Each desktop, laptop computer, and smart device depicted in exhibit 7-3 may house databases used to store relatively small quantities of data that is useful to the user of that computer. The database server houses bigger databases designed to hold larger volumes of data. Mainframe computers typically house even larger databases that require faster response time due to the volume of inquiries and processing requirements. The DBMS controls which data each user can access and what they can do with the data.

Big Data

A term used to refer to the large amount of constantly streaming digital information, massive increase in the capacity to store large amounts of data, and the amount of data processing power required to manage, interpret, and analyze the large volumes of digital information.

Information. "Information is a key resource for all enterprises, and from the time that information is created to the moment that it is destroyed, technology plays a significant role."[5] Information systems collect and store data, transform the data into useful information, and provide the information to internal and external decision-makers. For information to be useful, it must be relevant, reliable, complete, accurate, and timely.

Example: Each desktop, laptop, smart device, server, and mainframe computer depicted in exhibit 7-3 contains information in various types of files that is useful to the user or users of that computer. Information flows in multiple directions among the various computers, and to and from parties inside and outside the organization.

People. Specific information system roles vary significantly from one organization to another. Typically, these roles include those of a chief information officer (CIO), chief information security officer (CISO), a database administrator, systems developers, information processing personnel, and end users.

- The CIO is responsible for the day-to-day oversight and direction of IT and for ensuring that IT objectives and strategies are aligned with the organization's business objectives and strategies.
- The CISO establishes information security policies, procedures, and practices. The CISO also implements monitoring networks and individual access controls. In most large organizations, this is a full-time role that places an increased focus on the training of all individuals in the organization on the importance of security over corporate access and systems.
- The database administrator is responsible for supervising the design, development, implementation, and maintenance of the database, controlling access to the database, monitoring database performance, and upgrading the database in response to changes in users' needs. In larger organizations, roles such as CISO and business continuity planner commonly help address technology issues such as confidentiality of information and business continuity.
- Systems developers include analysts and programmers. Analysts survey users' IT needs, perform "what is" versus "what should be" analyses of IT systems, and design new IT systems. Programmers construct and test the software used to execute data processing tasks.
- Information processing personnel manage centralized IT resources and perform centralized day-to-day input, processing, and output activities.

- End users are the managers and employees for whom the information system was built. They use the information produced by the system to carry out their day-to-day roles and responsibilities.

  Example: The people involved in the information system depicted in exhibit 7-3 include the desktop, laptop, and smart device users, the database administrators responsible for managing the databases, the individuals responsible for managing and operating the various servers and the firewalls, and the application programmers who constructed and tested the application software. The application software may have been constructed in-house or purchased from a software vendor.

IT OPPORTUNITIES AND RISKS

Opportunity and risk were introduced in chapter 1, "Introduction to Internal Auditing," and discussed in detail in chapter 4, "Risk Management." *Opportunity* is the possibility that an event will occur and *positively* affect the achievement of an organization's objectives, and *risk* is the possibility that an event will occur and *negatively* affect the achievement of an organization's objectives. Opportunities and risks that arise within an organization because of IT represent a significant portion of the opportunities and risks the organization needs to understand and manage effectively.

Opportunities Enabled by IT

Selling goods online is an opportunity enabled by e-commerce technology that many organizations have exploited. Other opportunities that IT advances have enabled include enterprise resource planning (ERP) systems and electronic data interchange (EDI):

ERP System

A modular software system that enables an organization to integrate its business processes using a single operating database.

- **ERP systems**. An ERP system is a modular software system that enables organizations to integrate their business processes using a single operating database. Benefits organizations expect to gain from implementing ERP systems include online real-time processing of transactions, seamless interaction and sharing of information among functional areas, improved process performance, elimination or reduction of data redundancies and errors, and timely decision-making. However, implementing an effective and efficient ERP system on time and on budget is a huge undertaking that is fraught with risks. Exploiting the opportunities that an ERP system has to offer depends on effectively mitigating the risks that can cause the initiative to fail.

EDI

The computer-to-computer exchange of business documents in electronic form between an organization and its trading partners.

- **EDI**. EDI involves the computer-to-computer exchange of business documents in electronic form between an organization and its trading partners. Benefits organizations expect to gain from implementing EDI include transaction processing efficiencies and fewer data processing errors. Moreover, recent advances in e-business technology have enabled internet EDI, which is less expensive than traditional EDI. However, an organization cannot effectively and efficiently implement EDI unless its trading partners also effectively implement EDI. In addition, conducting business over the internet is not risk free. Fully exploiting the opportunities EDI has to offer depends on mitigating the risks associated with e-business.

IT Risks

Each of the key components of information systems described earlier in the chapter represents a potential source of risk. For example:

- Computer hardware is susceptible to power outages that interrupt the processing of transactions. Other more advanced and hard-to-detect risks include purchasing hardware already infected with malware.
- Networks transmit information that may be intercepted and stolen or misused.
- Computer software that is inaccurately programmed may produce invalid, incomplete, and/or inaccurate information. Poorly designed software increases inefficient, performance, or capacity risks.
- Databases may be infiltrated for the purpose of misappropriating or misusing information. Too many databases or lack of strong database version control can increase the risk of data duplication and increased processing cost.
- Information that is invalid, incomplete, and/or inaccurate may result in poor decisions. (The risk that poor information will result in poor decisions is referred to generally as *information risk*.)
- A person may perform incompatible IT duties and thus be in a position to perpetrate and conceal errors or fraud.

The use of IT in information systems opens the door for IT risks. The specific IT risks that a particular organization faces will depend on the nature of the organization's business and operations, the industry within which the organization operates, the configuration of the organization's information systems, and several other internal and external factors. Moreover, risks change as a result of changes in an organization's internal and external environment, and nothing in today's business world changes more rapidly than IT. Accordingly, organizations must constantly keep abreast of advances in IT and continuously consider the risk ramifications of these advances.

There are, however, certain types of IT risks that tend to be common across organizations and industries.

- **Selection risk.** Selection of an IT solution that is misaligned with a strategic objective may preclude the execution of the IT-dependent strategy. Likewise, selection of an IT solution that is insufficiently flexible and/or scalable may result in incompatibilities between the IT solution and the organization's existing systems and/or hinder future organizational changes and growth. Causes of selection risk include, for example, unqualified decision-makers and inadequate information supporting the selection decision. "GTAG: Management of IT Auditing, 2nd Edition" and "GTAG: Developing the IT Audit Plan" provide more details on selection risk and guidance on how an internal audit function should allocate its resources to provide assurance that selection risk is adequately mitigated.
- **Development/acquisition and deployment risk.** Problems encountered as the IT solution is being developed/acquired and deployed may cause unforeseen delays, cost overruns, or even abandonment of the project. Causes of development/acquisition and deployment risk include, for example, insufficient in-house expertise, inadequate vendor support, untried software or technology, and resistance to change. "GTAG: Auditing IT Projects" and "GTAG: Auditing User-developed Applications" identify many additional examples of risks IT projects introduce to the organization.
- **Availability risk.** Unavailability of the system when needed may cause delays in decision-making, business interruptions, lost revenue, and customer dissatisfaction. Causes of availability risk include, for example, hardware/software

failures, unscheduled maintenance, natural disasters, and viruses and other malicious acts. "GTAG: Business Continuity Management" provides guidance on best practices related to business recovery.

- **Hardware/software risk**. Failure of hardware/software to perform properly may cause business interruptions, temporary or permanent damage to or destruction of data, and hardware/software repair or replacement costs. Causes of hardware/software risk include, for example, natural wear and tear, environmental damage caused by such things as excessive humidity, disasters such as fires and floods, not patching hardware or software, and viruses and other malicious acts.
- **Access risk**. Unauthorized physical or logical access to the system may result in theft or misuse of hardware, malicious software modifications, and theft, misuse, or destruction of data. Causes of access risk include, for example, use of smartphones to access, modify, and store corporate data and open use of wireless networks for guest access to business data and lack of strong user access or authentication. "GTAG: Identity and Access Management" outlines a number of issues related to access controls along with solutions.

- **System reliability and information integrity risk**. Systematic errors or inconsistencies in processing may produce irrelevant, incomplete, inaccurate, and/or untimely information. In turn, the bad information produced by the system may adversely affect the decisions that are based on the information. Causes of system reliability and information integrity risk include, for example, software programming errors, weak edit or data verification controls, and unauthorized changes to software. "GTAG: Auditing Application Controls" provides guidelines for auditors to follow when verifying controls built into applications.
- **Confidentiality and privacy risk**. Unauthorized disclosure of business partners' proprietary information or individuals' personal information may result in loss of business, lawsuits, negative press, and reputation impairment. Causes of confidentiality and privacy risk include, for example, unimpeded access to system networks, software, and databases. The IIA Practice Guide "Auditing Privacy Risks" addresses privacy risks and controls, including those directly associated with IT, and provides guidance about how to effectively audit privacy.
- **Fraud and malicious acts risk**. Theft of IT resources, intentional misuse of IT resources, or intentional distortion or destruction of information may result in financial losses and/or misstated information that decision-makers rely upon. Causes of fraud and malicious acts risk include, for example, disgruntled employees and hackers intent on harming the organization for personal gain. "GTAG: Fraud Prevention and Detection in an Automated World" focuses on IT-related fraud risks and provides guidance as to how internal auditors can use technology to effectively address fraud.

The IT risks described above are intended to be illustrative rather than all-encompassing. Also notice that these risks are not mutually exclusive. For example, an information system may be unavailable (availability risk) due to hardware/software failures (hardware/software risk). Likewise, fraud and other malicious acts may cause any of the other risks. The GTAG series comprehensively addresses IT risks and controls and offers detailed guidance on how to perform effective IT audit engagements.

IT GOVERNANCE

Governance is defined in chapter 1 as the process conducted by the board of directors to authorize, direct, and oversee management toward the achievement of the organization's objectives. As discussed in detail in chapter 3, "Governance," an organization's governance structure provides assurance that the organization operates within the boundaries and values established by the board and senior management.

IT Governance

The leadership, structure, and oversight processes that ensure the organization's IT supports the objectives and strategies of the organization.

As indicated in the introduction of this chapter, organizations invest large sums of money in IT because IT enables the execution of business strategies and the achievement of business objectives. In response to the pervasive impact IT has on their business strategies and operations, many organizations have determined that IT governance, by itself, is important enough to warrant special attention.

As described in IIA Standard 2110.A2 and "GTAG: Auditing IT Governance," IT governance is very important. IIA Standard 2110.A2 states, "The internal audit [function] must assess whether the information technology governance of the organization supports the organization's strategies and objectives." "GTAG: Auditing IT Governance" reiterates this point: "The primary responsibility for IT governance lies with board and senior level management. The internal audit activity is responsible for assessing whether the organization's IT governance supports the organization's strategies and objectives as outlined under Standard 2110[.A2]."

As defined by The IIA, IT governance:

> "Consists of the leadership, organizational structures, and processes that ensure that the enterprise's information technology sustains and supports the organization's strategies and objectives."

The above description and definition clearly indicate that the board and senior management "own" IT governance, just as they own all other aspects of governance. Some boards have established governance committees whose spans of responsibility include IT governance. Audit committees often play a key role in IT governance as well. The IT governance roles of the board and its committees are to provide IT governance direction to senior management and oversee senior management's IT governance activities. Senior management is responsible for directing and overseeing the day-to-day execution of IT governance. Some organizations have established IT governance committees, the members of which include the CIO and other senior executives. As explained in "GTAG: Auditing IT Governance" and depicted in exhibit 7-4, IT governance is a key component of overall corporate governance.

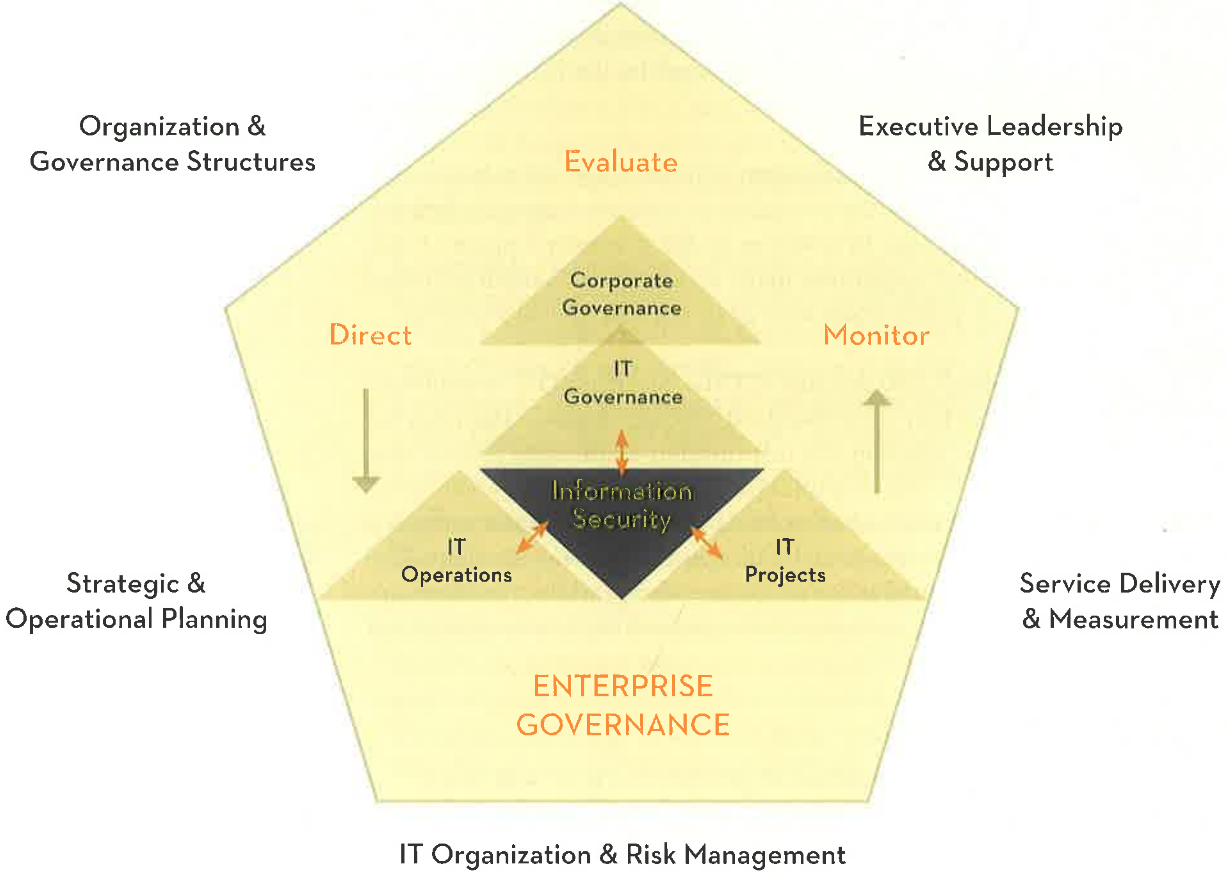
IT RISK MANAGEMENT

Risk management is defined in chapter 1 as the process conducted by management to understand and handle the uncertainties (risks and opportunities) that could affect the organization's ability to achieve its objectives. Chapter 4 discusses in detail how an organization's risk management process operates within the organization's governance structure to 1) identify and mitigate the risks that threaten the organization's success, and 2) identify and exploit the opportunities that enable the organization's success.

IT Risk Management

The process conducted by management to understand and handle the IT risks and opportunities that could affect the organization's ability to achieve its objectives.

EXHIBIT 7-4
IT GOVERNANCE FRAMEWORK



Source: "GTAG: Auditing IT Governance," Figure 2 (Lake Mary, FL: The Institute of Internal Auditors, July 2012), 3.

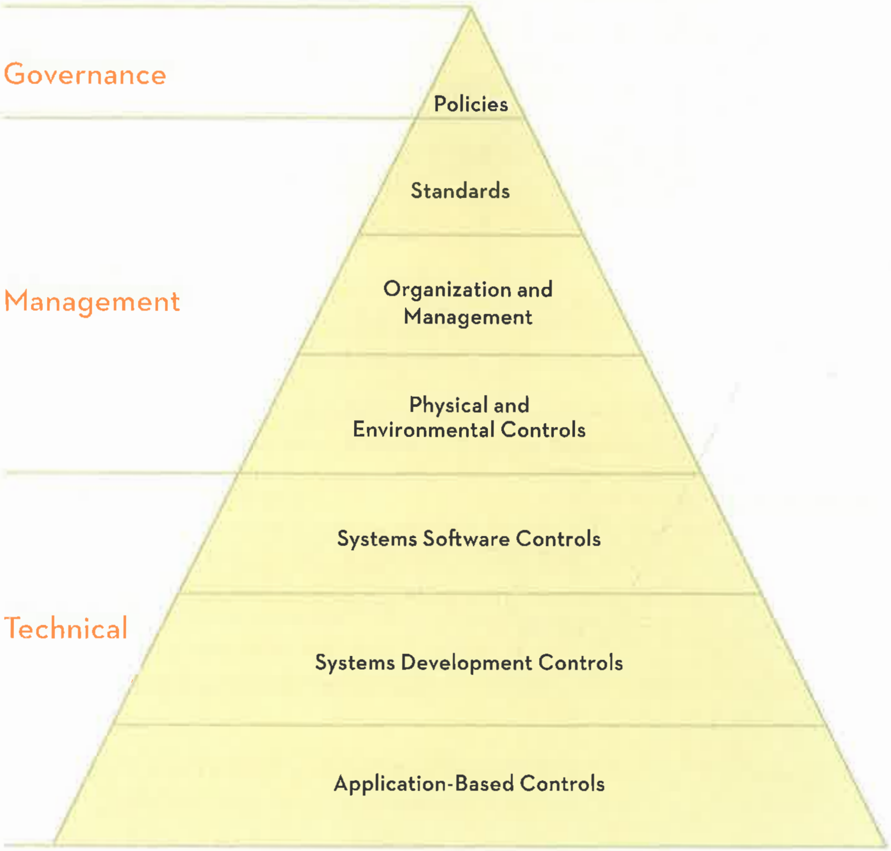
IT CONTROLS

Control is defined in chapter 1 as the process imbedded in risk management and conducted by management to mitigate risks to acceptable levels. Chapter 6, "Internal Control," provides in-depth coverage of internal control and introduces the concept of IT controls, which are commonly classified as general or application controls:

- *General controls* (italics added) apply to all systems components, processes, and data for a given organization or systems environment."
- *Application controls* (italics added) pertain to the scope of individual business processes or application systems and include controls within an application around input, processing, and output."

Another way to classify controls is "by the group responsible for ensuring they are implemented and maintained properly." For example, as presented in exhibit 7-5, IT controls may be categorized as a top-down hierarchy of IT governance, management, and technical controls. The top six layers of IT controls illustrated in exhibit 7-5 represent IT general controls and the bottom layer represents application controls. It is important to understand, however, that "The different elements of the hierarchy are not mutually exclusive; they are all connected and can intermingle." The remainder of this section describes IT controls from "the group responsible" perspective.

EXHIBIT 7-5
IT CONTROL FRAMEWORK


Governance
Policies
Standards
Management
Organization and Management
Physical and Environmental Controls
Systems Software Controls
Technical
Systems Development Controls
Application-Based Controls

Source: "GTAG: Information Technology Risk and Controls," 2nd Edition (Lake Mary, FL: The Institute of Internal Auditors, March 2012), 18.

IT Governance Controls

As discussed previously in this chapter, IT governance is an integral component of overall governance. Likewise, IT controls at the governance level are an important subset of an organization's overall system of internal controls. IT controls at the governance level fall under the jurisdiction of the board and senior management. The board's responsibility, however, is to oversee the organization's system of internal controls, not to execute controls. It is senior management's job to conduct the control process on a day-to-day basis.

As illustrated in exhibit 7-5, IT governance controls comprise IT policies. These policies establish the nature of the controls that should be in place and address, for example:

- A general policy on the level of security and privacy throughout the organization.
- A statement on the classification of information and the rights of access at each level.
- A definition of the concepts of data and systems ownership, as well as the authority necessary to originate, modify, or delete information.
- Personnel policies that define and enforce conditions for staff in sensitive areas.
- Definitions of overall business continuity planning requirements.

IT Management Controls

Management is responsible for ensuring that IT controls are designed adequately and operating effectively, taking into consideration the organization's objectives, risks that threaten the achievement of those objectives, and the organization's business processes and resources. As illustrated in exhibit 7-5, IT controls at the management level comprise standards, organization and management, and physical and environmental controls.

IT Standards

Support IT policies by more specifically defining what is required to achieve the organization's objectives.

IT standards support IT policies by more specifically defining what is required to achieve the organization's objectives. These standards should cover, for example:

- **Systems development processes**. When organizations develop their own applications, standards apply to the processes for designing, developing, testing, implementing, and maintaining information systems and programs.
- **Systems software configuration**. Because systems software provides a large element of control in the IT environment, standards related to secure system configurations are beginning to gain wide acceptance by leading organizations and technology providers.
- **Application controls**. All applications that support business activities need to be controlled.
- **Data structures**. Having consistent data definitions across the full range of applications ensures that disparate systems can access data seamlessly and security controls for private and other sensitive data can be applied uniformly.
- **Documentation**. Standards should specify the minimum level of documentation required for each application system or IT installation, as well as for different classes of applications, processes, and processing centers.

IT Organization and Management Controls

Provide assurance that the organization is structured with clearly defined lines of reporting and responsibility and has implemented effective control processes.

IT organization and management controls provide assurance that the organization is structured with clearly defined lines of reporting and responsibility and has implemented effective control processes. Three important aspects of these controls are segregation of duties, financial controls, and change management controls:

- Segregation of duties is a vital element of many controls. An organization's structure should not allow responsibility for all aspects of processing data to rest with one individual. The functions of initiating, authorizing, inputting, processing, and checking data should be separated to ensure no individual can create an error, omission, or other irregularity and authorize it and/or obscure the evidence. Segregation of duties controls for application systems are implemented by granting access privileges in accordance with job requirements for processing functions and accessing information.

- Because organizations make considerable investments in IT, budgetary and other financial controls are necessary to ensure the technology yields the projected return on investment or proposed savings. Management processes should be in place to collect, analyze, and report on these issues. Unfortunately, new IT developments often suffer massive cost overruns and fail to deliver the expected cost savings or income because of wrong estimates or insufficient planning.
- Change management processes ensure that changes to the IT environment, systems software, application systems, and data are applied in a manner that enforces appropriate segregation of duties; ensures that changes work and are implemented as required; and prevents changes from being exploited for fraudulent purposes. A lack of change management can seriously impact system and service availability.

IT physical and environmental controls protect information system resources (hardware, software, documentation, and information) from accidental or intentional damage, misuse, or loss. Such controls include, for example:

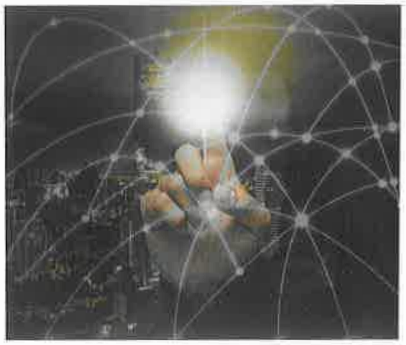
- Locating servers in locked rooms to which access is restricted.
- Restricting server access to specific individuals.
- Providing fire detection and suppression equipment.
- Housing sensitive equipment, applications, and data away from environmental hazards such as flood plains, flight paths, or flammable liquid stores.

IT Physical and Environmental Controls

Protect information system resources from accidental or intentional damage, misuse, or loss.

IT Technical Controls

"Technical controls often form the backbone of management's control framework...These controls are specific to the technologies in use within the organization's IT infrastructures."[6] As illustrated in exhibit 7-5, IT technical controls include systems software controls, systems development controls, and application-based controls.



Systems software facilitates the use of systems hardware and includes, for example, operating systems, network systems, database management systems, firewalls, and antivirus software. Systems software controls restrict logical access to the organization's systems and applications, monitor systems usage, and generate audit trails. *Systems software controls* include, for example:

- Access rights allocated and controlled according to the organization's stated policy.
- Division of duties enforced through systems software and other configuration controls.
- Intrusion and vulnerability assessment, prevention, and detection in place and continuously monitored.
- Intrusion testing performed on a regular basis.
- Encryption services applied where confidentiality is a stated requirement.
- Change management processes—including patch management—in place to ensure a tightly controlled process for applying all changes and patches to software, systems, network components, and data.

Application systems, whether developed in-house or purchased from a vendor, must effectively and efficiently process information in accordance with users' requirements. *Systems development and acquisition controls* include, for example:

- User requirements should be documented, and their achievement should be measured.
- Systems design should follow a formal process to ensure that user requirements and controls are designed into the system.
- Systems development should be conducted in a structured manner to ensure that requirements and approved design features are incorporated into the finished product.
- Testing should ensure that individual system elements work as required, system interfaces operate as expected, and that the system owner has confirmed that the intended functionality has been provided.
- Application maintenance processes should ensure that changes in application systems follow a consistent pattern of control. Change management should be subject to structured assurance validation processes.

Application-based controls are implemented to ensure that:

- All input data is accurate, complete, authorized, and correct.
- All data is processed as intended.
- All data stored is accurate and complete.
- All output is accurate and complete.
- A record is maintained to track the process of data from input to storage and to the eventual output.

Application-based controls include, for example:

- **Input controls.** These controls are used mainly to check the integrity of data entered into a business application, whether the source is input directly by staff, remotely by a business partner, or through a Web-enabled application.
- **Processing controls.** These controls provide automated means to ensure processing is complete, accurate, and authorized.
- **Output controls.** These controls address what is done with the data. They should compare results with the intended result and check them against the input.
- **Integrity controls.** These controls can monitor data in the process and/or storage to ensure that data remains consistent and correct.
- **Management trail.** Processing history controls, often referred to as an audit trail, enable management to track transactions from the source to the ultimate result and to trace backward from results to identify the transactions and events they record.

Specific examples of application-based controls are presented in exhibit 7-6.

Physical Access Controls

Provide security over tangible IT resources

Information security controls are not explicitly presented in exhibit 7-5 because "Information security is an integral part of IT controls."[7] Information security controls protect an information system from unauthorized physical and logical access. Physical access controls provide security over tangible IT resources and include such things as locked doors, surveillance cameras, and security guards. Logical access controls provide security over software and information imbedded in the system and include such things as firewalls, encryption, login IDs, passwords, authorization tables, and computer activity logs. Deficiencies in information security controls compromise the effectiveness of all other IT governance, management, and technical controls.

Logical Access Controls

Provide security over software and information imbedded in the system.

EXHIBIT 7-6
EXAMPLES OF IT APPLICATION-BASED CONTROLS

Input Controls: Designed to ensure that data input into the system is valid, complete, and accurate.

- **Source document controls:**
  - Access to documents used to initiate transactions is restricted to authorized individuals.
  - Documents used to initiate transactions are prenumbered when feasible. The source documents are used in numerical sequence and the sequence is verified periodically.
- **Control totals:**
  - **Record count.** A count of the records input for processing. Example: The number of time cards submitted for payroll processing.
  - **Batch total.** A total of an amount included in each record batched for processing. Example: The total of the number of hours worked in the batch of time cards submitted for payroll processing.
  - **Hash total.** An otherwise meaningless total that is used to ensure the completeness of data input for processing. Example: The sum of the employee numbers in the batch of time cards submitted for processing.
- **Programmed edit checks:**
  - **Completeness check.** Examines the data input to ensure that all critical fields contain values.
  - **Field check.** Examines a field to determine whether it contains the appropriate type of data (alpha or numeric).
  - **Sign check.** Examines a field to determine whether the amount sign is correct (positive or negative).
  - **Limit check.** Examines a field to determine whether the amount is ≤ a prescribed upper limit or ≥ a prescribed lower limit.
  - **Range check.** Examines a field to determine whether the amount falls within a prescribed range.
  - **Reasonableness check.** Compares the data in a field with data in related fields to determine whether the value is reasonable.
  - **Validity check.** Compares the data in a field with a predetermined set of authorized values to ensure the field contains valid data.
- **Input error correction:** Source documents containing errors detected during input are corrected and resubmitted before being processed.

Processing Controls: Designed to prevent or detect and correct errors that occur during processing.

- **Run-to-run control totals:** Control totals are calculated and checked at designated points as transactions are processed.
- **Error listings:** Error listings are automatically generated by the computer and errors identified are remediated expeditiously.

Output Controls: Designed to ensure that application system outputs are valid, complete, and accurate and that security over outputs is properly maintained.

- **Output review controls:** Application system outputs are reviewed for validity, completeness, and accuracy before being distributed to users.
- **Distribution controls:** Distribution of application system outputs is restricted to authorized recipients.
- **End-user controls:** End users review the application system outputs they receive for validity, completeness, and accuracy.

Management Trail Controls: Designed to provide a permanent record of input, processing, and output activity.

- **Transaction logging:** The application system automatically logs the transactions processed.
- **Programmed control logging:** The application system automatically logs the imbedded controls executed during input, processing, and output.
- **Error listing retention:** The error listings generated and remediated during processing are retained.

Due to the increased risk to an organization from cybersecurity threats, additional disclosure reporting regulations for financial reporting have been imposed by the U.S. Securities and Exchange Commission (SEC) effective October 2011. Internal audits of information security controls will help ensure that organizations take a proactive approach to managing cybersecurity risk and adhere to the more stringent SEC reporting requirements.

IMPLICATIONS OF IT FOR INTERNAL AUDITORS

The previous sections of this chapter describe how IT has affected organizations. IT has changed the manner in which organizations formulate strategies, conduct day-to-day operations, and make decisions. These changes have generated new risks and forced organizations to modify their governance, risk management, and control processes. The pervasive impact of IT on organizations has in turn compelled internal auditors to upgrade their IT knowledge and skills and adjust how they perform their work.

IT Proficiency and Due Professional Care

Two Attribute Implementation Standards specifically address the IT proficiency internal auditors must possess and the consideration they must give to using technology-based audit techniques:

> **1210.A3**—Internal auditors must have sufficient knowledge of key information technology risks and controls and available technology-based audit techniques to perform their assigned work. However, not all internal auditors are expected to have the expertise of an internal auditor whose primary responsibility is information technology auditing.
>
> **1220.A2**—In exercising due professional care, internal auditors must consider the use of technology-based audit and other data analysis techniques.

Standards 1210.A3 and 1220.A2 clearly indicate that all internal auditors providing assurance services need at least a baseline level of IT risk, control, and audit expertise. Fundamental IT risk and control concepts that all internal auditors need to understand are discussed in previous sections of this chapter. Technology-based audit techniques, also referred to as data analytics or computer-assisted audit techniques (CAATs), are described in chapter 10, "Audit Evidence and Working Papers." CAATs include generalized audit software (GAS) such as ACL and CaseWare IDEA, access to both of which can be gained via the website access information included in this textbook. GAS is an example of an IT audit tool that internal audit functions are increasingly expecting all staff members to understand and apply effectively. Utility software, test data, application software tracing and mapping, audit expert systems, and continuous auditing are other CAATs described in chapter 10. Chapter 11, "Data Analytics and Audit Sampling," goes into detail regarding the use of data analytics specifically.

In addition, most internal audit functions have some type of automated working paper system such as TeamMate, which is available with this textbook for classroom use. These products facilitate the ability to document, organize, and cross reference internal audit work. Automated working paper systems have significantly improved the documentation aspects of internal audit work by improving the effectiveness and efficiency of the work performed.

Standard 1210.A3 also indicates that every internal auditor need not have the level of IT audit expertise expected of an IT audit specialist. However, because the demand for highly skilled IT auditors continues to exceed the supply, readers with an interest in this area are encouraged to investigate further the competencies and credentials needed to succeed as an IT audit specialist. Such individuals may want to pursue IT control-related certifications to complement their Certified Internal Auditor (CIA) credential. Such certifications include, for example, the Certified Information Systems Auditor (CISA) sponsored by ISACA (www.isaca.org) and the Certified Information Systems Security Professional (CISSP) sponsored by the (ISC)^2 (www.isc2.org).

As is the case with all other areas of relevant expertise, the chief audit executive (CAE) is responsible for ensuring that the internal audit function has the IT proficiency needed to fulfill its assurance engagement responsibilities. Some internal audit functions have a sufficient complement of IT audit experts on staff. Those that do not have such experts on staff look to sources outside the internal audit function for such expertise. In some cases, qualified individuals from other areas of the organization may be asked to assist on internal audit engagements requiring IT competencies that the internal audit function does not have. In other cases, the CAE may hire external service providers with the requisite IT knowledge and skills.

Assurance Engagement IT Responsibilities

Three Performance Implementation Standards specifically address internal auditors' assurance engagement responsibilities regarding information systems and technology:

> **2110.A2**—The internal audit activity must assess whether the information technology governance of the organization supports the organization's strategies and objectives.
>
> **2120.A1**—The internal audit activity must evaluate risk exposures relating to the organization's... information systems...
>
> **2130.A1**—The internal audit activity must evaluate the adequacy and effectiveness of controls in responding to risks within the organization's ... information systems...

These three standards reflect the fact that an internal audit function cannot effectively evaluate governance, risk management, and control processes without giving due consideration to information systems and technology. To fulfill its IT-related responsibilities, an internal audit function must:

- Include the organization's information systems in its annual audit planning process.
- Identify and assess the organization's IT risks.
- Ensure that it has sufficient IT audit expertise.
- Assess IT governance, management, and technical controls.
- Assign auditors with appropriate levels of IT expertise to each assurance engagement.
- Use technology-based audit techniques as appropriate.

IT Outsourcing

Business process outsourcing was introduced in chapter 5, "Business Processes and Risks," as the act of transferring some of an organization's business processes to an outside provider to achieve cost reductions while improving service quality and efficiency. It is for these reasons that organizations are increasingly outsourcing IT functions to vendors that specialize in providing IT services.

IT Outsourcing

Transferring IT functions to an outside provider to achieve cost reductions while improving service quality and efficiency.

As is the case with any kind of outsourcing, IT outsourcing brings with it risks that an organization's board and management must understand and manage. Accordingly, they will seek assurance regarding the information upon which their outsourcing decisions are based. The internal audit function can provide such assurance and, in addition, advise the board and management about the risk and control implications of outsourcing IT.

The board and management also retain responsibility for the controls over the outsourced IT functions and will call upon the CAE to provide them with assurance regarding the design adequacy and operating effectiveness of these controls. Depending on the circumstances, the CAE may rely, to some extent, on the reports of the IT service provider's internal and/or independent outside auditors when formulating a conclusion about the controls over outsourced IT functions. If high-risk IT functions have been outsourced, the CAE should allocate an appropriate level of internal audit resources to testing the controls over those functions. "GTAG: Information Technology Outsourcing" describes in detail some of the key IT outsourcing considerations that warrant the attention of internal audit functions.

Cloud Computing

The practice of using a network of remote servers hosted on the internet to store, manage, and process data.

Cloud computing is the practice of using a network of remote servers hosted on the internet to store, manage, and process data and is an area that has experienced rapid growth and changed the way business operates. It provides capacity on demand, saving companies the expense of undertaking large infrastructure projects to get the same results. This is a good example of the internal audit function having to rely on others to provide assurance that the controls within the cloud computing environment are adequate. Business units often determine that there is a need for an application or technology infrastructure, requiring a significant effort to inventory and understand the variety of related control environments.

Similar to the introduction of other types of technologies, cloud computing solutions that do not include the proper care, due diligence, and controls are bound to cause unforeseen problems. Used appropriately—with the necessary precautions and controls in place as well as an effective risk assessment process—this solution can provide the desired benefits. Cloud computing environments can be established internally or externally to the enterprise and either model can provide for adequate controls if established to address the risks and controls as outlined in the Committee of Sponsoring Organizations of the Treadway Commission's (COSO's) report, *Enterprise Risk Management for Cloud Computing.*

Integrated and Continuous Auditing

Internal audits have historically been conducted retrospectively, for example, after transactions have occurred. This after-the-fact audit approach is rapidly becoming outdated as advances in technology give rise to IT-enabled business processes in which online, real-time processing of transactions is common. Paper-based audit trails of transaction processing and controls are increasingly being replaced with paperless audit trails and imbedded automated controls designed to test the propriety of transactions as they occur. In this information systems environment, direct evidence of transaction processing and controls implementation often is temporary in nature. This means that it is becoming less and less feasible for internal auditors to "audit around the computer" and reach a valid conclusion about the overall effectiveness of controls over financial reporting, operations, and compliance. They must instead "audit through the computer," using CAATs to evaluate IT controls built into the system.

Integrating IT auditing into assurance engagements. The integration of IT controls directly into business processes, together with the availability of user-friendly CAATs, is prompting a growing number of internal audit functions to modify their audit approach. Instead of conducting separate assurance engagements focused strictly on process-level IT risks and controls, these internal audit functions assimilate IT risk and control assessments into assurance engagements conducted to assess process-level financial reporting, operations, and/or compliance risks and controls.

Integrated Auditing

IT risk and control assessments are assimilated into assurance engagements conducted to assess process-level reporting, operations, and/or compliance risks and controls.

Internal audit functions that have adopted this approach are finding that it benefits their organizations by improving both the effectiveness and efficiency of their internal audit assurance services. Integrated assurance engagements are more effective because the internal auditors are in a much better position to assess the auditee's entire risk portfolio and reach an overall conclusion about the design adequacy and operating effectiveness of controls. The audit process is more efficient because 1) engagements previously conducted separately are combined and 2) the identification and assessment of all key risks and controls are consolidated in integrated audit engagements.

Continuous auditing. Continuous auditing is defined in "GTAG: Continuous Auditing: Implications for Assurance, Monitoring, and Risk Assessment" as "any method used by [internal auditors] to perform audit-related activities on a more continuous or continual basis." As described in this GTAG, continuous auditing comprises two main activities:

- *Continuous controls assessment*, the purpose of which is "to focus audit attention on control deficiencies as early as possible," and
- *Continuous risk assessment*, the purpose of which is "to highlight processes or systems that are experiencing higher than expected levels of risk."

Assessment of continuous monitoring is a third integral activity of continuous auditing. As indicated earlier in the chapter, management is responsible for monitoring the organization's risk management process, including the control process, over time to ensure that it continues to operate effectively and efficiently. The internal audit function's continuous audit responsibility is to assess the effectiveness of management's continuous monitoring activities. In areas of the organization in which management has implemented an effective ongoing monitoring process, internal auditors can conduct less stringent continuous assessments of risk and controls. Conversely, if continuous monitoring is nonexistent or ineffective, the internal audit function must perform more rigorous ongoing risk and control assessments.

GTAG

Provides internal auditors with guidance that will help them better understand the governance, risk management, and control issues surrounding IT.

SOURCES OF IT AUDIT GUIDANCE

The IIA has a growing body of IT audit guidance in the form of GTAG Practice Guides. The GTAG Practice Guides "...address timely issues related to information technology (IT) management, control, and security." The GTAGs available when this textbook was published are listed in exhibit 7-1.

IIA members can download Practice Guides free of charge at https://na.theiia.org/standards-guidance/recommended-guidance/practice-guides/. They also can be purchased from the Internal Audit Foundation's Bookstore at http://www.theiia.org/bookstore/. Other IT audit guidance available through The IIA includes:

- Numerous publications, including Foundation handbooks and research monographs, which can be purchased from the Foundation's Bookstore.
- The *IT Audit* portion of *Internal Auditor Online*, which, before January 2009, was a separate online publication of IT audit articles. Both current and archived *IT Audit* articles can be downloaded by anyone at https://iaonline.theiia.org/technology.

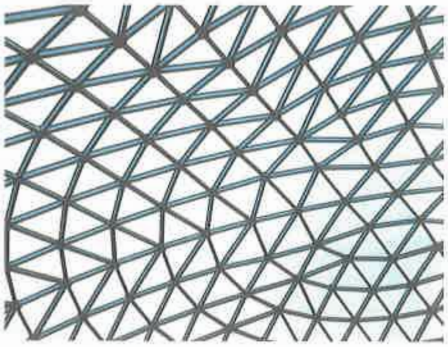
GAIT

Describes the relationships among financial reporting risks, key process controls, automated controls and other critical IT functionality, and key IT general controls.

Many other organizations have published online IT audit information of relevance to internal auditors that is available for downloading. These organizations include, for example:

- The IT Governance Institute (www.isaca.org).
- The IT Compliance Institute (www.isaca.org).
- The IT Process Institute (www.itpi.org).
- ISACA (www.isaca.org).
- International Organization for Standardization (www.iso.org).
- SANS Institute (www.sans.org).
- Network Information Security & Technology (www.nist.org).
- The Information Systems Security Association (www.issa.org).
- The American Institute of Certified Public Accountants (www.aicpa.org).
- The Canadian Institute of Chartered Accountants (www.cica.ca).

Emerging Information Technology Risk Issues



New and emerging information technologies will continue to be introduced at a rapid pace. Typically, these technologies are developed with a business purpose and controls are introduced later to mitigate the associated IT risks. IT advances originating outside the organization can no longer be ignored. As indicated earlier in the chapter, many of the recent IT advances such as smartphones, social media, and cloud computing have an impact on the risk profile of an organization even if it chooses not to employ the technology. It is important for the organization to anticipate technology innovations on the horizon and factor them into their IT risk assessment. The internal audit function can provide valuable insight to the organization on how new technology will impact the future of the organization and how to proactively address the impending risks.

Opportunities for Insight

As discussed throughout the chapter, IT is vital to an organization's success. The internal audit function can provide consulting services that help management deal with new IT risks as they emerge. Exhibit 7-7 describes 10 opportunities for the internal audit function to provide insight regarding IT risks and controls.

EXHIBIT 7-7
10 OPPORTUNITIES FOR THE INTERNAL AUDIT FUNCTION TO PROVIDE INSIGHT ON IT RISKS AND CONTROLS

1. Ensure IT risks are included in the annual risk assessment..
2. Provide insight to new systems development and IT infrastructure projects.
3. Integrate the review of IT in every audit.
4. Understand how IT can enhance internal audit productivity and control process throughout the organization.
5. Provide control recommendations as new technology is deployed.
6. Educate management about emerging IT risks and controls that can be implemented to mitigate those risks.
7. Volunteer to pilot emerging IT projects to provide insight to control issues prior to deployment of new technology.
8. Employ IT specialists as subject matter experts for audit engagements involving extensive IT complexity.
9. Keep management and the board apprised of major IT risks that may impact the organization.
10. Understand new technology that impacts the organization regardless of whether the organization currently employs it.

SUMMARY

The pervasive impact of IT on organizations' strategies, information systems, and processes has significantly affected the internal audit profession, and this chapter covered fundamental IT concepts that every internal auditor needs to understand:

- Six key components of modern information systems—computer hardware, networks, computer software, databases, information, and people—were described and illustrated.
- Opportunities enabled by IT and risk arising as a result of IT were discussed. IT-enabled opportunities include such things as online sales, integration of business processes, and electronic exchange of information between trading partners. Types of risks common across organizations and industries include:
- Selection.
- Development/acquisition and deployment.
- Availability.
- Hardware/software.
- Access.
- System reliability and information integrity.
- Confidentiality and privacy.
- Fraud and malicious acts.

- IT governance was identified as an important subcomponent of overall governance; IT risk management was explained; and IT controls were presented as a top-down hierarchy of IT governance, management, and technical controls.
- The implications of IT for internal auditors were addressed. Internal audit functions need to understand their organizations' information systems and the IT risks that threaten the achievement of their organizations' business objectives. They also must be proficient in assessing their organizations' IT governance, risk management, and control processes and be able to effectively apply technology-based audit techniques.
- Sources of IT audit guidance were identified. The GTAGs were discussed as the key component of The IIA's growing body of IT guidance. Other guidance available through The IIA includes numerous resources that can be purchased through the Internal Audit Foundation's Bookstore and, for current trends and practices, downloaded from the *IT Audit* portion of *Internal Auditor Online*.

In summary, IT has significantly changed the competencies internal auditors must possess and how they conduct their work. An internal audit function's capacity to provide value-adding assurance and consulting services is highly dependent on its IT expertise. All internal auditors need to have a baseline of technology knowledge and skills. This includes automated workpaper systems, data analytics, and IT terminology. The internal audit function can provide insights as to how the organization can best leverage advances in IT.

REVIEW QUESTIONS

1. What are the six components of modern IT described in this chapter?

2. How has IT enabled opportunities? Provide two examples.

3. What are the potential effects (adverse consequences) of each of the following types of IT risk?
   a. Development/acquisition and deployment.
   b. Hardware/software.
   c. System reliability and information integrity.
   d. Fraud and malicious acts.

4. What are typical causes of each of the following types of IT risk?
   a. Selection.
   b. Availability.
   c. Access.
   d. Confidentiality and privacy.

5. How does The IIA define IT governance?

6. How is each of the following COSO enterprise risk management (ERM) components relevant to IT risk management?
   a. Objective setting.
   b. Risk assessment.
   c. Risk response.
   d. Information and communication.

7. What is the difference between general controls and application controls?

8. What should IT governance-level controls (that is, IT policies) address?

9. What are the three types of IT management controls described in the chapter? Provide two examples of each type.

10. What are the three types of IT technical controls described in the chapter? Provide two examples of each type.

11. What is the difference between physical access controls and logical access controls?

12. What two Attribute Implementation Standards specifically address the IT proficiency internal auditors must possess and the consideration they must give to using technology-based audit techniques?

13. What three Performance Implementation Standards specifically address internal auditors' assurance engagement responsibilities regarding information systems and technology?

14. What must an internal audit function do to fulfill its IT-related responsibilities related to effectively evaluating governance, risk management, and control processes?

15. How does IT outsourcing affect the internal audit function?

16. Why has cloud computing been so pervasively adopted? What additional risks are introduced and what can the internal audit function do to assist in evaluating controls in the cloud?

17. In what ways might integrating IT auditing into assurance engagements improve audit effectiveness and efficiency?

18. Continuous auditing involves what three types of assessments?

19. What are the two types of IT-related Practice Guides included in The IIA's International Professional Practices Framework (IPPF)?

20. Give some examples of how cybersecurity can best be implemented through the three lines of defense?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. The software that manages the interconnectivity of the system hardware devices is the:

   a. Application software.
   b. Utility software.
   c. Operating system software.
   d. Database management system software.

2. An internet firewall is designed to provide protection against:

   a. Computer viruses.
   b. Unauthorized access from outsiders.
   c. Lightning strikes and power surges.
   d. Arson.

3. Which of the following best illustrates the use of EDI?

   a. Purchasing merchandise from a company's internet site.
   b. Computerized placement of a purchase order from a customer to its supplier.
   c. Transfer of data from a desktop computer to a database server.
   d. Withdrawing cash from an ATM.

4. The possibility of someone maliciously shutting down an information system is most directly an element of:

   a. Availability risk.
   b. Access risk.
   c. Confidentiality risk.
   d. Deployment risk.

5. An organization's IT governance committee has several important responsibilities. Which of the following is not normally such a responsibility?

   a. Aligning investments in IT with business strategies.
   b. Overseeing changes to IT systems.
   c. Monitoring IT security procedures.
   d. Designing IT application-based controls.

6. If a sales transaction record was rejected during input because the customer account number entered was not listed in the customer master file, the error was most likely detected by a:

   a. Completeness check.
   b. Limit check.
   c. Validity check.
   d. Reasonableness check.

7. The purpose of logical security controls is to:

   a. Restrict access to data.
   b. Limit access to hardware.
   c. Record processing results.
   d. Ensure complete and accurate processing of data.

8. Which of the following statements regarding an internal audit function's continuous auditing responsibilities is/are true?

   I. The internal audit function is responsible for assessing the effectiveness of management's continuous monitoring activities.
   II. In areas of the organization in which management has implemented effective monitoring activities, the internal audit function can conduct less stringent continuous assessments of risks and controls.

   a. Only statement I is true.
   b. Only statement II is true.
   c. Both statements I and II are true.
   d. Neither statement I nor statement II is true.

9. Which of the following is not one of the top 10 technology risks facing organizations?

   a. Cybersecurity.
   b. Use of older technology.
   c. IT governance.
   d. Mobile computing.

MULTIPLE-CHOICE QUESTIONS

10. Requiring a user ID and password would be an example of what type of control?

    a. Detective.

    b. Corrective.

    c. Preventative.

    d. Reactive.

11. Which is NOT a benefit of user-developed applications (UDAs)?

    a. Quick to develop and use.

    b. Readily available and at a low cost.

    c. More configurable and flexible.

    d. Easy to control access to.

12. Which of the following is true about new and emerging technologies?

    a. New technologies have security login controls built into them.

    b. New technologies take time for the users to transition and adapt to the new technology, so training is critical.

    c. New technologies always come from large multinational companies.

    d. New technologies have the best controls embedded in them.

13. Which of the following is the best source of IT audit guidance within the IPPF?

    a. Control Objectives for Information and Related Technologies (COBIT).

    b. GTAG.

    c. National Institute of Standards and Technology (NIST).

    d. ITIL.

14. Which of the following best describes continuous auditing?

    a. Development of computer-assisted audit techniques (CAATs).

    b. Oversight of continuous monitoring.

    c. The use of continuous risk assessment, continuous controls assessment, and assessment of continuous monitoring.

    d. The ability of internal auditors to continually perform auditing steps.

15. When discussing integration of IT into audit engagements, which of the following is the most desirable integration of IT into specific engagements?

    a. Developing and integrating testing of IT controls into process-level audits.

    b. Developing and performing computer audit software steps into process-level audits.

    c. Auditing controls around the computer to make sure the computer controls are working effectively.

    d. Developing and performing computer audit software steps into the process-level audits along with testing of IT controls.

DISCUSSION QUESTIONS

1. a. As stated in the chapter, all internal auditors need at least a baseline level of IT audit-related expertise.

    1. Identify six specific IT-related competencies (that is, knowledge and skills) that all entry-level internal auditors should possess.

    2. Discuss how a college student can begin to develop the knowledge and skills identified in 1.a.1. above.

   b. Must all internal auditors have the level of IT audit-related expertise expected of an IT auditor? Explain.

2. Risk, Inherent Risk, and Fraud are defined in the textbook Glossary as follows:

   Risk—The possibility that an event will occur and adversely affect the achievement of objectives.

   Inherent Risk—The combination of internal and external risk factors in their pure, uncontrolled state, or the gross risk that exists, assuming there are no internal controls in place.

   Fraud—Any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage.

   IT Fraud and Malicious Acts Risk is defined in this chapter as follows:

   IT Fraud and Malicious Acts Risk—Theft of IT resources, intentional misuse of IT resources, or intentional distortion or destruction of information may result in financial losses and/or misstated information that decision-makers rely upon. Causes of fraud and malicious acts risk include, for example, disgruntled employees and hackers intent on harming the organization for personal gain.

   With the definitions presented above as the backdrop, identify six specific inherent IT fraud and malicious acts risk events that could occur and cause harm to an organization.

3. Search for the white paper, "The Risk Intelligent IT Internal Auditor" on the Deloitte United States website (www.deloitte.com). Download and read the white paper.

   a. What characterizes a "Type 1: Drifting Along" IT internal audit group?

   b. What issues characterize a:

    1. "Type 2: Getting Aloft" IT internal audit group?

    2. "Type 3: Flying High" IT internal audit group?

4. Change management controls are a type of IT organization and management controls, which are a subset of IT management-level (general) controls.

   a. What are change management controls?

   b. Assume that an organization's change management controls pertaining to application software are ineffective. What impact would this have on the reliance that management can place on application-based controls?

   c. Assume instead that the organization's change management controls pertaining to application software are effective. Assume further that the internal audit function determined that the controls imbedded in the purchasing process application software were designed adequately and operating effectively last year. What impact would this have on this year's internal audit testing of the controls imbedded in the purchasing process application software?

   d. Based on the answers to 4.b. and 4.c. above, what general conclusion can be reached about the relationship between IT management-level (general) controls and application-based controls?

5. Download *COBIT® 5: A Business Framework for the Governance and Management of Enterprise IT* from the ISACA website (www.isaca.org). (Note: The framework will be sent to you via email when you request it at www.isaca.org/COBIT/Pages/Cobit-5-Framework-product-page.aspx.). Read the Executive Summary (pages 13–14).

DISCUSSION QUESTIONS

a. What does the Executive Summary say about information and IT?

b. What is the purpose of COBIT® 5?

c. What are the five COBIT 5 principles?

d. Per COBIT 5, what is the difference between governance and management?

6. Visit www.webtrust.org. Read the "Overview of Trust Services" and the following paragraphs of "Principles and Criteria":

   - Introduction (paragraphs .01–.18).
   - Paragraph .19, which provides a description of the security principle.
   - Paragraphs .21–.22, which provide a description of the availability principle.
   - Paragraphs .24–.26, which provide a description of the processing integrity principle.
   - Paragraphs .28–.31, which provide a description of the confidentiality principle.
   - Paragraphs .33–.44, which provide a description of the privacy principle.

a. What are Trust Services? What is the WebTrust service? What is the SysTrust service?

b. What are Trust Services principles, criteria, and illustrative controls?

c. How is "system" defined?

d. What is the *security* principle?

e. What is the *availability* principle?

f. What is the *processing integrity* principle? What is the difference between *processing integrity* and data integrity?

g. What is the *confidentiality* principle? What kinds of information may be subject to confidentiality?

h. What does "privacy" mean? What are some examples of "personal information?" What are some examples of "sensitive personal information?" What is the difference between privacy and confidentiality? What is the privacy objective? What are the 10 generally accepted privacy principles?

CASES

CASE 1

MVF Company manufactures engine parts for lawn mowers, snow blowers, and other types of yard care equipment. The company employs approximately 300 production employees. Production employees alternate back and forth between two shifts and are sometimes asked to work overtime.

MVF's CAE has asked Alyssa Worcshard, a first-year internal auditor, to gather information about the controls over the company's production payroll process. Worcshard reviewed the process, interviewed selected personnel, and documented the following information about the process.

The personnel department prepares a personnel action form when a production employee is hired or terminated. Action forms also are used to document personnel changes such as changes in pay rates, deductions, employee names, employee addresses, etc. A personnel department employee keys the information from the action forms into the computer each week to update the personnel master file.

Production employees use a time clock to record the hours they work. At the end of each week, production supervisors collect the time cards, verify the number of hours worked for each employee, and document the total number of hours worked on each employee's time card. Each supervisor also counts the number of time cards collected and emails the count to MVF's treasurer.

Every Monday morning, a payroll employee collects the previous week's time cards from the production supervisors, sorts them by employee number, recalculates the total hours on each time card, keys the data from the time cards into the computer, and processes the production payroll. The system automatically assigns a sequential number to each payroll check produced. Blank checks are stored in a box next to the printer for immediate access. Controls are imbedded in the payroll application software to detect invalid employee numbers, unreasonably high numbers of hours worked, etc. The computer also determines whether overtime has been worked or a shift differential is required. Invalid data is printed on an error listing.

The payroll employee then:

- Prints the payroll register and payroll checks.
- Separates the checks into a valid batch and a batch of those that were included in the error listing.
- Uses the results of the payroll check run to update the employee earnings master file.
- Prepares the weekly payroll journal entry and posts the entry to the general ledger.
- Notifies the payroll manager that the weekly processing of payroll transactions has been completed.

The payroll manager prepares a backup of the employee earnings master file, which is stored on the system in the computer room and backed up in a cloud environment.

The valid and invalid batches of payroll checks are sent directly to MVF's treasurer. The treasurer agrees the number of valid checks received with the total number of time cards emailed by the production supervisors, signs the valid checks, and shreds the invalid checks. The treasurer stores the signed checks in the safe until they are given to the production supervisors for distribution on Friday. If an employee is absent when the checks are distributed, the supervisor returns the unclaimed check to the treasurer who keeps it in the safe until the employee comes to get it.

A. Based on the information presented above, and taking into consideration both manual and automated controls, describe the:
   1. Control strengths in MVF Company's payroll process.
   2. Control deficiencies in MVF Company's payroll process.
B. MVF Company's senior management, including the CAE, realizes that the company's payroll process needs to be upgraded.
   1. Brainstorm ideas as to how the company could more effectively leverage IT to improve the payroll process.
   2. Discuss the risk and control implications of the ideas generated in B.1.

CASES

CASE 2

KnowledgeLeader Practice Case: Cybersecurity

Background Information

Cybersecurity is an ever-increasing risk. In fact, leaders in the profession have identified cybersecurity as the number one technology risk, which is consistent with the findings in The IIA's 2015 Common Body of Knowledge (CBOK) study, *Navigating Technology's Top 10 Risks: Internal Audit's Role.*

The term "cybersecurity" refers to the technologies, processes, and practices designed to protect an organization's information assets—computers, networks, programs, and data—from unauthorized access.

The proliferation of technology today enables more user access to an organization's information than ever before. Third parties are increasingly provided access to organizational information through the supply chain, customers, and service providers. A greater variety of data has become readily available as organizations often store large volumes of sensitive and confidential information in virtualized infrastructure accessible through cloud computing. There is an increasing number of devices that can be connected and always engaged in data exchange. As organizations globalize and the organization's web of employees, customers, and third-party providers expands, expectations for constant access to the organization's information also increases.

Cyberattacks are perpetuated for varied reasons, including but not limited to financial fraud, information theft or misuse, activist causes, to render computer systems inoperable, and to disrupt critical infrastructure and vital services of a government or organization. Five common sources of cyber threats include nation-states, cybercriminals, hacktivists, insiders and service providers, and developers of substandard products and services.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and identify/discuss alternative approaches to implementing effective cybersecurity.

C. Submit a brief write-up indicating the results of your research to your instructor.

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CHAPTER 8

Risk of Fraud and Illegal Acts

LEARNING OBJECTIVES

- Understand the prevalence of illegal acts and fraud in today's world.
- Compare and contrast various illegal acts/fraud definitions.
- Describe the fraud triangle and its three elements, and "dark triad" personalities.
- Define the types of fraud and fraud risk factors.
- Define governance, risk management, and control in the context of fraud.
- Describe fraud prevention, deterrence, and detection techniques.
- Understand the behavioral aspects of fraudsters.
- Describe internal auditors' compliance and fraud-related responsibilities related to protecting the organization from regulatory violations.
- Understand evolving responsibilities of the internal audit function, including the involvement of forensic accountants, forensic data analysts, and fraud examination specialists.

One of the most significant risks faced by organizations continues to be the risk of fraud. When fraud surfaces—whether committed by individual employees, collusion among multiple employees, executive management, or outside third parties—the afflicted organization may incur not only significant financial losses but also serious reputational damage. In many cases, the occurrence of fraud at a public company quickly leads to precipitous declines in stock prices and market capitalization, and may be an early indicator of financial distress. Indeed, fraud and financial distress seem to relate to each other in a "chicken-and-egg" sort of way: fraud can lead to financial distress, but financial distress frequently fuels fraud. Given the serious economic consequences of fraud, senior management and governing boards are increasingly stressing antifraud programs and controls to address key business, regulatory compliance, and marketplace drivers. This renewed global focus on corporate governance and fraud deterrence comes from a realization that fraudulent financial reporting could easily cause an organization to fail.

Illegal acts are activities that violate laws and regulations of particular jurisdictions where a company is operating. Recently, the U.S. Department of Justice has stepped up its efforts in prosecuting companies that have violated provisions of the U.S. Foreign Corrupt Practices Act of 1977 (FCPA). The UK Bribery Act of 2010 is far more comprehensive than the FCPA (as amended) in that the U.K. requirements cover both domestic and foreign bribery acts. The 2016 Global Overview of Anti-Bribery Laws Handbook offers an excellent overview of the relevant anti-bribery laws in 46 jurisdictions regulating domestic bribery covering both private-to-public and public-to-private and corruption of foreign public officials. The handbook also provides practices to mitigate the potential criminal liabilities as well as administrative and reputational risks associated with bribery and corruption.

Internal auditors at major corporations often take the lead to ensure compliance with regulatory matters. The first steps usually include completion of a fraud risk assessment. There has also been an increase in the adoption of new roles within many organizations, such as chief compliance officer (CCO) and chief risk officer (CRO). The internal audit function may work closely with the individuals in these new roles. In addition, some chief audit executives (CAEs) may now have the compliance function report to them. As always, in such circumstances, the CAE should carefully navigate around any potential independence or objectivity concerns.

This chapter starts by comparing and contrasting different definitions of fraud to illustrate the different ways in which fraud can be viewed. Next, the fraud triangle is explored as a means of understanding the key factors that must be present for fraud to occur. This chapter then outlines key principles for a fraud prevention and detection program. Having a good understanding of these principles will lay the foundation for the role an internal audit function can play in such a program. The discussion then moves to the role that a strong fraud prevention and detection program can have in supporting the governance structure. This naturally leads to the importance of a fraud risk assessment, and how this assessment enables an organization to develop preventive and detective fraud controls, in particular by leveraging advances in forensic data analytics. Finally, the implications fraud has on the role and focus of the internal audit function are explored. The IIA's *International Standards for the Professional Practice of Internal Auditing* makes several references to the internal audit function's fraud-related responsibilities.

OVERVIEW OF FRAUD IN TODAY'S BUSINESS WORLD

Fraud is not limited to only certain countries or industries. It can arise in virtually any organization at any time. At the dawn of the twenty-first century, the large accounting scandals in the U.S. (for example, Enron and World Com) were headline news across the globe. These corporate scandals not only cost

EXHIBIT 8-1
IPPF GUIDANCE RELEVANT TO CHAPTER 8

Standard 1210 - Proficiency

Standard 1220 - Due Professional Care

Standard 2060 - Reporting to Senior Management and the Board

Standard 2110 - Governance

Standard 2120 - Risk Management

Standard 2210 - Engagement Objectives

investors billions of U.S. dollars, they resulted in a loss of confidence in the U.S. capital markets. This prompted the passage of the U.S. Sarbanes-Oxley Act of 2002, which was intended to enhance corporate governance and restore investor confidence in the capital markets. The response around the world was swift, and many countries followed the lead provided by Sarbanes-Oxley as noted below:

- CANADA: C-SOX - Canadian equivalent of Sarbanes-Oxley.
- GERMANY: German Corporate Governance Code - 2002 German corporate governance code.
- SOUTH AFRICA: King Report on Corporate Governance - 2002 South African corporate governance code, with the King IV Report released on November 1, 2016, and taking effect beginning April 2017.
- THE NETHERLANDS: Code Tabaksblat - 2003 Dutch governance code, based on "comply or explain.
- FRANCE: Financial Security Law of France ("Loi sur la Sécurité Financière") - 2003 French equivalent of Sarbanes-Oxley.
- AUSTRALIA: Corporate Law Economic Reform Program Act 2004 - 2004 Australian corporate reporting and disclosure law.
- INDIA: Clause 49 - 2005 Indian corporate governance clause.
- ITALY: Italian Law 262/2005 ("Disposizioni per la tutela del risparmio e la disciplina dei mercati finanziari").
- JAPAN: J-SOX - 2006 Japanese equivalent of Sarbanes-Oxley.
- TURKEY: TC-SOX 11 Turkish equivalent of Sarbanes-Oxley.
- For a comprehensive list of governance codes from around the world, consult http://www.ecgi.org/codes/all_codes.php.[1]

The 2016 Global Internal Audit Common Body of Knowledge (CBOK) Practitioner Survey report, "Promoting and Supporting Effective Organizational Governance: Internal Audit's Role," discusses internal audit's role in terms of assurance and advisory engagements that are designed to result in superior governance outcomes for all types of organizations.[2]

EXHIBIT 8-2
INTERNATIONAL EXAMPLES OF FRAUD

In January 2009, B. Ramalinga Raju, chairman of Satyam Computer Systems, the fourth largest technology outsourcing company from India, made a startling and very public confession. In addition to furnishing details of inflating facts and figures over an extended period of time, he lamented that despite the concerted efforts to cook the books, the gap between actual profits and those reported in the books of accounts remained, ruefully noting that, "It was like riding a tiger, not knowing how to get off without being eaten."[1] After having led the outsourcing company for two decades, possessing over 100 of the Fortune 500 companies as clients, and being a successful business leader representing India at the Davos World Economic Forum Summit, Mr. Raju's revelations raised uncomfortable questions about corporate governance in India. The Central Bureau of Investigation (CBI)—similar to the Federal Bureau of Investigation (FBI) in the U.S.—that looks into India's most serious and complex crimes, filed documents in a court in Hyderabad, India, in April 2009 that lay out what it alleges are the outlines of a scandal that has become known as "India's Enron."

The CBI alleges that Mr. Raju, two of his brothers, and four other Satyam executives committed the fraud by forging more than 7,000 fake invoices and dozens of bogus bank statements to inflate Satyam's earnings. It all started when, in December 2008, Mr. Raju attempted to accomplish unrelated diversification of Satyam's business by combining with related parties—he sought to acquire Maytas Properties and Maytas Infra, companies led by his sons. Institutional investors globally objected to this brazen strategy of browbeating Satyam's Board of Directors into acquiescing with the chairman's wishes—most of the board resigned even before Raju's confession (the global company with some 53,000 employees in 66 countries is listed on the Bombay Stock Exchange, India; the Amsterdam Stock Exchange, the Netherlands; and the New York Stock Exchange, USA).

The two audit partners, S. Gopala Krishnan and Srinivas Talluri, who have been suspended from PriceWaterhouse, the Indian audit arm of PricewaterhouseCoopers (PwC), received certificates of deposit from Satyam's banks that were in "great variance with the figures provided by the company's management" but signed off on the fudged accounts anyway, the CBI claimed.[2] Mr. Krishnan and Mr. Talluri are in prison in Hyderabad, along with the others who were accused.

The CBI further alleged that the auditors received several times the market rate for the audit work they carried out for Satyam. Since January, furious investors have been demanding to know how the auditors missed a systematic fraud that also severely dented confidence in India's regulatory bodies. Interestingly, news articles in India make no reference to the existence of an internal audit function at Satyam Computer Services.

The CBI's case may impact the potentially enormous legal liabilities to which Satyam is exposed, including a potential class-action lawsuit from U.S. and other global investors. It also has implications for how the other large IT outsourcing companies from India such as Infosys, Wipro, Tata Consultancy Services, and others strengthen their own internal controls and corporate governance structures and mechanisms, including internal audit functions.

On April 13, 2009, Tech Mahindra, the IT group partly owned by BT (British Telecom), agreed to buy Satyam despite the full nature of the scandal remaining a mystery. The sale, conducted by auction and facilitated by the Indian government, valued Satyam at about £670 million and will transform Tech Mahindra into an outsourcing group employing about 75,000 people.

Other noteworthy examples of massive financial frauds outside the United States include: wholesale fraud at the Bank of Credit and Commerce International (BCCI), based in the United Kingdom; the multibillion dollar fraud at Parmalat, the Italian dairy giant; numerous financial statement re-statements at Nortel Networks, one of Canada's largest companies, that eventually filed for bankruptcy; the corporate governance failure at Olympia, a Japanese medical devices company whose senior executives systematically hid losses through sudden and unrelated acquisitions; bribery and corruption "on an unprecedented scale and geographic reach" of government officials worldwide by the Siemens Group in Germany; the facilitation of tax evasion by clients of UBS of Switzerland, the largest money manager in the world for the wealthy (note that tax evasion is not illegal in Switzerland); the Dutch food service giant, Royal Ahold NV, engaged in widespread earnings manipulation and securities fraud; and the years of fraudulent financial reporting at Kanebo, a giant cosmetics and textiles company in Japan.

[1] *Source:* B. Ramalinga Raju's memo from January 7, 2009, addressed to Satyam Computer Systems' Board of Directors.

[2] The references to the CBI report on Satyam have been culled from the online newsletter available to members of the Institute of Chartered Accountants of India (April 2009).

Clearly, the driving factor behind such regulatory interest is to preserve market confidence by directly addressing and mitigating the risk of fraudulent financial reporting. Examples of fraud that led to this emphasis on improved corporate governance outside the United States are presented in exhibit 8-2.

The Association of Certified Fraud Examiners (ACFE) conducts a biannual survey of its members and prepares a *Report to the Nations on Occupational Fraud & Abuse* (*Report to the Nations*). The latest 2016 report spans 114 countries and thus provides insights into the role of fraud across the world. The 2016 *Report to the Nations* is based on data compiled from 2,410 cases of occupational fraud from a wide range of industries that were investigated from January 2014 to October 2015. Fraud continues to be a major concern for organizations worldwide, with more than one-fifth of fraud incidents causing losses of at least $1 million in 2014–2015.[3]

Certified Fraud Examiners

Individuals certified as specialists in conducting forensic accounting investigations and advising on fraud risks and other fraud matters.

Information from these cases was reported by the certified fraud examiners (CFEs) who investigated the cases. The 2016 report summarized the following findings:

- Participants in the survey estimated that organizations lose 5 percent of their annual revenues to fraud. Applied to the 2014 Gross World Product (GWP), this figure translates to a potential projected annual fraud loss of more than $3.7 trillion.
- Occupational fraud schemes tend to be extremely costly. The median loss caused by the occupational frauds in this study was $150,000.
- Asset misappropriation was by far the most common form of occupational fraud, occurring in more than 83 percent of cases, but causing the smallest median loss of $125,000. Financial statement fraud was on the other end of the spectrum, occurring in less than 10 percent of cases but causing a median loss of $975,000. Corruption cases fell in the middle, with 35.4 percent of cases and a median loss of $200,000.
- Not surprisingly, the longer a fraud lasted, the greater the financial damage it caused. While the median duration of the frauds in this study was 18 months, the losses rose as the duration increased. At the extreme end, those schemes that lasted more than five years caused a median loss of $850,000.
- The most common detection method was tips (39.1 percent of cases), and organizations that had reporting hotlines were much more likely to detect fraud through tips than organizations without hotlines (47.3 percent compared to 28.2 percent, respectively).
- The most prominent organizational weakness that contributed to the frauds in the study was a lack of internal controls, which was cited in 29.3 percent of cases, followed by an override of existing internal controls, which contributed to just more than 20 percent of cases.
- The perpetrator's level of authority was strongly correlated with the size of the fraud. The median loss in a scheme committed by an owner/executive was $703,000. This was more than four times higher than the median loss caused by managers ($173,000) and nearly 11 times higher than the loss caused by employees ($65,000).

Corruption

Acts in which individuals wrongfully use their influence in a business transaction in order to procure some benefit for themselves or another person, contrary to their duty to their employer or the rights of another (for example, kickbacks, self-dealing, or conflicts of interest).

- More occupational frauds originated in the accounting department (16.6 percent) than in any other business unit. Of the frauds analyzed, more than three-fourths were committed by individuals working in seven key departments: accounting, operations, sales, executive/upper management, customer service, purchasing, and finance.
- The more individuals involved in an occupational fraud scheme, the higher losses tended to be. The median loss caused by a single perpetrator was $85,000. When two people conspired, the median loss was $150,000; three conspirators caused $220,000 in losses on average; four caused an average loss of $294,000; and for schemes with five or more perpetrators, the median loss was $633,000.
- Fraud perpetrators tended to display behavioral warning signs when they were engaged in their crimes. The most common red flags were living beyond means, financial difficulties, unusually close association with a vendor or customer, excessive control issues, a general "wheeler-dealer" attitude involving unscrupulous behavior, and recent divorce or family problems. At least one of these red flags was exhibited during the fraud in 78.9 percent of cases.
- Most occupational fraudsters are first-time offenders. Only 5.2 percent of perpetrators in this study had previously been convicted of a fraud-related offense, and only 8.3 percent had previously been fired by an employer for fraud-related conduct.
- In 40.7 percent of cases, the victim organizations decided not to refer their fraud cases to law enforcement, with fear of bad publicity being the most-cited reason.[4]

The key point to reinforce here is that no organization is immune to fraud. It can occur in both large and small organizations, and in any country or industry. As long as human beings, with their inherent frailties, are involved in organizations, the risk of fraud is real.

Common Fraud Perpetrator Red Flags:

– Living beyond their means
– Experiencing financial difficulties
– Excessive organizational pressure

DEFINITIONS OF FRAUD

While most individuals have a general understanding of fraud and can probably provide one or more examples, defining it is not so easy. Since most types of fraud are illegal, it is appropriate to start with a legal-focused definition. Exhibit 8-3 provides such a definition from the authoritative *Black's Law Dictionary*, which speaks of "one individual taking unfair advantage of another." In a world awash with social media outlets such as Facebook and Twitter, it is reasonable to ask whether we will see more collusive fraud in the coming years with groups of actors such as insider trading rings, the LIBOR rigging scandal, hacker networks, etc.

There are many other definitions of fraud that represent the perspective of both internal and independent outside auditors. Organizations representing auditors as well as fraud examiners have attempted to define fraud and delineate the roles and responsibilities of their respective member constituency. The updated Committee of Sponsoring Organizations of the Treadway Commission's (COSO's) Fraud Risk Management Guide, produced in collaboration with the ACFE, released in September 2016, contains the following definition:

> Fraud is any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving a gain.[5]

EXHIBIT 8-3
BLACK'S AUTHORITATIVE DEFINITION OF FRAUD

Fraud is a legal term and frequently involves a legal determination to be made, so the broad definition from *Black's Law Dictionary* may be the most appropriate to consider in this context:

> "[Fraud is] a generic term, embracing all multifarious means which human ingenuity can devise, and which are resorted to by one individual to get advantage over another by false suggestions or by suppression of truth, and includes all surprise, trick, cunning, dissembling, and any unfair way by which another is cheated... Elements of a cause of action for "fraud" include false representation of a present or past fact made by defendant, action in reliance thereupon by plaintiff, and damage resulting to plaintiff from such misrepresentation."

Source: Black's Law Dictionary, 1979, p. 594.

Each of the COSO sponsoring organizations has its own definition, reflecting their specific perspectives on fraud. These definitions are shown in exhibit 8-4.

The IIA's definition is probably the broadest, referring to "Any illegal act characterized by deceit, concealment, or violation of trust." This definition is consistent with the broad role of an internal audit function within an organization. The IIA's definition goes on to cite the types of perpetrators and the potential advantages such individuals may gain. Once again, it is evident how broadly The IIA views the internal audit function's role within an organization. Many aspects of this definition will be discussed in later sections of this chapter.

Fraud

Any illegal act characterized by deceit, concealment, or violation of trust. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage.

The American Institute of Certified Public Accountants' (AICPA's) definition is, not surprisingly, much narrower. It specifically focuses on "misstatements arising from fraudulent financial reporting and misstatements arising from misappropriation of assets." Given the public accounting profession's primary focus on the financial statement audit, now expanded in the United States and other countries to include an audit of internal control over financial reporting, it is not surprising that the AICPA discusses the concept of fraud by evaluating its relation to, and effect on, the organization's financial statements. Refer to exhibit 8-5 where the standards relating to independent outside auditors are outlined.

Fraudulent financial reporting involves intentional misstatements or omissions of amounts or disclosures in financial statements designed to deceive financial statement users. The nature of these misstatements or omissions is the failure of the financial statements to be presented, in all material respects, in conformity with Generally Accepted Accounting Principles (GAAP). Fraudulent financial reporting can be accomplished by:

- Manipulating, falsifying, or altering accounting records or supporting documents from which the financial statements are prepared.
- Misrepresenting, or intentionally omitting from, the financial statements events, transactions, or other significant information.
- Intentionally misapplying accounting principles relating to amounts, classification, manner of presentation, or disclosure.

EXHIBIT 8-4
DIFFERENT DEFINITIONS OF FRAUD

The Institute of Internal Auditors (IIA)

(From the Glossary to its *Standards* in the International Professional Practices Framework)

Any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage.

The American Institute of Certified Public Accountants (AICPA)

(From Statement on Auditing Standard No. 99, now codified as AU-C 240)

...fraud is an intentional act that results in a material misstatement in financial statements that are subject to an audit. The two types of misstatements [are] . . . misstatements arising from fraudulent financial reporting and misstatements arising from misappropriation of assets.

Association of Certified Fraud Examiners (ACFE)

(From the 2016 *Report to the Nations*)

The use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets.

Misstatements arising from misappropriation of assets (sometimes referred to as pilferage, embezzlement, or defalcation) involve the theft of an organization's assets in which the effect of the theft causes the financial statements not to be presented, in all material respects, in conformity with GAAP. Misappropriation of assets can be perpetrated in various ways, including embezzling receipts, stealing assets, or causing an entity to pay for goods or services that have not been received. Misappropriation of assets may be accompanied by false or misleading records or documents, or suppressing evidence, possibly created by circumventing internal controls. Frequently, collusion with other employees or third parties also may be involved.

Misappropriation of Assets:

– Pilferage
– Embezzlement
– Defalcation

The ACFE's definition focuses on occupational fraud, that is, fraud in the workplace. Occupational fraud encompasses a wide range of misconduct by employees, managers, and executives. Occupational fraud schemes can be as simple as petty cash theft or as complex as fraudulent financial reporting. Four elements seem to characterize the incidence of occupational fraud. Such an act:

- Is clandestine (that is, secretive and suspicious).
- Violates the perpetrator's fiduciary duties to the victim organization.
- Is committed for the purpose of direct or indirect financial benefit to the perpetrator.
- Costs the employing organization assets, revenues, or reserves.

The ACFE's Occupational Fraud and Abuse Classification System, also called "The Fraud Tree," describes three main types of fraud: fraudulent statements, which generally involve falsification of an organization's financial statements (for example, overstating revenues and understating liabilities and expenses); asset misappropriation, which involves the theft or misuse of an organization's assets (for example, skimming revenues, stealing inventory, or payroll fraud); and corruption, in which fraudsters wrongfully use their influence in a business transaction to procure some benefit for themselves or another person, contrary to their duty to their employer or the rights of another (for example, kickbacks, self-dealing, or conflicts of interest). Refer to exhibit 8-6 for this classification system.

EXHIBIT 8-5 FRAUD REQUIREMENTS OF INDEPENDENT OUTSIDE AUDITORS

U.S. Public Companies

The Public Company Accounting Oversight Board (PCAOB) promulgates standards that guide the issuance of opinions covering the financial statements of public companies in the U.S. Specific to fraud, the PCAOB standards state in AU Section 110.02 *Responsibilities and Functions of the Independent Auditor*, "The auditor has a responsibility to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud." The PCAOB standards address fraud more specifically in AU Section 316, *Consideration of Fraud in a Financial Statement Audit* (now re-organized as AS 2401), the source of which is the AICPA Statement of Auditing Standard (SAS) No. 99, now codified as AU-C 240 in the AICPA's Professional Standards.

U.S. Non-Public Companies

Since the PCAOB's authority covers only those audits conducted for U.S. public companies, non-public companies continue to follow the AICPA's standards. AU-C 240, *Consideration of Fraud in a Financial Statement Audit*, states that "... [independent outside] auditors are responsible for planning and performing an audit to obtain reasonable assurance about whether the financial statements are free of material misstatements whether caused by error or fraud." Specifically, AU-C 240 contains the following additional guidance for (independent outside) auditors in the U.S.:

- Increased emphasis on fraud awareness and professional skepticism
- Audit engagement team discussion ("brainstorming session")
- Gathering information needed to identify the risk of material misstatement due to fraud
- Summarizing identified fraud and the auditor's planned response
- Mandatory audit procedures to address the risk of management override of internal control activities
- Evaluating audit results
- Communications about fraud with management, audit committee, and others

Non-U.S. Companies

The International Auditing and Assurance Standards Board issued International Standard on Auditing (ISA) 240, *The Auditor's Responsibility to Consider Fraud in an Audit of Financial Statements*, which states, "In planning and performing the audit to reduce audit risk to an acceptably low level, the auditor should consider the risks of material misstatements in the financial statements due to fraud." ISA 240 provides additional guidance that is similar to that discussed above in AU-C 240.

Fraudulent Financial Reporting

Acts that involve falsification of an organization's financial statements (for example, overstating revenues, understating liabilities and expenses).

Internationally, the pertinent standard furnishing guidance for auditors is International Standard on Auditing (ISA) No. 240: The Auditor's Responsibility Relating to Fraud and Error in an Audit of Financial Statements, issued by the International Federation of Accountants (IFAC). Although this standard applies primarily to independent outside auditors, its contents and guidance are relevant to internal auditors as well.

Each of these fraud definitions supports the focus of the professional organization that created it. However, since several of these organizations worked together to issue the recently released 2016 COSO Fraud Risk Management Guide, the definition used in the guide, specifically that "Fraud is any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving a gain,"[6] will serve as the basis for discussion throughout the rest of this chapter.

THE FRAUD TRIANGLE

An important conceptual framework in understanding fraud is Cressey's Fraud Triangle, loosely based on what police officers and detectives have referred to as "means, motives, and opportunity." First conceived by sociologist Donald Cressey, and widely disseminated by the ACFE, the fraud triangle has three components: perceived need/pressure, perceived opportunity, and rationalization of fraudulent behavior. Exhibit 8-7 is a visual representation of these three components.

The fraud triangle highlights the three elements that may be called the "root causes of fraud." Fraud perpetrators want to relieve real or perceived pressure (for example, generating the attitude that when you can't "make" the numbers, you just "make up" the numbers), they need to see ample opportunity so that they can carry out the fraud with ease (for example, nobody's watching the store, the employee is trusted completely and unlikely to get caught), and most importantly, they need to rationalize their action as acceptable (for example, I'm doing it for the good of the company). Rationalization allows fraud perpetrators to believe that they have done nothing wrong and are "normal people." Specifically, fraud perpetrators must be able to justify their actions to themselves as a psychological coping mechanism to deal with the inevitable "cognitive dissonance" (that is, a lack of congruence between their own perception of being honest and the deceptive nature of their action or behavior). Said another way, they need excuses. A typical list includes:

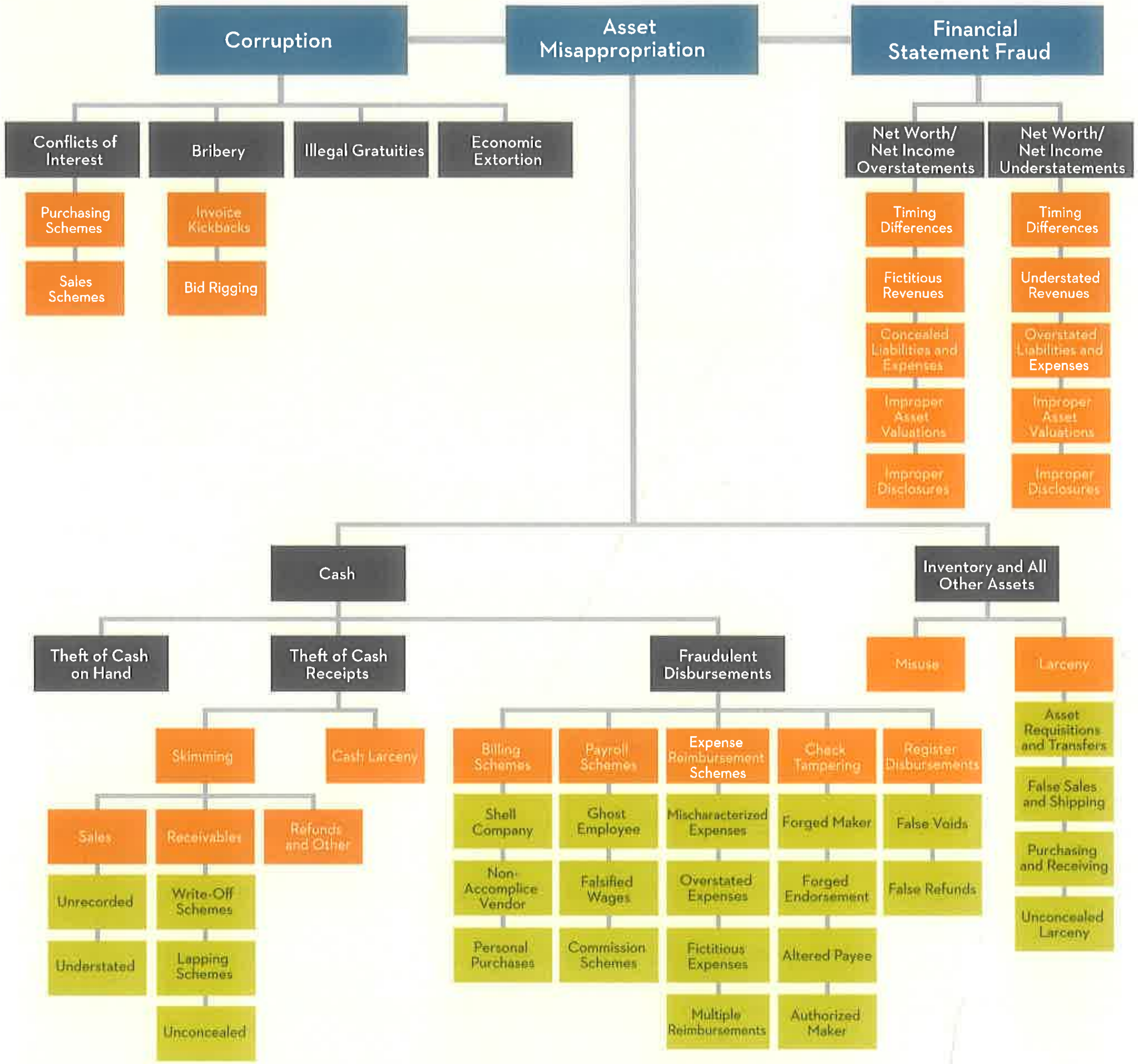
- Everyone's doing it, so I am no different.
- Taking money from the cash till was just a temporary "borrowing." The money will be returned when the gambling/betting winnings materialize.
- The employer is underpaying me, so I deserve these "perks" as reasonable compensation, and the company can certainly afford it.
- I am not hurting anyone—in fact, it's for a good cause!
- It is not really a serious matter.

Occupational Fraud

Fraud in the workplace:
– Falsification of financial statements
– Asset misappropriation
– Corruption

Consider a couple of examples. A furniture store employee stealing inventory may be taking advantage of weak internal controls (perceived opportunity), the need to furnish his new apartment with nice furniture instead of the "junk" he can afford with his meager salary (perceived pressure from spouse), and using the rationalization

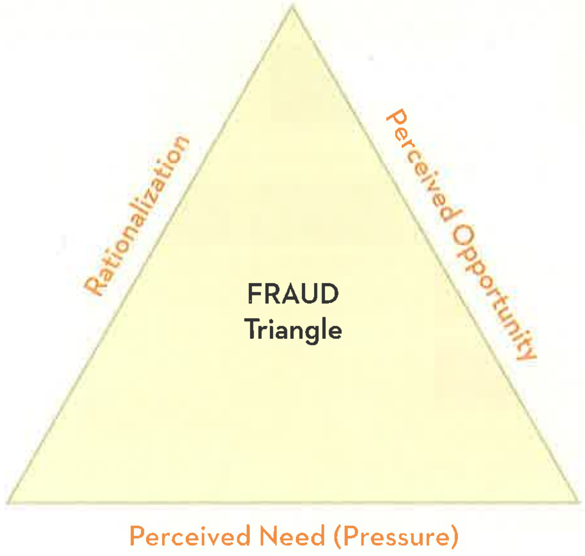
EXHIBIT 8-6
THE ACFE'S OCCUPATIONAL FRAUD AND ABUSE CLASSIFICATION SYSTEM



Source: ACFE, *Report to the Nations on Occupational Fraud and Abuse* (Association of Certified Fraud Examiners, 2016).

that other store employees are probably stealing too (whether or not this is a fact). In the case of management fraud, the perceived pressure may be to meet earnings targets so that bonuses can be lavish and the stock price can get boosted, the opportunity may be weak financial reporting controls and/or an inactive audit committee, and the rationalization may be that "this is in the organization's best interest and therefore an appropriate use of 'cookie jar reserves' created earlier to get over a temporary hump." Although the fraud triangle is a powerful conceptual tool, there

EXHIBIT 8-7
THE FRAUD TRIANGLE



Source: Cressey, D.R., *Other People's Money: A Study in the Social Psychology of Embezzlement* (Glencoe, IL: The Free Press, 1986).

may be other personality factors that do not fit easily into those three categories, particularly the potentially abnormal or deviant personality of fraud perpetrators.[7] (Regarding fraudster personality, see the discussion on "dark triad" personalities under the section on "Understanding Fraudsters" later in the chapter.)

KEY PRINCIPLES FOR MANAGING FRAUD RISK

The 2016 COSO Fraud Risk Management Guide emphasizes how important it is for organizations to establish rigorous and ongoing efforts to protect themselves from acts of fraud. It begins with principle 8 (one of the risk assessment component principles) in the 2013 COSO *Internal Control - Integrated Framework*:

> Principle 8: The organization considers the potential for fraud in assessing risks in the achievement of objectives.

The COSO Guide goes on to outline five core principles summarized in exhibit 8-8 that organizations would be well-advised to follow.

Fraud Risk Governance (Principle 1)

As discussed in chapter 3, "Governance," it is important for organizations to develop a strong governance structure to oversee risk management and other activities that are in place to help ensure achievement of business objectives. "Fraud risk governance is an integral component of corporate governance and the internal control environment [and] addresses the manner in which the board of directors and management meet their respective obligations to achieve the organization's goals, including its fiduciary, reporting, and legal responsibilities to stakeholders."[8]

Governance

The combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives.

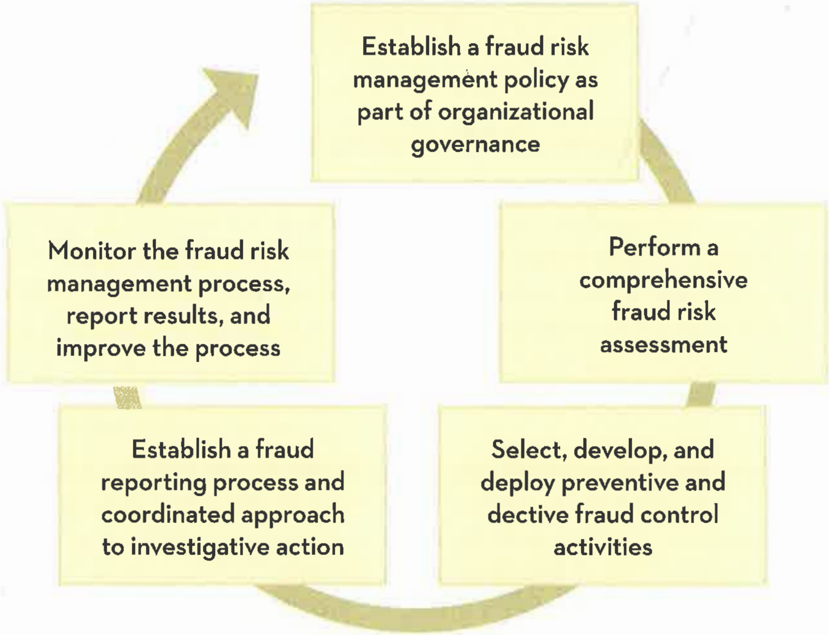
Fraud Risk Assessment (Principle 2)

A fraud risk management program will not be successful without management first understanding the inherent fraud risks the organization faces. The steps in a fraud risk assessment are similar to those described for an enterprise risk assessment in chapter 4, "Risk Management." An organization must first identify the potential fraud events or scenarios to which it may be vulnerable. These events or scenarios will vary from one organization to the next, depending on the business model, industry, locations where the organization operates, culture, and other similar factors. When compiling a list of potential fraud scenarios, it may be helpful to gather information from external regulatory bodies, industry sources, guidance-setting groups, and professional organizations. "Fraud risk assessment addresses the risk of fraudulent financial reporting, fraudulent non-financial reporting, asset misappropriation, and illegal acts (including corruption). Organizations can tailor this approach to meet their individual needs, complexities, and goals."[9]

Root Causes of Fraud:

– Perceived need or pressure
– Perceived opportunity
– Rationalization

EXHIBIT 8-8
COSO'S ONGOING, COMPREHENSIVE FRAUD RISK MANAGEMENT PROCESS


Establish a fraud risk management policy as part of organizational governance
Perform a comprehensive fraud risk assessment
Select, develop, and deploy preventive and dective fraud control activities
Establish a fraud reporting process and coordinated approach to investigative action
Monitor the fraud risk management process, report results, and improve the process

Source: COSO, *Fraud Risk Management Guide* (The Committee of Sponsoring Organizations of the Treadway Commission, 2016).

Fraud Control Activity (Principle 3)

"A fraud control activity is a specific procedure or process intended either to prevent fraud from occurring or to detect fraud quickly in the event that it occurs."[10] A fraud risk management program must have an appropriate balance between prevention and detection controls. Prevention controls may include policies, procedures, training, and communication, all of which are designed to stop fraud from occurring. Prevention controls may not provide absolute assurance that a fraud will be prevented, but they do serve as an important first line of defense in minimizing fraud risk. Prevention controls, including a strong fraud awareness program, can serve as an important deterrent to fraud (that is, discourage fraud).

While an organization typically prefers to prevent fraud, that is not always possible. Therefore, it is important to design and implement effective detection controls as well. Detection controls may include manual or automated activities that will recognize timely that a fraud has or is occurring. These controls may provide a deterrent to fraud, but they are not designed to prevent the fraud from occurring. Rather, they provide evidence that a fraud has occurred, which can be helpful in an investigation. Fraud control activities are documented with descriptions of the identified fraud risk and scheme, the fraud control activity that is designed to mitigate the fraud risk, and the identification of those responsible for the fraud control activity.

Fraud Investigation and Corrective Action (Principle 4)

Control activities can only be expected to provide reasonable—not absolute—assurance against fraud. Therefore, "the organization's governing board ensures that the organization develops and implements a system for prompt, competent, and confidential review, investigation, and resolution of instances of non-compliance and allegations involving fraud."[11] An organization can both improve its loss recovery likelihood, while simultaneously minimizing exposure to litigation and damage to reputation, by establishing and carefully preplanning investigation and corrective action processes.

Fraud Risk Management Monitoring Activities (Principle 5)

The final COSO fraud risk management principle "relates to monitoring the overall fraud risk management process. Organizations use fraud risk management monitoring activities to ensure that each of the five principles of fraud risk management is present and functioning as designed and that the organization identifies needed changes in a timely manner. Organizations use ongoing and separate (periodic) evaluations, or some combination of the two, to perform the fraud monitoring activities."[12]

As noted earlier in this chapter, the ACFE *Report to the Nations* indicates that frauds are more likely to be detected by a tip than by audits, controls, or other means. Therefore, it is important for an organization to establish a reporting system to facilitate and encourage reporting of potential fraud incidents. For example, a whistleblower hotline provides a means for prompt notification, helps in gathering the necessary information to enable an investigation, if necessary, and provides for confidentiality, if desired by the individual reporting the incident. The reporting system can be managed by a member of management, but it may also be appropriate, and even required by regulation, for there to be a reporting mechanism directly to the board in certain circumstances. This provides an avenue of reporting to individuals who believe senior management may be involved in the fraud incident.

Once an allegation has been received through a hotline, there must be a structured process for evaluating and investigating the incident. In fact, establishing a sound investigation process can improve an organization's chances of recovering losses and may also minimize exposure to litigation. Depending on the circumstances, it may be necessary to involve internal or external legal counsel in the investigation, as well as other functions in the organization, such as human resources (HR), IT, and internal auditing. Having a formal, structured approach to conducting and reporting on the results of investigations helps an organization complete an investigation timely and develop and maintain the support necessary to facilitate corrective actions.

Regardless of whether an investigation results in prosecution, disciplinary action, or no action at all, it is important for an organization to have a consistent means of resolving investigations. First, timely resolution will help ensure prosecution or disciplinary actions can be taken before "the trail goes cold" (a term often used in investigations to indicate that the collection of evidence will be more difficult and potentially less relevant). Additionally, individuals involved in the fraud have a need, and in many countries a right, to be able to defend themselves timely. Second, organizations must determine what gave rise to the fraud incident so that corrective actions (for example, control enhancements) can be implemented. Finally, management must discipline employees consistently to avoid the perception of favoritism or that disciplinary actions are arbitrary. This supports the tone at the top, which should send the message that fraudulent acts will not be tolerated and will be dealt with swiftly and consistently.

GOVERNANCE OVER THE FRAUD RISK MANAGEMENT PROGRAM

Strong governance provides the foundation for an effective fraud risk management program. *Managing the Business Risk of Fraud: A Practical Guide of 2008* states that organizations' key stakeholders "...have raised the awareness and expectation of corporate behavior and corporate governance practices. Some organizations have developed corporate cultures that encompass strong board governance practices, including:

- Board ownership of agendas and information flow.
- Access to multiple layers of management and effective control of a whistleblower hotline.
- Independent nomination processes.
- Effective senior management team...evaluations, performance management, compensation, and succession planning.
- A code of conduct specific for senior management, in addition to the organization's code of conduct.
- Strong emphasis on the board's own independent effectiveness and process through board evaluations, executive session, and active participation in oversight of strategic and risk mitigation efforts."[13]

Roles and Responsibilities

The roles and responsibilities in a fraud risk management program must be formal and communicated. Policies and procedures, job descriptions, charters, and delegations of authority are all important in defining the various roles and responsibilities for such a program. Generally, the following roles and responsibilities are embedded in successful fraud risk management programs.

Board of directors. As indicated previously, boards help set the tone at the top. They do so by embracing the governance practices listed above. Many of the specific fraud oversight responsibilities may be carried out by committees of the board, such as the audit committee or the nominating and governance committee. This oversight should generally include:

- A general understanding of fraud-related policies, procedures, incentive plans, etc.
- A comprehensive understanding of the key fraud risks.
- Oversight of the fraud risk management program, including the internal controls that have been implemented to manage fraud risks.
- Receiving and monitoring reports that provide information about fraud incidents, investigation status, and disciplinary actions.
- The ability to retain outside counsel and experts when needed.
- Directing the internal audit function and the independent outside auditor to provide assurance regarding fraud risk concerns.

The board and committee responsibilities should be documented in the respective charters to ensure their roles and responsibilities are clearly delineated and understood. The board should also gain comfort that sufficient resources are being applied to ensure effective operation of the fraud risk management program.

Management. Similar to the board, management plays a very important role in setting the tone for the organization. Beyond what management says, how it acts is instrumental in shaping perceptions of the culture and its attitude toward fraud prevention. In addition, management is responsible for implementing the overall fraud risk management program. This includes direction and oversight over the system of internal controls, which must be designed and operated in a manner to prevent fraud incidents or detect them timely. Management must also establish a system of monitoring and reporting that will enable it to evaluate whether the fraud risk management program is operating effectively. This helps provide management with timely and relevant information that can be reported to the board.

It is common in many organizations to assign a member of management the responsibility for overseeing the fraud risk management program. This responsibility may include overseeing fraud and ethics-related policies, conducting the fraud risk assessment, overseeing the controls that are designed to address fraud risks, monitoring the effectiveness of the program, coordinating the investigation and reporting process, and training and educating employees on the program. This individual should be at a sufficiently high level in the organization to reinforce management's commitment to preventing and deterring fraud. Typically, there are other functions, most commonly from the legal and HR areas that have defined support roles for this individual.

Tone at the Top

The entitywide attitude of integrity and control consciousness, as exhibited by the most senior executives of an organization. See also Control Environment.

Employees. The day-to-day execution of the fraud risk management program, specifically the controls that are designed to prevent and detect fraud, must involve everyone in the organization. According to the *Fraud Guide*, this means that "all levels of staff, including management, should:

- Have a basic understanding of fraud and be aware of the red flags.
- Understand their roles within the internal control framework. Staff members should understand how their job procedures are designed to manage fraud risks and when noncompliance may create an opportunity for fraud to occur and go undetected.
- Read and understand policies and procedures ([that is], the fraud policy, code of conduct, and whistleblower policy), as well as other operational policies and procedures, such as procurement manuals.

- As required, participate in the process of creating a strong control environment and designing and implementing fraud control activities, as well as participate in monitoring activities.
- Report suspicions of incidences of fraud.
- Cooperate in investigations."[14]

Control Environment

The attitude and actions of the board and management regarding the significance of control within the organization.

The internal audit function. The internal audit function plays an important role in contributing to the overall governance of a fraud risk management program. This is primarily evident from the independent assurance the internal audit function provides to the board and management that the controls in place to manage fraud risks are designed adequately and operate effectively. The internal audit function's role is discussed in greater detail later in the chapter.

It is recognized that the independent outside auditor has responsibilities with regard to the detection of types of fraud (primarily financial reporting fraud and misappropriation of certain assets). This role, which is well defined in the standards governing that profession, is not part of an organization's fraud risk management program because such a role would violate the public accounting profession's independence standards.

Components of a Fraud Risk Management Program

While there is no "one-size-fits-all" approach to designing a fraud risk management program, there are certain components that are common among most effective programs. Most organizations have written policies and procedures relating to fraud, and typically have some activities associated with assessing risks, designing effective controls, monitoring compliance, conducting investigations, and educating employees on fraud topics and red flags. However, few organizations have comprehensively tied all of this together into an integrated program. Typically, successful integrated programs have certain key components.

- *Commitment* by the board and senior management. This commitment should be formally documented and communicated throughout the organization.
- *Fraud awareness* activities that help employees understand the purpose, requirements, and responsibilities of the program. These activities may include any or all of the following: written communications to all employees, oral communications during organizationwide meetings, postings on the organization's internal website and external Web page, and formal training programs.
- *An affirmation process* that requires employees to affirm periodically, typically annually, that they understand and are complying with policies and procedures.
- *A conflict disclosure* protocol or process that helps employees self-disclose potential or actual conflicts of interest. This would also include a means for timely resolution of matters that have been disclosed.
- *Fraud risk assessment*, which helps to identify all reasonable fraud scenarios. This is discussed further in the next section.
- *Reporting procedures and whistleblower protection* that provide a well-known and easy avenue for individuals, whether inside or outside the organization, to report suspected violations or incidents.
- *An investigation process* that ensures all matters undergo a timely and thorough investigation, as appropriate.

- *Disciplinary and/or corrective actions* that address noncompliance with established policies and help deter fraudulent behavior.
- *Process evaluation and improvement* to provide quality assurance that the program will continue to meet its objectives.
- *Continuous monitoring* to ensure the program consistently operates as designed.

Reasonable Assurance

A level of assurance that is supported by generally accepted auditing procedures and judgments

Including these components in a fraud risk management program will not eliminate fraud risk. It will, however, provide reasonable assurance that fraud incidents are prevented, or detected timely and dealt with appropriately.

FRAUD RISK ASSESSMENT

As previously stated, the process of conducting a fraud risk assessment is similar to that of conducting an enterprise risk assessment. The three key steps are:

1. Identify inherent fraud risks.
2. Assess impact and likelihood of the identified risks.
3. Develop responses to those risks that have a sufficiently high impact and likelihood to result in a potential outcome beyond management's tolerance.

Risk Assessment

The identification and analysis (typically in terms of impact and likelihood) of relevant risks to the achievement of an organization's objectives, forming a basis for determining how the risks should be managed.

When conducting a fraud risk assessment, it is important to involve individuals with varying knowledge, skills, and perspectives. While the specific individuals will vary from organization to organization, the risk assessment will typically include:

- Accounting and finance personnel to help identify financial reporting and safeguarding of cash fraud scenarios.
- Nonfinancial business personnel to leverage their knowledge of day-to-day operations, customer and vendor interactions, and other industry-related fraud scenarios.
- Legal and compliance personnel to identify scenarios that may include potential criminal, civil, and regulatory liability should fraud or misconduct occur.
- Risk management personnel to help identify market and insurance fraud scenarios, and to ensure the fraud risk assessment is integrated with the overall enterprise risk assessment.
- Internal auditors, who have an understanding of broad fraud risk scenarios and controls.
- Other internal or external parties who can provide additional expertise to the exercise.

The risk assessment process can take many different forms, the most common of which are interviews, surveys, and facilitated meetings. Regardless of the approach, it is important for individuals to remain open and creative to ensure the fraud risk universe is sufficiently comprehensive.

Fraud Risk Identification

An effective means of identifying the most comprehensive list of fraud risk scenarios is through brainstorming. While the actual approach may vary, this exercise should involve all of the individuals who are part of the risk assessment team discussed above. Brainstorming can help the organization identify and discuss the wide array of potential scenarios that may exist. One of the challenges when brainstorming fraud risks is to make sure that the discussion is not limited to scenarios perpetrated by a sole individual. Frequently, fraud includes collusion among multiple individuals, and while it is more difficult to brainstorm these scenarios, it is certainly no less important.

The 2016 COSO Fraud Risk Management Guide outlines certain elements that should be considered when brainstorming fraud risk scenarios. All of these elements should be considered to ensure a comprehensive fraud risk universe can be compiled.

Before finalizing the list of fraud risk scenarios, it is important to understand the potential causes and sources of each scenario. If several scenarios have the same root cause, it is possible that the root cause should be assessed, not the other scenarios. Ultimately, an organization should develop responses to the causes of risks, not the symptoms that may be seen on the surface. Similarly, understanding the potential sources of the scenarios (that is, where they might occur within the organization) also will help later in the process as responses are determined. Spending extra time at this stage to understand causes and sources will help make the rest of the fraud risk assessment program more successful.

Regulatory and Legal Misconduct

Includes conflicts of interest, insider trading, theft of competitor trade secrets, anti-competitive practices, environmental violations, and trade and customs regulations in areas of import/export.

It should be apparent that identifying fraud risk scenarios is not an exact science. It requires contributions from a diverse collection of individuals over time. Moreover, the brainstorming really never ends; the list of potential fraud scenarios continues to evolve over time. But similar to the enterprise risk assessment, identifying potential fraud risks provides the foundation for the next steps in the fraud risk assessment process.

Assessment of Impact and Likelihood of Fraud Risks

Determining the potential impact and likelihood of each fraud scenario is a very subjective process. The risk assessment concepts outlined in chapter 4 apply to fraud risk assessment as well. Following are key points that should be considered when assessing fraud risks.

- **Impact**. As previously stated, it is important to consider all possible outcomes of a fraud risk scenario, not just the financial statement or monetary impact. The significance of other outcomes may be greater than the financial statement or monetary impact. For example, it is important to consider the legal impact (criminal, civil, and regulatory outcomes), reputational impact (such as damage to a brand), operational impact (such as cost of production and warranty liability), and impact on people (such as health and safety incidents, or inability to attract and retain employees in an organization with low morale). The objective is to identify fraud risk scenarios with outcomes that exceed management's tolerance relative to those outcomes. Given that precise quantification of fraud risk outcomes is difficult, the measurement of impact will typically be in general categories, such as highly significant, somewhat significant, or insignificant.

Impact

The severity of outcomes caused by risk events. Can be measured in financial, reputation, legal, or other types of outcomes.

- **Likelihood**. Judgment regarding the probability or frequency of a fraud scenario is influenced in part by past experience, such as previous incidents of such a scenario within the organization or at organizations in the same industry or geographical location. However, an estimate of likelihood also should be made even if there is no knowledge of past events. As was the case with the impact assessment, precise probability quantifications are typically not possible or even necessary. Therefore, general measurement categories, such as probable, possible, or remote, are more commonly used.

Likelihood

The probability that a risk event will occur.

Tolerance

The boundaries of acceptable outcomes related to achieving business objectives.

Management's assessment involves considering impact and likelihood together. This assessment provides sufficient context about the fraud risk scenarios to begin making decisions about the resources and priorities that should be devoted to managing the scenarios.

Response to Fraud Risk

As indicated above, management's tolerance of fraud risks influences the fraud risk assessment. Typically, an organization's tolerance to fraud risks is lower than its tolerance to other risks. Specifically, when considering the potential impact on reputation or possible legal liability, an organization may establish a "zero tolerance" to many of the fraud risks. Such a level will influence, and may limit, its options regarding how to respond to the risks. However, there may be some fraud risk outcomes that will be tolerable. There may be more flexible responses that can be applied to these risks.

Risk Response

An action, or set of actions, taken by management to achieve a desired risk management strategy. Risk responses can be categorized as risk avoidance, reduction, sharing, or acceptance.

Once the risk response decisions are made, management must execute the necessary actions to carry out those responses. Since most fraud risk responses involve reducing the risks, the next two sections focus on fraud prevention and fraud detection.

ILLEGAL ACTS AND RESPONSE

With the world of business becoming increasingly complex, interconnected, and fast-paced, there has been an explosion of laws and regulations across the globe. Companies belonging to the most heavily regulated industries such as financial services and health care are keenly conscious of creating and maintaining an elaborate infrastructure for compliance.

The IIA's definition of fraud as "Any *illegal* act characterized by deceit, concealment, or violation of trust" (emphasis added) is particularly noteworthy. In companies in many heavily regulated industries, it is not uncommon to find that the CAE reports directly to the general counsel or chief legal officer (CLO) because the compliance element is so significant. In many instances, illegal acts are also fraudulent, so the techniques to address and respond to fraud risk may well carry over to the domain of illegal acts. Nevertheless, it is important to recognize that illegal, unethical, immoral, and fraudulent activities do not all entail the same thing.

Consider your car parked at a meter for a meeting running late. Perhaps you have not put sufficient money in the meter, thus making your parking "illegal" but not necessarily fraudulent. For companies operating in foreign jurisdictions, it frequently happens that they may have been unaware of a certain law (particularly if it is in a local, non-English language), or were inappropriately advised by their attorneys. It could then be argued that their operating in that jurisdiction without a license was illegal but by no means fraudulent.

The consequences of noncompliance can be severe as evidenced by prosecutions under and fines levied by invoking the FCPA. The long-awaited December 2008 settlement between Siemens AG and U.S. and German regulators resulted in more than $1.6 billion in combined FCPA fines related to charges of rampant bribery and kickbacks. This was quickly followed by the settlements with Kellogg Brown & Root, Inc. and Halliburton Company in February 2009 and totaling a combined $579 million in criminal fines and disgorgement, confirming that the Siemens settlement was not an anomaly. In fact, the U.S. Securities and Exchange Commission (SEC) has chosen to spotlight its FCPA Enforcement Actions in a dedicated website (https://

www.sec.gov/spotlight/fcpa/fcpa-cases.shtml). More recently, in September 2016, the Och-Ziff hedge fund and two executives settled charges related to the use of intermediaries, agents, and business partners to pay bribes to high-level government officials in Africa. Och-Ziff agreed to pay $412 million in civil and criminal matters, and CEO Daniel Och agreed to pay $2.2 million to settle charges against him.

Consequently, the FCPA of 1977 has recently emerged as a major compliance concern for U.S. companies operating globally. Beyond the sheer magnitude of the settlements noted above, these developments have several noteworthy implications for U.S. and multinational companies operating in today's enforcement environment. The focus on combatting illegal acts is not diminishing. In 2010, the United Kingdom (UK) Bribery Act was passed. It is even more expansive and stringent than the FCPA in its scope and implementation.

Some topics surrounding the FCPA that are pertinent for internal auditors focused on compliance efforts are:

- The anti-bribery provisions and related compliance concerns.
- The record-keeping and internal accounting control provisions.
- Conducting due diligence and instituting compliance measures.
- Internal investigations, disclosure obligations, and monitors.
- Related business, contractual, and employment issues.
- Measures for staying clear of FCPA violations and preempting enforcement actions.

To provide effective insight to their organizations, internal auditors must keep abreast of recent developments in this space, including:

- Aggressive enforcement efforts and associated penalties from non-U.S. regulators spanning the globe.[15]
- The message, according to then Acting Assistant Attorney General Matthew Friedrich, that the U.S. regulators will continue "efforts to level the business playing field, making it free from corruption and open to all who seek to participate within it," which will include the investigation and prosecution of non-U.S.-based companies.[16]
- The U.S. government's expansive interpretation of the jurisdictional reach of the FCPA.[17]
- The clear indication that foreign regulatory investigations can serve as the basis for Department of Justice and the SEC investigations and that U.S. and non-U.S. regulators now routinely work cooperatively on anticorruption investigations.[18]
- The need to have in place a robust compliance apparatus and respond appropriately to red flags.
- The importance of taking appropriate remedial action against culpable employees, particularly at high levels of management.
- Demonstration of the U.S. enforcement agencies' openness to creative measures to facilitate companies' internal investigations, such as possibly through amnesty and leniency programs for company employees and officials that cooperate with the investigation.

Exhibit 8-9 identifies warning signs of illegal acts internal auditors need to anticipate.

FRAUD PREVENTION

In a perfect world, an organization would prefer to implement sufficient fraud prevention controls to ensure none of the potential fraud scenarios occur. However, complete prevention is not possible and in many cases the cost of preventing certain fraud scenarios exceeds the benefits. That is why organizations develop fraud programs that combine an appropriate balance of both preventive and detective controls. Nevertheless, the familiar phrase "an ounce of prevention is worth a pound of cure" provides a good starting point for developing actions to manage fraud risks to an acceptable level.

There are different types of preventive techniques, several of which are discussed below. However, one of the most important forms of prevention relates to organizational awareness. The *Fraud Guide* states, "One key to prevention is making personnel throughout the organization aware of the fraud risk management program, including the types of fraud and misconduct that may occur. This awareness should enforce the notion that all of the techniques established in the program are real and will be enforced."[19] In other words, strong organizational awareness serves as a deterrent to fraud.

The "ounce of prevention" part of the familiar phrase represents an organization's proactive way of fighting fraud. By building preventive controls into the system of internal controls, management can establish a foundation that will deter most individuals from even considering fraud. In addition to implementing a strong fraud governance environment, the *Fraud Guide* outlines common elements that can play an important role in preventing fraud:

- **Performing background investigations.** Some individuals are more susceptible to succumbing to the temptations that may lead to fraud than others. An individual who has committed fraud once is more likely to do so again than one who has not. A comprehensive background investigation can help keep those most likely to commit fraud out of the organization. In addition to performing background investigations on potential employees, some organizations also will perform these investigations on new and existing vendors, customers, and business partners to reduce the risk of fraud from these outside parties. In particular, going forward, such background investigations in the future may involve consulting psychologists and psychiatrists who may assist with personality assessment inventories with a particular focus on identifying "dark triad" personalities.

- **Providing anti-fraud training.** Even if competent and honest employees are hired, they must understand what fraud is, the red flags to watch for, how to report suspected fraud incidents, and the consequences of committing fraud. Such training should be mandatory and provide periodic updates.

- **Evaluating performance and compensation programs.** Organizations must be careful to not incent the wrong behavior. Compensation programs must be scrutinized carefully to make sure that they not only encourage the right behavior, but even reward it. Conversely, such programs must not inadvertently condone behaviors that might incent, or be perceived to incent, behavior that could be fraudulent.

- **Conducting exit interviews.** Employees leave for a variety of reasons. Frequently, they are willing to share those reasons. Exit interviews are often considered a detection control because individuals may be willing to "tell on" someone who they would not implicate when they were co-employees. However, awareness that exit interviews are conducted also may serve as a deterrent to fraud, which makes such interviews a preventive control as well.
- **Authority limits.** By establishing boundaries of authority, potential fraudulent transactions can be prevented over the established authority limits. A common example is prohibiting wire transfers of funds over a certain amount without the approval of two individuals. This control prevents fraudulent transactions over that amount, assuming there is no collusion among those individuals.
- **Transaction-level procedures.** Many fraud schemes involve third parties, including related parties. By requiring careful scrutiny of those transactions before they are consummated, an organization can prevent inappropriate transactions from occurring.

EXHIBIT 8-9
WARNING SIGNALS OF POSSIBLE ILLEGAL ACTS

- Unauthorized transactions, improperly recorded transactions, or transactions not recorded in a complete or timely manner in order to maintain accountability for assets
- Investigation by a governmental agency, an enforcement proceeding, or payment of unusual fines or penalties
- Violations of laws or regulations cited in reports of examinations by regulatory agencies that have been made available to the auditor
- Large payments for unspecified services to consultants, affiliates, or employees
- Sales commissions or agents' fees that appear excessive in relation to those normally paid by the client or for the services actually received
- Unusually large payments in cash, purchases of bank cashiers' checks in large amounts payable to bearer, transfers to numbered bank accounts, or similar transactions
- Unexplained payments made to government officials or employees
- Failure to file tax returns or pay government duties or similar fees that are common to the entity's industry or the nature of its business

Source: Grant Thornton, The Audit Committee Guide Series. *Managing Fraud Risk: The Audit Committee Perspective.* Reproduced with permission.

As part of the organization's system of internal controls, preventive controls must be documented in the same manner as any other control. This will help with the evaluation of whether the preventive controls are designed adequately, and serve as a deterrent to the extent employees are aware that these controls are in place. Assessing the adequacy of fraud prevention controls takes experience and judgment, but there are tools available that can help with this process.

Preventive Control

An activity that is designed to deter unintended events from occurring.

Detective Control

An activity that is designed to discover undesirable events that have already occurred. A detective control must occur on a timely basis (before the undesirable event has had a negative impact on the organization) to be considered effective.

Collusion

Acts involving two or more persons, working together, whereby established controls or procedures may be circumvented for the gain of those individuals.

Fraud Detection

According to the ACFE's *Report to the Nations*, occupational frauds are much more likely to be detected by a tip than by audits, controls, or other means.

FRAUD DETECTION

As previously mentioned, an effective fraud risk management program cannot rely solely on prevention. Not only is the cost of preventing certain fraud scenarios prohibitively high, but it is not possible to prevent all fraud incidents from occurring. Fraud prevention can fail when there is inadequate design or ineffective operation of fraud prevention controls. In addition, collusion among individuals or management override may circumvent established controls that are designed to prevent fraud. As a result, an organization must have a prudent balance of fraud detection controls as well.

By definition, detective controls are those that are designed to identify occurrences of fraud or symptoms that may be indicative of fraud. Fraud detection techniques may be designed specifically to identify fraud, or they may be built into the system of internal controls and serve other purposes in addition to fraud detection. For example, the preparation and review of a bank reconciliation can serve many purposes, one of which is identifying unusual or suspicious transactions.

- **Whistleblower hotlines.** As noted earlier in this chapter, tips are the most common method of fraud detection. Hotlines allow individuals to report their concerns about suspicious activities and remain anonymous. Whistleblower hotlines are frequently operated by third parties to make it easier for people to report matters without fear of reprisal. Broad awareness of a hotline can serve as a deterrent because potential fraud perpetrators realize it is easy for individuals to report their suspicions.

  In connection with maintaining a hotline, organizations must also employ an effective case management process. This process ensures that reported allegations are reported to the right individual, adequately vetted and investigated, if necessary, and receive timely resolution. Case management processes are typically administered by the head of the compliance program, the HR function, the legal function, or the internal audit function.

- **Process controls.** The most common type of detective controls are built into the day-to-day processes. Examples of process controls that can help to detect fraudulent activity include reconciliations, independent reviews, physical inspections or counts, certain types of analysis, and internal audits or other monitoring activities. The fraud risks with the greatest potential impact may require detective controls that can operate at a lower level of sensitivity to ensure timely detection.

- **Proactive fraud detection procedures.** While detection sounds reactive by nature, it is possible to design more proactive detection procedures. Common proactive procedures include data analysis, continuous auditing, and the use of other technology tools that can flag anomalies, trends, and risk indicators warranting attention. Some of the more creative fraud detection techniques involve analyzing data from multiple sources. Another example is software that searches for certain words or phrases in emails to identify individuals who may be considering, or already are committing, fraudulent activities.

Continuous monitoring and measurement techniques can help an organization evaluate, enhance, and improve its fraud detection techniques. There are a variety of criteria that can be measured.

FRAUD INVESTIGATION AND CORRECTIVE ACTION

Clearly, detecting incidents or symptoms of fraud is quite important. But the battle is not over at detection. Whether an act of fraud is prosecuted through the legal system or handled within an organization, it is critical to understand all of the facts and circumstances surrounding the incident. Thus, the final stage of an effective fraud risk management program focuses on investigating, reporting, and correcting the suspected fraud incidents. There are several discreet steps involved in this stage.

Receiving the Allegation

Allegations may be received from a variety of sources in many different manners. As discussed earlier in the chapter, the ACFE's 2016 *Report to the Nations* cites tips, audits, and controls as the most common means of identifying frauds. Regardless of the source, an organization must have a process or protocol for gathering the available information pertaining to an allegation. This will help ensure that the organization "... develops a system for prompt, competent, and confidential review, investigation, and resolution of allegations involving potential fraud or misconduct."[20] There is no one-size-fits-all approach to receiving allegations; it will depend on the nature of the allegation, who was purportedly involved, and the potential impact. Regardless of the protocol, the *Fraud Guide* states that "The investigation and response system should include a process for:

- Categorizing issues.
- Confirming the validity of the allegation.
- Defining the severity of the allegation.
- Escalating the issue or investigation when appropriate.
- Referring issues outside the scope of the program.
- Conducting the investigation and fact-finding.
- Resolving or closing the investigation.
- Listing types of information that should be kept confidential.
- Defining how the investigation will be documented.
- Managing and retaining documents and information."[21]

The process must be flexible enough to handle the many different types of allegations, but also structured enough to ensure all key steps are appropriately executed and documented. A formal process will help enable the remaining steps in this stage.

Evaluating the Allegation

Not all allegations of fraud prove to be acts of fraud. It is necessary to evaluate the information received and make many key decisions that can be critical to the effectiveness of the process. The evaluation step involves answering the following questions:

- Does this allegation require a formal investigation or is there enough information now to draw a conclusion?
- Who should lead the investigation?
- Are there special skills or tools needed to conduct the investigation?

- Who needs to be notified and when?
- Establishing formal protocols, as discussed below, will help answer these and other questions that are fundamental to evaluating the allegation.

Establishing Investigation Protocols

Establishing formal investigation protocols that are approved by management and the board will ensure an investigation achieves its objectives.

Determining Appropriate Actions

The final step is determining the appropriate actions based on the results of the investigation. Possible actions include:

- Legal actions, whether criminal or civil.
- Disciplinary actions, such as warning, demotion, censure, suspension, or termination.
- Insurance claims if losses from the act are covered by insurance policies.
- Redesign or reinforcement of processes and controls that may have been inadequately designed or that operated ineffectively, allowing the incident to occur.

Legal Privileges

Working with legal counsel to protect the results of investigations, supporting working papers, and communications with counsel.

Regardless of the choice, actions must be swift and fair. Others in the organization may be watching to see how perpetrators are dealt with. While the ultimate actions may not be made public, employees must sense that the actions were fair under the circumstances and management would treat other perpetrators in the same manner. This is part of what reinforces the tone at the top, a critical element in fraud risk management governance.

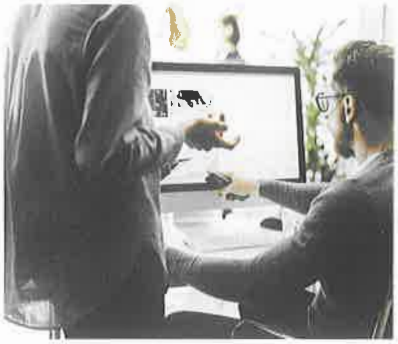
UNDERSTANDING FRAUDSTERS

It is natural to think of a system of internal controls as being somewhat people neutral. That is, assuming an organization has competent individuals in key control positions, an adequately designed system of internal controls should operate effectively, even when people make mistakes. However, considering that fraud involves intent to act in a manner different than would normally be expected, another element must be considered: how unethical people might act. Internal auditors must have a heightened sense of professional skepticism and not assume that people will "do the right thing." Putting it another way, internal auditors must "think like a crook to catch a crook." They must try to understand why an otherwise honest individual would commit a dishonest act. Gaining this understanding will increase the likelihood that an internal auditor can detect, and in some cases even deter, an individual from committing a fraud. An entire subfield focusing on the psychology of fraud, called *behavioral forensics,* has emerged to understand the motivations of white collar criminals to go from the how to the why: that is, from looking at the tools and instruments of fraud such as accounting ledgers and computers to understanding fraud perpetrator motivations.[22]

Behavioral science has thus far been unable to identify a single psychological characteristic or a set of characteristics that can serve as a reliable marker of the propensity of an individual to commit fraud. For example, to say that "greed and dishonesty"—a commonly heard refrain—can account for all that went on during the "irrational exuberance" of the 1990s would be overly simplistic. After all, there are many professionals in the business world who are extremely ambitious, competitive, and wealthy, but nevertheless fully abide by the law. They do not necessarily resort to fraud to achieve their stretch goals. But they are motivated by something, and understanding the different motives that drive fraudsters is an important starting point.

Fraud is typically a team sport, i.e., collusion, especially between the CEO and the chief financial officer (CFO) seems to be a pattern in many SEC enforcement cases as noted in the COSO fraud studies of 1998 and 2010 respectively. Hence, the ABC taxonomy of "bad apple, bad bushel, and bad crop" suggested in a book on the psychology of fraud seems plausible and intuitive. Similarly, on many an occasion, organizational culture seems to be an enabler and even a driver of fraud. In the context of a toxic culture, the notion of a "bad crop" rings true.

Based on personality psychology research over the last 15 years or so, Canadian researcher Delroy Paulhus has identified the "dark triad of human personalities" consisting of narcissists, psychopaths, and Machiavellians. Because these abnormal and deviant personalities have little or no conscience, lack empathy for others, tend to be disagreeable, etc., it turns out that the Cressey fraud triangle is largely ineffective when such personalities are present in the executive suite, whether they are operating in solo or in collusion. Although the incidence of "dark triad types" in the general population of males is only about 1-2 percent, empirical evidence has shown that when "almost psychopaths" are included, their incidence on Wall Street and corporate America may exceed 10 percent.[23] These and related findings and their troublesome and distressing implications have been discussed in two articles published in *The CPA Journal*, but have significant implications for internal auditors as well when they evaluate behavioral/integrity risks in the C-suite.



Gaining insights into the potential fraud risk factors that may signal individuals who are more likely to commit fraud will help internal auditors understand when fraud risk is heightened. Such fraud risk factors include both personality-related factors and non-personality-related factors.

Abnormal or Deviant Personality-Related Factors

Classified under "anti-social personality disorder" in the DSM-5 of the American Psychiatric Association (APA), the dark triad personality typically includes a cluster of interpersonal, affective, lifestyle, and antisocial traits and behaviors such as: "deception; manipulation; irresponsibility; impulsivity; stimulation seeking; poor behavioral controls; shallow affect; lack of empathy, guilt, or remorse; sexual promiscuity; callous disregard for the rights of others; and unethical and antisocial behaviors."[24]

Non-Personality-Related Fraud Risk Factors

Individuals who are at risk for committing fraud but are not classified as dark triad personalities may:

- Show little respect for playing by the rules or for laws and regulations.
- Exhibit a lifestyle that appears to be well beyond their current means.
- Be experiencing extreme financial problems and/or have overwhelming personal debts.
- Have an unusual propensity to spend money.

Fraud Perpetrators

Generally fit one of two profiles: greater good oriented or scheming, self-centered types.

- Be suffering from depression or other emotional problems.
- Appear to have a gambling obsession.
- Have a need or craving for status, and believe money can buy that status.
- Appear to engage in unethical, illegal, or immoral conduct and have frequent run-ins with law enforcement, including the tax authorities.

As noted before, the presence of dark triad personalities in positions of power and influence challenges the relevance of the Cressey Fraud Triangle. It is important for internal auditors to be alert to the possibility that when behavioral/integrity risks relating to members of the C-suite are unacceptably high, there exists a heightened risk of fraud.

Internal auditors are not expected to become behavioral psychologists, psychiatrists, or criminologists. However, gaining insights into what motivates fraudsters can help internal auditors "keep their antennas up" in the workplace and, potentially, anticipate individuals who may present a greater risk of fraud.

IMPLICATIONS FOR INTERNAL AUDITORS AND OTHERS

It should be evident by now that internal auditors play a key role in a fraud risk management program. The IIA's *Standards* provides specific guidance for internal auditors. For example:

> **Standard 1210.A2** — Internal auditors must have sufficient knowledge to evaluate the risk of fraud and the manner in which it is managed by the organization, but are not expected to have the expertise of a person whose primary responsibility is detecting and investigating fraud.
>
> **Standard 1220.A1** — Internal auditors must exercise due professional care by considering the ... probability of significant errors, fraud, or noncompliance...
>
> **Standard 2060** — The chief audit executive must report periodically to senior management and the board on ... fraud risks ...
>
> **Standard 2120.A2** — The internal audit [function] must evaluate the potential for the occurrence of fraud and how the organization manages fraud risk.

Due Professional Care

Applying the care and skill expected of a reasonably prudent and competent internal auditor. Does not imply infallibility.

These standards make it clear that internal auditors must consider fraud in almost everything they do. But the *Standards* does not provide the only impetus for internal audit functions to focus on fraud. The role of the internal audit function has been emphasized in recent legislation, regulatory mandates, and the proliferation of governance-focused organizations around the world. As a result, the gatekeepers of financial integrity, among them internal auditors, have achieved significant prominence and are increasingly being asked to play a key role in preventing, deterring, and detecting fraud in for-profit, governmental, and nonprofit organizations globally. As the "eyes and ears, and arms and legs of the audit committee," internal auditors need to consider the following questions:

- What fraud risks are being monitored by management on a periodic or regular basis? Are the critical fraud risks subject to frequent, and even continuous, monitoring?

- What specific procedures are being performed by the internal audit function to address management override of internal controls?
- Has anything occurred that would lead the internal audit function to change its assessment of the risk of management override of internal controls?
- What competencies and skills do internal auditors need to address the risk of fraud within organizations? When should they obtain the services of outside specialists to deal with particularly complex issues?
- In addition to establishing direct lines of reporting to the audit committee, how can the independent organizational status of the internal audit function be strengthened? Are they relied upon as competent and objective professionals in addressing fraud risk and control issues?
- How should the internal audit function devote its attention to the preventive, deterrent, detective, and investigative aspects of fraud?
- How can internal audit add data analytics software to provide the early detection?

To fulfill this responsibility to the audit committee and other stakeholders, internal auditors must be equipped with skills and experience beyond that which is necessary for most assurance engagements.

Professional Skepticism, Professional Judgment, and Forensic Technology

The exercise of sound professional judgment lies at the heart of the internal audit function's assurance and consulting activities. When assessing fraud risks, the internal auditor must exhibit a high degree of professional skepticism, that is, an ability to critically evaluate the evidence and information available at hand. This is particularly so because fraud perpetrators typically "cover their tracks" and determined persistence may be required to unravel a well-concealed fraud scheme. For example, it required dogged perseverance by 2002 *Time* magazine's Person of the Year, Cynthia Cooper, and her internal audit team at WorldCom to unearth the massive fraud committed by WorldCom management.

Professional Skepticism

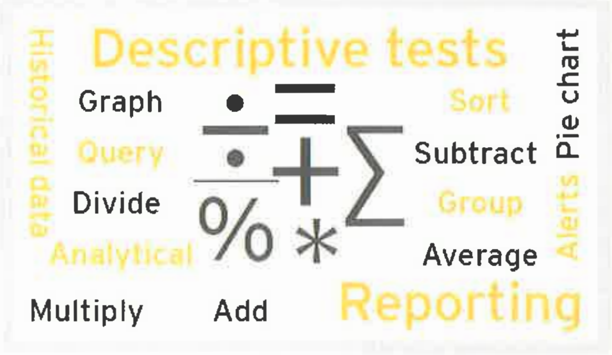
The state of mind in which internal auditors take nothing for granted; they continuously question what they hear and see and critically assess audit evidence.

Not all internal auditors exercise the same degree of professional skepticism—some are naturally more skeptical than others, some accept explanations at face value, and others want to probe further and dig deeper. The latter types, who would seem to have natural "sleuthing tendencies," also display higher levels of professional skepticism, in general. While being "paranoid" may frequently result in over-auditing, whenever facts and circumstances suggest a higher likelihood of fraud, exhibiting a heightened degree of professional skepticism may be expected, warranted, and justified.

When leading or participating in a fraud investigation, internal auditors may have to deal with evidence that differs from what they are accustomed to on other engagements. These assignments may be more complex and involve a review of disparate pieces of evidence with diverse characteristics and degrees of reliability. In such contexts, an experienced internal auditor has better ability to make connections and reconstruct the whole picture from incomplete information and evidence. This is why most fraud investigation groups are staffed with individuals who have significant controls experience. Indeed, research on the applications of artificial intelligence (including neural network technology) has shown that solving the puzzle, that is, aggregating dispersed evidence, is actually a pattern recognition problem. In other words, all the available evidence cannot be considered sequentially; instead, a holistic approach that considers all the available evidence simultaneously may be required. In such circumstances, it may be important for the technology-savvy internal auditor to leverage decision aids, expert systems, and artificial intelligence to increase both effectiveness and efficiency (for example, Benford's Law or digital analysis, advanced computer-assisted audit techniques [CAATs], and predictive analytics, including regression models and neural networks). While movies and television shows may glamorize this process, having a CSI (Crime Scene Investigation) mentality serves internal auditors well when assessing fraud risks and conducting fraud engagements.

With the ubiquitous use of technology-enabled communications, forensic investigations and fraud examinations in the future will depend heavily on computer forensics, computer data imaging, electronic evidence discovery, and the analysis of structured and unstructured data. In other words, the use of technology will not be limited to data analysis (after structured data has been collected); instead, the very extraction and preservation of electronic evidence—usually in the form of textual, unstructured data requiring keyword searches, for instance—will be technology intensive. In such a context, it will be crucial for fraud examiners to have a sound understanding of, and mastery over, digital forensics—the latest and emerging forensic technology tools and techniques. For an example of such applications, see exhibit 8-10.

EXHIBIT 8-10
CUTTING EDGE FORENSIC DATA ANALYSIS



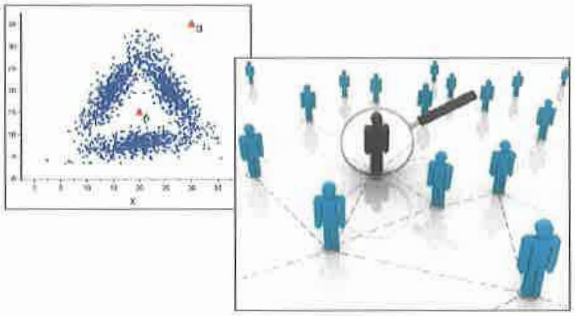
Rules-based descriptive tests and reporting – By using historical data with simple and complex analytical weighted tests, significant value can be achieved to identify areas of risk. Alerts will be produced when a specific condition is met. For example, if an employee submits an expense for reimbursement with an expense amount in excess of a predefined reimbursement policy, then an alert would be triggered. These types of analytics are often easy to implement.

Keyword search – The process scans free text fields and unstructured data sources to identify suspicious or high-risk language used. Companies can develop their own library of high-risk terms that incorporate industry and company-specific jargons, acronyms, and cultural slangs that might be used within the specific group being analyzed. The process can be developed to take into account industry-specific terms, multiple languages, and historical events.

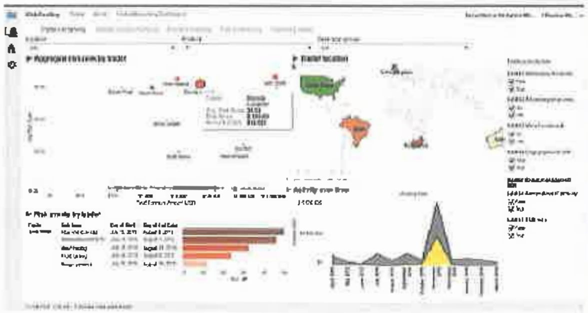
(continued next page)

EXHIBIT 8-10
CUTTING EDGE FORENSIC DATA ANALYSIS *(cont.)*

Topic modeling and linguistic analysis – These tools use text analytics to identify suspicious phrases, high-risk topics, or unusual patterns of behavior in the free text components of the data. Beyond keyword searching, topic modeling seeks to cluster, quantify and group the key noun or noun phrases in the data, enabling the investigative team to quickly gain an understanding of what information may have been compromised or the corrupt intent of certain business activities. Linguistic analysis techniques use the results of text analytics to identify the emotive tone of the communication—identifying angry, frustrated, secretive, harassing, or confused communications.



Statistical analysis and machine learning – This technique leverages historical facts in the data and machine learning to make predictions about future or otherwise unknown events. The incorporation of statistical models into this approach further increases the confidence that items identified as outliers warrant additional review, thus limiting the amount of false positives and increasing the efficiency of the review process.



Data visualization: dashboards – Dashboards can be very powerful in the identification of unknown events. Data visualization, including heat maps, geospatial analysis, time series analysis, word clouds, stratification, and drill-down techniques, enables the identification of trends and outliers in one, easy-to-understand interface. By combining transactions scoring, dashboards can aggregate threats across multiple criteria and data sources to prioritize review.

Data visualization: pattern and link analysis – This technique provides insights, hidden patterns, and relationships from vast, seemingly unrelated data sources. Data, both structured and unstructured, is provided in a variety of visual and link formats that can be used to connect one data source to another, exposing hidden relationships.

Source: EY, Shifting into high gear: mitigating risks and demonstrating returns (Global Forensic Data Analysis Survey, 2016), 26–27.

Use of Fraud Specialists

Fraud Awareness

Activities that help employees understand the purpose, requirements, and responsibilities of a fraud risk management program.

The internal audit function can play a variety of roles to combat fraud in an organization, including conducting fraud awareness training, assessing the design of antifraud programs and controls, testing the operating effectiveness of such controls, investigating improprieties and whistleblower complaints, and conducting a full-fledged investigation at the behest of the audit committee. However, the internal audit function may not have the experience and skills to perform all of these roles. As a result, it is common for the CAE to seek the help of fraud specialists to complement the skills of those in the function.

The most common specialists engaged are CFEs, who specialize in conducting forensic accounting investigations (usually after the fact, when predication exists) to resolve allegations or suspicions of fraud, reporting to the CAE, an appropriate level of management, or to the audit committee or board of directors, depending upon the nature of the issue and the level of personnel involved. They also may assist the audit committee and the board of directors with aspects of the oversight process, either directly or as part of a team of internal auditors or independent outside auditors, in evaluating the fraud risk assessment and fraud prevention measures implemented by senior management. They can provide more objective input into management's evaluation of the risk of fraud (especially fraud involving senior management, such as financial statement fraud) and the development of appropriate antifraud controls that are less vulnerable to management override. In recent years, internal audit professionals have increasingly obtained the CFE designation and, having acquired this specialized expertise, are better equipped to discharge their responsibilities in this area. Many internal audit functions try to have at least one CFE on the staff. However, individuals with this expertise are not as plentiful as may be necessary. As a result, it is common to source the CFE expertise from outside service organizations.

While the CFE designation is the primary qualification for fraud specialists, other specialties also may be needed. For example, when investigations involve fraudulent financial reporting, possessing the CPA/CA [Certified Public Accountant/Chartered Accountant] credential can be very helpful. Additionally, technology specialists may be able to conduct advanced investigative techniques using tools that are customized for such purposes.

There are numerous advantages to using outside fraud specialists, in addition to the independence they bring to the job. For example, they have extensive experience with identifying and investigating a variety of different fraud schemes. Therefore, they can help in identifying and assessing the "usual suspects" and recommending the optimal methods of investigation. Additionally, having worked with independent counsel, general counsel, state attorneys, regulators, law enforcement personnel, other accountants and auditors, and prosecutors, they have a good understanding of issues such as:

- The best way to investigate a specific type of fraud scheme.
- Assessing the quality and quantity of evidence needed.
- Evaluating the admissibility of evidence in consultation with outside lawyers.
- Preserving evidence and the chain of custody.
- The need for, as well as potential to act as, a fact witness or as an expert witness.

It is very important for internal auditors to conduct investigations fairly and thoroughly, and develop and maintain the documentation necessary to support any actions that result from the investigation. Using specialists is common practice to ensure these objectives are achieved.

Communicating Fraud Audit Outcomes

When preparing communications concerning the results of fraud audits or investigations, many of the principles discussed in chapter 14, "Communicating Assurance Engagement Outcomes and Performing Follow-up Procedures," apply. For example, internal auditors should identify the criteria, condition(s), cause, and effect to summarize their findings from a fraud investigation. They should write their communications in a systematic, organized fashion to enhance clarity and comprehension, which typically includes:

- A brief, clear statement of the issue(s).
- A citation of the relevant policies, rules, standards, laws, and regulations that may be applicable to the case at hand.
- The analysis of the evidence gathered to form a professional opinion.
- The conclusions; that is, the findings and recommendations.

This will help make the communication clear and useful, particularly if it is being relied upon by the general counsel or the outside attorney conducting the investigation, who may want to make the communication part of their own communication. At all times, the communications issued by internal auditors should contain facts only, and every effort must be made to eschew personal opinions or any kind of bias or speculation that could potentially enter the analysis. In any case, they should never seek to fix culpability on any particular employee(s), but should merely state that the evidence gathered appears to support the conclusion that fraud may have been perpetrated. Determining culpability and affixing blame are functions of the court (the judge and the jury), and are typically outside the scope of the internal auditor's responsibility.

OPPORTUNITIES TO PROVIDE INSIGHT

Internal auditors can provide insight to senior management regarding prevention and detection of fraud and illegal acts in a number of ways. The top 10 opportunities for internal auditors to provide insight are outlined in exhibit 8-11.

SUMMARY

Fraud is a major concern among all types of organizations. Rising fraud awareness around the world has compelled local regulators to address management's responsibilities for fraud prevention, deterrence, and detection. Audit committees and management are increasingly looking to the internal audit function for help with the design adequacy and operating effectiveness of fraud risk management programs and related controls.

An effective fraud risk management program must have certain key elements. First, there must be sound governance activities in place, both directly related to the program and overall within the organization. Second, a comprehensive fraud risk assessment must be completed. This includes the identification of possible fraud events or scenarios, the assessment of impact and likelihood of those scenarios, and decisions regarding what types of responses should be made to those scenarios. Third, effective controls must be designed and implemented. These controls should be balanced between preventive controls aimed at stopping fraud from occurring and deterring potential fraudsters from considering fraudulent acts, and detective controls, which will help ensure timely identification of fraud incidents. Finally, a process must be established to facilitate reporting of fraud incidents, investigation of those incidents, and implementation of disciplinary and corrective actions.

The internal audit function is essential for promoting and supporting an organization's fraud risk management program. The *Standards* requires internal auditors to consider fraud in most of their activities. As a result, internal auditors can support all of the elements of an effective fraud risk management program. Understanding the behavioral characteristics of potential fraudsters helps internal auditors stay alert for those situations in which fraud is most likely. This sense of alertness, coupled with a heightened professional skepticism, can help internal auditors prevent or deter potentially fraudulent actions, and detect timely those incidents that have occurred. Finally, while the skills possessed by most internal auditors are valuable, it is important for the CAE to recognize when it is necessary to hire outside fraud specialists, such as CFEs, and use specialized fraud technology to better enable the internal audit function in fulfilling its fraud-related responsibilities.

Illegal acts are especially problematic for organizations belonging to industries that are heavily regulated, for example, financial services, health care, and the public sector. Increasingly, internal auditors are tasked with compliance responsibilities, and it is not uncommon to find them reporting to the general counsel in such circumstances. Rising prosecutions related to the FCPA in the U.S., the UK Bribery Act of 2010, and anti-money laundering efforts have put the spotlight on compliance with applicable laws and regulations. Nevertheless, it is important to recognize that illegal, unethical, immoral, and fraudulent activities do not all refer to the same thing.

EXHIBIT 8-11
10 OPPORTUNITIES FOR THE INTERNAL AUDIT FUNCTION TO PROVIDE INSIGHT INTO THE RISK OF FRAUD AND ILLEGAL ACTS

1. Assist the organization in the development of comprehensive fraud risk assessment.
2. Develop processes for early detection of fraud.
3. Develop data analysis tools that can be used to detect fraud in the early stages.
4. Assist with the development of hotline call procedures.
5. Provide fraud awareness training throughout the organization.
6. Act decisively on significant fraud events.
7. Assist in postmortem analysis when fraud occurs.
8. Inform management of potential legal acts that are risks to the organization.
9. Assist management in developing a culture of ethical behavior and low tolerance of fraud.
10. Stay abreast and inform management of emerging issues and developing issues related to compliance and regulations.

REVIEW QUESTIONS

1. According to the ACFE's *Report to the Nations*, what percentage of their revenues do organizations lose to fraud? Based on the 2015 World GDP, approximately how much is that in dollars?

2. What is the definition of fraud provided in the *Fraud Guide*?

3. According to the AICPA, by what three ways can fraudulent financial reporting be accomplished?

4. According to the ACFE, what four elements characterize an act of occupational fraud?

5. What are the three elements that may be called the "root causes of fraud" (that is, they are always present, no matter the type of fraud)?

6. What are the five key principles for managing fraud risk outlined in the *Fraud Guide*?

7. What are some examples of strong governance practices?

8. What roles and responsibilities should each of the following have in a fraud risk management program?

   a. The board of directors.

   b. Management.

   c. Employees.

   d. The internal audit function.

9. According to the *Fraud Guide*, what 10 components are typically found in a successful fraud program?

10. What are the three key steps in a fraud risk assessment?

11. What elements should be considered while brainstorming fraud risk scenarios to ensure a comprehensive fraud risk universe is compiled?

12. What key points should be considered when assessing fraud risks?

13. What are the four possible responses to fraud risks?

14. Why must internal auditors be knowledgeable about the FCPA?

15. Per the *Fraud Guide*, what methods can an organization employ to:

    a. Prevent fraud?

    b. Detect fraud?

16. What steps are involved in the final stage in an effective fraud risk management program?

17. Which of the IIA *Standards* provide specific guidance to internal auditors regarding their fraud-related responsibilities?

18. What does "professional skepticism" mean?

19. How might fraud specialists, such as CFEs, assist the internal audit function in combating fraud?

20. What should internal auditors include in their fraud audit communications? What should they not include?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. Predication is a technical term that refers to:

   a. The ability of internal auditors to predict fraud successfully.

   b. The ability of a fraud examiner to commence an investigation if a form of evidence exists that fraud has occurred.

   c. The activities of fraud perpetrators in concealing their tracks so that fraud is covered up and may not be discovered.

   d. Management's analysis of fraud risks so they can put in place effective anti-fraud programs and controls.

2. What fraud schemes were reported to be most common in the ACFE's 2016 *Report to the Nations*?

   a. Corruption.

   b. Fraudulent billing.

   c. Misappropriation of assets by employees.

   d. Inappropriately reporting revenues in published financial results.

3. Which of the following is not a typical "rationalization" of a fraud perpetrator?

   a. It's in the organization's best interest.

   b. The company owes me because I'm underpaid.

   c. I want to get back at my boss (revenge).

   d. I'm smarter than the rest of them.

4. Which of the following is not something all levels of employees should do?

   a. Understand their role within the internal control framework.

   b. Have a basic understanding of fraud and be aware of the red flags.

   c. Report suspicions of incidences of fraud.

   d. Investigate suspicious activities that they believe may be fraudulent.

5. An organization that manufactures and sells computers is trying to boost sales between now and the end of the year. It decides to offer its sales representatives a bonus based on the number of units they deliver to customers before the end of the year. The price of all computers is determined by the vice president of sales and cannot be changed by sales representatives. Which of the following presents the greatest reason a sales representative may commit fraud with this incentive program?

   a. Sales representative may sell units that have a lower margin than other units.

   b. Customers have the right to return a laptop for up to 90 days after purchase.

   c. The units delivered may be defective.

   d. The customers may not pay for the computers timely.

6. How should an organization handle an anonymous accusation from an employee that a supervisor in the organization has manipulated time reports?

   a. Assign a staff internal auditor to review all time reports for the past six months in the supervisor's area.

   b. Make a record of the accusation but do nothing, as anonymous accusations are typically not true.

   c. Assess the facts provided by the anonymous party against pre-established criteria to determine whether a formal investigation is warranted.

   d. Turn the issue over to the HR department because this type of anonymous accusation is usually just a human resource issue.

7. Which of the following is an example of misappropriation of assets?

   a. A small amount of petty cash is stolen.

   b. A journal entry is modified to improve reported financial results.

   c. A foreign official is bribed by the chief operating officer (COO) to facilitate approval of a new product.

   d. A duplicate bill is sent to a customer in hopes that they will pay it twice.

8. Which of the following is not an example of a fraud prevention program element?

   a. Background investigations of new employees.

   b. Exit interviews of departing employees.

MULTIPLE-CHOICE QUESTIONS

c. Establishing authority limits related to purchasing commitments.

d. Analyzing cash disbursements to determine whether any duplicate payments have been made.

9. Which of the following types of companies would most likely need the strongest anti-fraud controls?

   a. A manufacturer of popular athletic shoes.

   b. A grocery store.

   c. A bank.

   d. An internet-based electronics retailer.

10. A payroll clerk increased the hourly pay rate of a friend and shared the resulting overpayment with the friend. Which of the following controls would have best served to prevent this fraud?

    a. Requiring that all changes to pay records be recorded on a standard form.

    b. Limiting the ability to make changes in payroll system personnel information to authorized HR department supervisors.

    c. Periodically reconciling pay rates per personnel records with those of the payroll system.

    d. Monitoring payroll costs by department supervisors monthly.

11. The internal audit function's responsibilities with respect to fraud are limited to:

    a. The organization's operational and compliance activities only because financial reporting matters are the responsibility of the independent outside auditor.

    b. Monitoring any calls received through the organization's whistleblower hotline but not necessarily conducting a follow-up investigation.

    c. Being aware of fraud indicators, including those relating to financial reporting fraud, but not necessarily possessing the expertise of a fraud investigation specialist.

    d. Ensuring that all employees have received adequate fraud awareness training.

12. From an organization's standpoint, because internal auditors are seen to be "internal control experts," they also are:

    a. Fraud risk management process owners, and hence, the first and most important line of defense against fraudulent financial reporting or asset misappropriation.

    b. The best resource for audit committees, management, and others to consult in-house when setting up anti-fraud programs and controls, even if they may not have any fraud investigation experience.

    c. The best candidates to lead an investigation of a fraud incident involving the potential violation of laws and regulations.

    d. The primary decision-maker in terms of determining punishment or other consequences for fraud perpetrators.

13. According to research in personality psychology, the three "dark triad personalities" do not mention:

    a. Sociopaths.

    b. Psychopaths.

    c. Narcissists.

    d. Machiavellians.

14. The 17 principles in the updated COSO 2013 *Internal Control – Integrated Framework* include one devoted specifically to addressing fraud risk:

    a. True.

    b. False.

15. The Cressey Fraud Triangle does not include, as one of its vertices:

    a. Pressure.

    b. Opportunity.

    c. Rationalization.

    d. Fraudster personality.

DISCUSSION QUESTIONS

1. Discuss why the internal audit function's organizational status, competence, and objectivity are particularly important when considering fraud by senior management. Why might a CAE reporting directly to the CFO, CEO, general counsel, or controller be more problematic than reporting to the audit committee (or equivalent)?

2. The Open Compliance and Ethics Group (OCEG) released a guide for internal auditors to assist them in performing ethics and compliance audits (this guide can be found at www.oceg.org). How will "tone at the top," a control consciousness orientation, and a culture of integrity and ethics within organizations assist, if at all, in preventing, deterring, and detecting fraud? Is it sufficient that organizations effectively deter activities that are "illegal, unethical, or immoral," and if these are observed, ensure that the "whistleblower hotline" will be used to report such wrongful conduct that might well be a precursor to fraud?

3. Based on your reading of the 2016 COSO Fraud Risk Management Guide executive summary (see www.coso.org), discuss the five principles presented therein. Use the "MECE" (Mutually Exclusive, Collectively Exhaustive) methodology to evaluate whether these five principles are indeed mutually exclusive (i.e., independent of each other) and collectively exhaustive (i.e., there is no significant principle that remains omitted). At what stage and where are fraudster personality aspects considered (refer to *The CPA Journal* articles by B. J. Epstein and S. Ramamoorti in March and November 2016)?

4. In general, what are the fraud risk indicators that internal auditors should be aware of? How are these "red flags" (fraud risk factors) influenced by industry and geography? Why does it seem that certain areas and assets are more vulnerable to fraud, that is, what "relative risk" considerations need to be factored in? Expand these considerations to materiality (that is, the significance or importance of achieving organizational objectives) and the appropriateness and sufficiency of evidence.

5. How can the internal audit function assist the audit committee by alerting it to instances of management override of internal controls on a timely basis?

6. How should internal auditors help, if at all, with forensic accounting investigations?

7. Internal auditors may be asked to conduct a fraud investigation involving litigation. Is it important to consider conducting the investigation under attorney-client privilege? Explain.

CASES

CASE 1

Oxalite Inc.: A Cautionary Tale*

The headlines stunned investors, regulators, and the business community. Over a period of five years, several members of the management team at Oxalite Incorporated had engaged in fraudulent financial reporting. The offenses discovered included revenue-timing schemes and the creation of fictitious revenue in both U.S. and Asian offices.

Prior to the discovery, a cursory look at Oxalite would have given little hint of vulnerabilities to financial reporting fraud. Its board of directors was populated with respected individuals. Oxalite had a written code of conduct. It had expanded at a healthy rate, even opening facilities in Asia. The company had experienced steady profits.

But a look behind the curtain revealed a culture that encouraged and enabled fraud. Promotions were based on loyalty rather than competence. "Fast" and "new" were the watchwords, trumping "deliberate" and "documented." Employees did not feel safe bringing bad news forward. Furthermore, skepticism was discouraged and questions were frowned upon.

Executives shared the company code of conduct with investors, media, and others outside the company; however, employees were simply provided with a weblink to the code upon hire and few had ever accessed or read it. A significant portion of executive compensation hinged on "making the numbers." The Asian offices came under particular pressure, as hopes for ever-higher earnings were pinned on rapid-growth markets. Executives struggled to hit targets but learned to manipulate the books to make it appear they had.

The board of directors and audit committee met regularly but rarely availed themselves of the opportunity to engage internal or external auditors, or the company's ethics and compliance personnel. Board meetings discouraged two-way discussion, and the board frequently ran out of time before ethics and compliance issues could be discussed. The audit committee rarely met with executives or middle management, and when they did, failed to ask questions whose answers might have raised red flags. In short, the participants in the financial reporting supply chain were insufficiently inquisitive or skeptical. They assumed all was well. It was not.

Note: *Oxalite Inc. is a fictional company created for illustrative purposes. It appears as the "opener" to the Center for Audit Quality's (CAQ) November 17, 2014, publication, "The Fraud-Resistant Organization: Tools, Traits, and Techniques to Detect and Report Financial Reporting Fraud."[25] The publication resulted from the work of the Anti-Fraud Collaborative formed in 2010 and consisting of the CAQ, Financial Executives International (FEI), the Institute of Internal Auditors (IIA), and the National Association of Corporate Directors (NACD).

Discussion questions:

1. For discussion purposes, treat Oxalite, Inc. as a public company. Based on this assumption, reflect on the following:
   a. What were some internal control deficiencies and even material weaknesses? How would they have been discovered? What would be the implications for Sarbanes-Oxley Section 404 compliance?
   b. Analyze this case using the COSO Fraud Risk Management Guide Principles 1, 2, and 5 relating to the COSO internal control components of control environment, risk assessment, and monitoring.
2. How could the external auditors have helped avoid this adverse corporate governance outcome?
3. How could the internal audit function have helped evaluate the design and operating effectiveness of internal controls?
4. Mr. N. G. Shankar, CAE of the Aditya Birla Group, a large conglomerate in India and a former member of the Internal Audit Standards Board of The IIA, has remarked, "Poor culture leads to organizational disaster." In what way was his observation justified in the case of Oxalite, Inc?

CASE 2

A number of large cases of fraud have come to trial and the postmortems are completed. You have learned a lot related to identifying fraud risk, mitigating control activities, as well as promoting organizational ethics and compliance. You now should understand that fraud incidence is more common than previously thought, and that there are many techniques, methods, and motivations to fraud. You also should understand that fraud that is uncovered may just be a symptom of other issues and problems (for example, when management lacks integrity, a restatement of the financial statements may mean that the independent outside auditor and/or internal auditor was successful in foiling attempted fraud). We now have a lot more regulation—a classic response to similar periods in history.

Your group project is strategic in nature and relates to how internal auditors can deal with fraud and the impact of some of the current regulations such as the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Act of 2010. In the United States, as of this writing, the unfolding Wells Fargo scandal has already resulted in then CEO John Stumpf's resignation (see CFPB Consent Order at http://files.consumerfinance.gov/f/documents/2016-CFPB-0013Wells_Fargo_Bank_N.A.--_Consent_Order.pdf). The Wells Fargo firing of 5,300 employees as a result of the opening of 2 million unauthorized customer accounts and credit cards have raised numerous unanswered questions: Where were the internal controls? Where were the internal auditors? Where were the external auditors? Where were the regulatory auditors? Where was the risk management function, and what happened with the so-called three lines of defense? Where was the audit committee? Do we really need a new agency called the Consumer Financial Protection Bureau (CFPB, see http://www.consumerfinance.gov/) without whose $100 million fine imposed on Wells Fargo these matters may have never come to light?

The first part of this case study is to select three such cases in your relevant local, national, or international jurisdiction (for example, the FIFA bribery and corruption scandal has affected any countries around the world, especially because soccer is such a popular sport globally, see https://www.wired.com/2015/05/fifa-scandal-explained/). Your task is to look at the root cause of each fraud or corruption incident and identify techniques that might have prevented each from occurring, or at least detected it timely. Note the laws and regulations, or professional standards, policies, and procedures, that may have been violated as you go about evaluating the strength of internal controls and their operating effectiveness.

As a group, prepare a PowerPoint presentation. The presentation should include two or three slides for each fraud case that summarize the fraud or corruption incident, approximate loss incurred, the parties involved in the fraud/corruption incident, the root causes, and the corrective actions that have been taken since the fraud/corruption incident occurred. Also indicate whether Sarbanes-Oxley, the Dodd-Frank Act, and other applicable laws and regulations (or comparable local legislation and regulation) are robust enough to preclude such a fraud from occurring in the future. Additionally, describe the corrective actions your group would recommend to prevent, or detect timely, this type of fraud. On a separate slide, compare the root causes of the three fraud/corruption cases you study. Note how the three lines of defense were ill-conceived and designed, were not operating effectively, or were somehow compromised by those perpetrating fraud/engaging in corruption. On a final slide, convey what your group learned as a result of completing this case study.

CASE 3

The purpose of this case is to familiarize you with the Benford's Law functionality of the ACL and CaseWare IDEA software.

A. Go to the ACL site. Locate the description of "Benford command" in ACL Help. Answer the following questions.
   1. What does the ACL Benford command do?
   2. What caution is provided regarding the use of digital analysis tools such as the Benford command?
   3. How is the Benford command activated?

B. Go to the CaseWare IDEA site. Locate the description of "Benford's Law" in IDEA Help. Answer the following questions.
   1. Benford's Law analysis is most effective on data with certain characteristics. What are these characteristics?
   2. Identify and briefly describe the seven steps used to perform a Benford's Law analysis.
   3. What fields are contained in the database created when a Benford's Law analysis is performed?

C. Locate the description of "Fraud Investigations" in IDEA Help. Click on "Payroll frauds." Answer the following questions.

1. What types of payroll fraud are described?
2. How are most payroll frauds found?
3. Describe the payroll fraud tests that can be performed using CaseWare IDEA.

CASE 4

KnowledgeLeader Practice Case: Fraud Risk Assessment

Background Information

The process of conducting a fraud risk assessment is similar to that of conducting an enterprise risk assessment. The three key steps are:

1. Identify inherent fraud risks.
2. Assess impact and likelihood of the identified risks.
3. Develop responses to those risks that have a sufficiently high impact and likelihood to result in a potential outcome beyond management's tolerance.

When conducting a fraud risk assessment, it is important to involve individuals with varying knowledge, skills, and perspectives. The risk assessment process can take many different forms, the most common of which are interviews, surveys, and facilitated meetings. Regardless of the approach, it is important for individuals to remain open and creative to ensure the fraud risk universe is sufficiently comprehensive.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and identify alternative models for conducting an effective fraud risk assessment. Compare and contrast these models. How do they differ? How are they similar?

C. Submit a brief write-up indicating the results of your research to your instructor.

CHAPTER 9

Managing the Internal Audit Function

LEARNING OBJECTIVES

- Understand the importance of proper positioning of the internal audit function within the organization.
- Identify the benefits of various organizational structures for an internal audit function.
- Identify the roles and responsibilities of the key positions in an internal audit function.
- Understand the policies and procedures of internal auditing and how they guide the internal audit function.
- Understand the attributes of a well-executed risk management model (process) and reflect on what role the internal audit function should have in the organization's risk management processes.
- Understand quality assurance, how it operates, and why it is important to the internal audit function.
- Understand how technology is used in the management of the internal audit function.

By now, you should recognize the depth and complexity of an internal audit function and be aware of the critical role it can play in the success of the entire organization through the assurance services it performs in support of the organization's governance structure. In this chapter, we discuss what is involved in managing the internal audit function. When applicable, the spectrum of methods employed by different internal audit functions is presented and the benefits of each are discussed. We begin with a discussion of the various options regarding organizational structures for an internal audit function, including where it is positioned within an organization. Then, we identify the key positions within the internal

Chief Audit Executive

A senior position within the organization responsible for internal audit activities. The term also includes titles such as general auditor, head of internal audit, chief internal auditor, internal audit director, and inspector general.

audit function, including the chief audit executive (CAE), and outline the roles and responsibilities for each. From there, we move on to the policies and procedures with an overview of how they provide necessary guidance and structure to the internal audit function. Next, we examine various risk management models and look at what role the internal audit function can and should play in the organization's risk management and governance processes. After that, we explain quality assurance and its importance in the internal audit function. Finally, we end the chapter by touching on various technological tools available to an internal audit function and how they are used in managing the function.

EXHIBIT 9-1
IPPF GUIDANCE RELEVANT TO CHAPTER 9

- **Standard 1000** – Purpose, Authority, and Responsibility
- **Standard 1010** – Recognition of the Core Principles for the Professional Practice of Internal Auditing, the Definition of Internal Auditing, the Code of Ethics, and the *Standards* in the Internal Audit Charter
- **Standard 1100** – Independence and Objectivity
- **Standard 1110** – Organizational Independence
- **Standard 1111** – Direct Interaction With the Board
- **Standard 1112** – Chief Audit Executive Roles Beyond Internal Auditing
- **Standard 1120** – Individual Objectivity
- **Standard 1130** – Impairments to Independence or Objectivity
- **Standard 1200** – Proficiency and Due Professional Care
- **Standard 1210** – Proficiency
- **Standard 1220** – Due Professional Care
- **Standard 1230** – Continuing Professional Development
- **Standard 1300** – Quality Assurance and Improvement Program
- **Standard 1310** – Requirements of the Quality Assurance and Improvement Program
- **Standard 1311** – Internal Assessments
- **Standard 1312** – External Assessments
- **Standard 1320** – Reporting on the Quality Assurance and Improvement Program
- **Standard 1321** – Use of "Conforms with the *International Standards for the Professional Practice of Internal Auditing*"
- **Standard 2000** – Managing the Internal Audit Activity
- **Standard 2010** – Planning
- **Standard 2020** – Communication and Approval
- **Standard 2030** – Resource Management
- **Standard 2040** – Policies and Procedures
- **Standard 2050** – Coordination and Reliance
- **Standard 2060** – Reporting to Senior Management and the Board
- **Standard 2100** – Nature of Work
- **Standard 2110** – Governance
- **Standard 2120** – Risk Management
- **Standard 2130** – Control

POSITIONING THE INTERNAL AUDIT FUNCTION IN THE ORGANIZATION

There is a broad spectrum of opinions regarding where internal audit functions can and should be positioned in an organization to conform to The IIA's *International Standards for the Professional Practice of Internal Auditing*. On one end of the spectrum, internal audit functions are placed on a senior management level, giving the function the visibility, authority, and responsibility to 1) independently evaluate management's assessment of the organization's system of internal controls, and 2) assess the organization's ability to achieve business objectives and manage, monitor, and mitigate risks associated with the achievement of those objectives. In addition to assurance services, these internal audit functions are commonly asked by management to provide consulting services in the form of initiatives or projects that allow management to use the professional expertise that the internal audit function possesses. (Consulting services are covered more extensively in chapter 15, "The Consulting Engagement.") On the other end of the spectrum are those organizations that either do not have internal audit functions or place their internal audit functions much lower in the organizational hierarchy, typically assigning them nonaudit activities to perform on a day-to-day basis, such as quality assurance, compliance, operational, and/or other transaction processing activities.

In response to The IIA's definition of internal auditing quoted in chapter 1, "Introduction to Internal Auditing," as "an independent, objective, assurance and consulting activity designed to add value and improve an organization's operations" that "helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve effectiveness of risk management, control, and governance processes," many organizations have positioned their internal audit function as a senior management activity that reports directly to the board. Organizations that continue to position the internal audit function to perform primarily operational and other nonaudit activities, as previously mentioned, essentially render the function unable to provide management with an evaluation of the design and effectiveness of risk management, control, and governance processes because they lack the objectivity to independently evaluate the organization's operations and offer impartial suggestions for improvement.

Organizations that recognize the importance of placing the internal audit function in a position that maximizes its effectiveness and ability to evaluate the efficacy of the risk management, control, and governance processes that are in place often do so through a senior management position described in the *Standards* as a CAE. IIA Standard 2000: Managing the Internal Audit Activity states that "the chief audit executive must effectively manage the internal audit activity to ensure it adds value to the organization." Recognizing that the CAE is pivotal to a successful internal audit function, the interpretation of Standard 2000 goes on to state that "the internal audit [function] is effectively managed when:

- The results of the internal audit [function's] work achieve the purpose and responsibility included in the internal audit charter;
- The internal audit [function] conforms with the *Standards*;
- The individuals who are part of the internal audit [function] demonstrate conformance with the Code of Ethics and the *Standards*; and
- The internal audit activity [function] considers trends and emerging issues that could impact the effectiveness of the internal audit [function]."

A necessary condition for the CAE to fulfill the responsibilities outlined above is to create a charter that "establishes the internal audit [function's] position within the organization; authorizes access to records, personnel, and physical properties relevant to the performance of engagements; and defines the scope of internal audit activities" (Interpretation to IIA Standard 1000: Purpose, Authority, and Responsibility). In addition to specifying the purpose, authority, and responsibility of the internal audit function, the charter should take into consideration assurance and consulting services. It is important to recognize that the internal audit function and the audit committee have separate charters delineating the specific and separate obligations to the organization of each, while considering and reflecting the inherent interdependencies of the two. The internal audit function's charter is subordinate to the audit committee's charter and must support, not contradict, it. Internal audit functions often supplement the charter with formal vision and/or mission statements, as well as a detailed long-term strategy for the internal audit function. Frequently this supplemental information, along with operating budgets and resource plans, are included in an annual internal audit plan presented to the audit committee for its review and approval. These various separate documents, along with the operating policies and procedures of the internal audit function, are commonly combined into a set of guiding principles (generally referred to as an "audit manual") that, along with other procedural information, drive the internal audit function. Exhibit 9-2 outlines The IIA's recommendations for establishing an internal audit charter.

Internal Audit Charter

A formal written document that defines the internal audit function's purpose, authority, and responsibility. The internal audit charter is subordinate to the audit committee's charter.

EXHIBIT 9-2
RECOMMENDATIONS FOR ESTABLISHING AN INTERNAL AUDIT CHARTER

Internal Audit Charter

1. A formal, written internal audit charter is essential in managing the internal audit function. The internal audit charter provides formal criteria for review and understanding by management, as documented in the minutes, by the audit committee. It also facilitates a periodic assessment of the adequacy of the internal audit function's purpose, authority, and responsibility, which establishes the role of the internal audit function. The internal audit charter provides a formal, written agreement with management and the audit committee regarding the organization's internal audit function.
2. The chief audit executive (CAE) is responsible for periodically assessing whether the internal audit function's purpose, authority, and responsibility, as defined in the internal audit charter, continue to be adequate to enable the internal audit function to accomplish its objectives. The CAE is also responsible for communicating the result of this assessment to management and the audit committee.

In addition to establishing a charter, mission and/or vision, and internal audit plan, the CAE is responsible for establishing and maintaining independence, objectivity, proficiency, and due professional care within the internal audit function. As stated earlier, the positioning of the internal audit function affects the degree to which it can remain objective. Being positioned on a level with senior management with direct access to the audit committee gives the internal audit function greater independence and, consequently, greater objectivity. Audit committee participation in the selection, evaluation, and dismissal of the CAE further enhances the CAE's ability to maintain organizational independence and minimizes the possibility of senior management exerting undue influence that would impact his or her ability to act without bias (individual objectivity). Ideally, the function will be positioned high enough within the organization with direct access to the audit committee to allow conformity with The IIA's requirements and recommendations as detailed below.

Independence and Objectivity

IIA Standard 1110: Organization Independence states, "The chief audit executive must report to a level within the organization that allows the internal audit activity to fulfill its responsibilities." More specifically, Standard 1110.A1 specifies that "the internal audit activity must be free from interference in determining the scope of internal auditing, performing work, and communicating results. The chief audit executive must disclose such interference to the board and discuss the implications." The supplementary Implementation Guide provides greater detail, stressing the importance of senior management and audit committee support of the internal audit function to help ensure auditee cooperation and the elimination of interference when the internal audit function is working on an engagement.

Individual Objectivity

An unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they have an honest belief in their work product and that no significant quality compromises are made. Objectivity requires internal auditors not to subordinate their judgment on audit matters to that of others.

IIA Standard 1120: Individual Objectivity states, "Internal auditors must have an impartial, unbiased attitude and avoid any conflict of interest." The Implementation Guide for this standard further outlines these requirements: "Conflict of interest is a situation in which an internal auditor, who is in a position of trust, has a competing professional or personal interest. Such competing interests can make it difficult to fulfill his or her duties impartially. A conflict of interest exists even if no unethical or improper act results. A conflict of interest can create an appearance of impropriety that can undermine confidence in the internal auditor, the internal audit activity, and the profession. A conflict of interest could impair an individual's ability to perform his or her duties and responsibilities objectively."

Organizational Independence

The chief audit executive's line of reporting within the organization that allows the internal audit function to fulfill its responsibilities free from interference.

As discussed in IIA Standard 1130: Impairment to Independence or Objectivity:

> If independence or objectivity is impaired in fact or appearance, the details of the impairment must be disclosed to appropriate parties. The nature of the disclosure will depend upon the impairment.
>
> **Interpretation:**
> Impairment to organizational independence and individual objectivity may include, but is not limited to, personal conflict of interest, scope limitations, restrictions on access to records, personnel, and properties, and resource limitations, such as funding.
>
> The determination of appropriate parties to which the details of an impairment to independence or objectivity must be disclosed is dependent upon the expectations of the internal audit activity's and the chief audit executive's responsibilities to senior management and the board as described in the internal audit charter, as well as the nature of the impairment.

Should an impairment to independence or objectivity be identified, the internal auditor must report the impairment or perceived impairment to the CAE who must decide if the internal auditor needs to be reassigned. When the impairment results from a scope limitation, the CAE must report such limitation to the audit committee.

The CAE's communication to the audit committee should be in writing and include the potential effect of the scope limitation. Additionally, to prevent the possibility of an impairment (actual or perceived) internal auditors cannot accept fees, gifts, or entertainment from an employee, client, customer, supplier, or business associate.

Additional IIA requirements regarding impairments to independence or objectivity can be found in exhibit 9-3.

EXHIBIT 9-3
IIA REQUIREMENTS REGARDING IMPAIRMENTS TO INDEPENDENCE AND OBJECTIVITY

Standard 1130.A1

Internal auditors must refrain from assessing specific operations for which they were previously responsible. Objectivity is presumed to be impaired if an auditor provides assurance services for an activity for which the auditor had responsibility within the previous year.

Standard 1130.A2

Assurance engagements for functions over which the chief audit executive has responsibility must be overseen by a party outside the internal audit activity.

Standard 1130.A3

The internal audit activity may provide assurance services where they had previously performed consulting services, provided the nature of the consulting did not impair objectivity and provided individual objectivity is managed when assigning resources to the engagement.

Standard 1130.C1

Internal auditors may provide consulting services relating to operations for which they had previous responsibilities.

Standard 1130.C2

If internal auditors have potential impairments to independence or objectivity relating to proposed consulting services, disclosure must be made to the engagement client prior to accepting the engagement.

Often, the internal audit function will coordinate efforts with other departments in the organization that have similar risk mitigation objectives and responsibilities, such as compliance and risk management. As long as the internal audit function is not asked to perform operating activities or design processes and procedures they will later need to evaluate as part of their duties as an internal audit function, there is no impairment to independence or objectivity. This type of coordination can add significant value to the organization and promote efficient resource utilization in the organization's risk mitigation efforts. Similarly, the internal audit function may identify opportunities for coordinating assurance efforts between the different areas of the organization without impairing independence or objectivity. Coordination of assurance efforts is discussed in greater detail later in this chapter.

Proficiency and Due Professional Care

IIA Standard 1200: Proficiency and Due Professional Care states simply that "engagements must be performed with proficiency and due professional care." IIA Standard 1210: Proficiency goes into more detail, stating that "internal auditors must possess the knowledge, skills, and other competencies needed to perform their individual responsibilities. The internal audit activity collectively must possess or obtain the knowledge, skills, and other competencies needed to perform its responsibilities." Furthermore, IIA Standard 1220: Due Professional Care states that "internal auditors must apply the care and skill expected of a reasonably prudent and competent internal auditor. Due professional care does not imply infallibility."

Proficiency

The knowledge, skills, and other competencies internal auditors need to perform their individual responsibilities.

It is important to note that the interpretation of Standard 1210 defines "proficiency [as] a collective term that refers to the knowledge, skills, and other competencies required of internal auditors to effectively carry out their professional responsibilities." This interpretation goes on to say that "it encompasses consideration of current activities, trends, and emerging issues, to enable relevant advice and recommendations" and further encourages internal auditors to "demonstrate their proficiency by obtaining appropriate professional certifications and qualifications, such as the Certified Internal Auditor designation and other designations offered by The Institute of Internal Auditors and other appropriate professional organizations."

Due Professional Care

Internal auditors must apply the care and skill expected of a reasonably prudent internal auditor, however, internal auditors are not expected to be infallible.

PLANNING

As previously mentioned, the CAE is responsible for creating an operating budget and allocating resources in a manner designed to accomplish the annual internal audit plan. The annual plan is developed by the internal audit function through a process that identifies and prioritizes possible audit entities (business units or processes, referred to as the "audit universe") responsible for mitigating key strategic, operations, reporting, and compliance risks to levels acceptable to the organization's board of directors and senior management. Key risks are those confronting the organization that must be controlled and monitored for an organization to successfully accomplish its defined business objectives. These risks, as identified by senior management, should be independently corroborated by the internal audit function. After the key risks have been identified and agreed upon, the CAE determines which specific business units and processes are responsible for mitigating these risks. The resulting information is then subject to a process that prioritizes and ranks the risks and associated business units or processes. The CAE considers all of this information and determines the human and financial resources necessary to provide appropriate audit coverage of the prioritized audit universe. The result is a comprehensive internal audit plan that includes both the assurance services and consulting services necessary to assess how effectively the organization is managing the risks that threaten its business objectives and to identify risk management improvement opportunities. The audit plan can then be implemented by assigning specific personnel to individual engagements in the plan over the following fiscal year. Internal audit functions will implement and assign resources to execute the internal audit plan throughout the fiscal year, and many will update and recast the internal audit plan more frequently than annually (for example, quarterly or monthly).

Audit Universe

A compilation of the subsidiaries, business units, departments, groups, processes, or other established subdivisions of an organization that exist to manage one or more business risks.

There are multiple theories for the structuring of an internal audit plan. Many internal audit functions have moved toward a comprehensive process whereby senior management and the internal audit function collaborate to complete a formal risk assessment on an organizationwide basis to establish a prioritized list of key risk scenarios facing the organization that must be appropriately managed by the organization to achieve key business objectives. It is much more common, however, for the process to be informal and much less collaborative in nature. Whatever process is used, maximum effectiveness is achieved when the risk assessment process is completed at least annually at the beginning of, or prior to, an organization's fiscal year with quarterly updates. This allows the CAE to align audit resources for the upcoming year and, if necessary, make quarterly adjustment to stay in alignment with the conclusions drawn by management during their risk assessment process. Providing the CAE with a definitive list of audit entities related to the prioritized risks allows for the creation of an internal audit plan using a top-down, risk-based approach. However, many organizations and their internal audit functions still do not use this approach. Instead, they continue to create internal audit plans that cyclically audit each and every area of the organization with highly prioritized business units or processes cycled in for audit coverage more frequently and lower prioritized business units or processes cycled in less frequently.

Internal Audit Plan

An outline of the specific assurance and consulting engagements scheduled for a period of time (typically one year) based on an assessment of the organization's risks.

The IIA addresses the differences between assurance services and consulting services relative to IIA Standard 2010: Planning with Standards 2010.A1 and 2010.C1:

> **Assurance Services.** The internal audit activity's plan of engagements must be based on a documented risk assessment, undertaken at least annually. The input of senior management and the board must be considered in this process. (Standard 2010.A1)
>
> **Consulting Services.** The chief audit executive should consider accepting proposed consulting engagements based on the engagement's potential to improve management of risks, add value, and improve the organization's operations. Accepted engagements must be included in the plan. (Standard 2010.C1)

The planning process should include the establishment of goals, engagement schedules, staffing schedules, and financial budgets. Additionally, effective planning should reflect the internal audit charter and be consistent with organizational objectives. The planning process should be a collaborative process involving all levels of management to ensure the audit plan is understood and supported by management.

COMMUNICATION AND APPROVAL

After the internal audit plan has been established, it is incumbent upon the CAE to present it to senior management and the board (typically the audit committee) to be approved. Resource requirements, significant interim changes, and the potential implications of resource limitations should all be included in the communication to senior management and the board (IIA Standard 2020: Communication and Approval).

Means for meeting this requirement are discussed in Implementation Guide 2020: "The CAE's presentation of the internal audit plan to the board usually occurs during a meeting, which may include senior management. The proposed internal audit plan may include:

- A list of proposed audit engagements (and specification regarding whether the engagements are assurance or consulting in nature).
- Rationale for selecting each proposed engagement (for example, risk rating, time since last audit, change in management, etc.).
- Objectives and scope of each proposed engagement.
- A list of initiatives or projects that result from the internal audit strategy but may not be directly related to an audit engagement."

RESOURCE MANAGEMENT

A significant consideration in implementing an internal audit function's plan is how to allocate resources. It is the CAE's responsibility to "ensure that internal audit resources are appropriate, sufficient, and effectively deployed to achieve the approved plan" (IIA Standard 2030: Resource Management). This is achieved by carefully orchestrating a number of factors as discussed below.

Organizational Structure and Staffing Strategy

Internal audit functions should be structured in a way that is consistent with the needs and culture of their organizations. The CAE may choose to employ a flat organizational structure in which most of the internal auditors have more or less the same level of skills, experience, and seniority. Typically, this type of organization creates an internal audit function that is stable, highly knowledgeable, and very collaborative. Little supervision is necessary and the work performed is consistent and reliable. However, a flat organizational structure tends to result in a higher cost base due to the higher salaries necessary to retain auditors who all have a high degree of knowledge and experience. Other internal audit functions are much more hierarchical in nature with field auditors reporting to and learning from senior auditors who in turn report to and learn from managers and directors who mentor those in positions subordinate to theirs while supporting the CAE above them.

Internal audit functions that are structured hierarchically tend to be more dynamic due to the fact that positions are often rotating. As the people in the positions near the top of the organizational structure move up and sometimes out of the function, the people in the subordinate positions move up into the recently vacated positions. This allows for growth within the function and leads to the cultivation of diverse skills and fresh perspectives with a lower cost base. Both types of internal audit organization, however, rely on staff members who continue to receive training and broaden their skill base.

The typical hierarchical internal audit function includes associates in a variety of positions that correlate to specific roles within the function, including:

- **Staff auditor or IT staff auditor**. Staff auditors are responsible for performing the fieldwork on financial, operational, compliance, and information system engagements in accordance with the established audit schedule for the purpose of determining the accuracy of financial records, effectiveness of business practices, and compliance with policies, procedures, laws, and regulations.
- **Senior auditor or IT senior auditor (sometimes referred to as an in-charge auditor)**. In addition to the responsibilities listed above, senior auditors are responsible for the planning stages of an engagement, guiding staff auditors

in their fieldwork, ensuring that engagement timelines are met, reviewing the workpapers prepared by the staff auditors, assisting in the preparation of engagement communications, performing the wrap-up steps of the engagement, and evaluating the staff auditors' performance.

- **Audit manager or IT audit manager.** Audit managers supervise and administer engagements in accordance with the established audit schedule. Additionally, audit managers assist in the development and maintenance of the annual internal audit plan and risk model for assigned areas, issue engagement communications, and supervise senior auditors.
- **Audit director or IT audit director.** Audit director positions may exist in larger internal audit functions. In addition to the responsibilities listed above, audit directors assist with the development of the overall internal audit strategy and planning, including the presentation and review of the internal audit strategy, mission, charter, and plan with the audit committee and senior management. Audit directors also supervise audit managers and are responsible for hiring and terminating internal audit associates.
- **Chief audit executive.** The CAE develops, directs, organizes, monitors, plans, and administers the internal audit plan and budget, as approved by the audit committee, for the purpose of determining the accuracy of financial records, effectiveness of business practices, and compliance with applicable policies, procedures, laws, and regulations. The CAE also directly supervises the internal audit management team (audit directors and managers), oversees the entire internal audit function, and approves the hiring and termination of internal auditors.

In addition to the traditional positions described above, many internal audit functions are also creating specialist positions designed to bring a unique or niche set of skills, experiences, and knowledge to bear, such as engineers, actuaries, writers, data analysts, etc. These positions will vary widely depending on the philosophy, structure, and mandate of the internal audit function, as well as the organization's industry, regulatory environment, and governance structure. Depending on the complexity of the subject matter expertise required, experience desired, and the particular needs of the internal audit function, specialist positions can range from staff to director level.

The IIA's Global Internal Audit Competency Framework, originally published by The IIA in 2013 and updated in 2014, is a tool that defines the competencies needed to meet the requirements of the International Professional Practices Framework (IPPF) for success within the internal audit profession. As defined by the Framework, a competency is the ability of an individual to perform a job or task properly, which includes a defined set of knowledge, skills, and behaviors. The Framework provides a structured guide that assists in the identification, evaluation, and development of those competencies in an individual internal auditor. The Framework outlines 10 core competencies to be demonstrated by each role included in the Framework, including: Internal Audit Staff, Internal Audit Senior/Supervisor, Internal Audit Manager, Director, and Head of Internal Audit/CAE. The Framework is introduced in chapter 1, discussed further in chapter 2, "The International Professional Practices Framework: Authoritative Guidance for the Internal Audit Profession," and can be found under "Professional Guidance" on The IIA's website.

Right Sizing

Right sizing is an important concept in the staffing and scheduling of an internal audit function. It is important to achieve and maintain a balance of knowledgeable and skilled staff to complete the internal audit plan, without putting undue stress on the staff by creating oppressive workloads, while simultaneously maintaining a reasonable financial budget. This is true whether the internal audit structure is flat or hierarchically organized and is often a factor when determining what type of structure is appropriate for an organization. The CAE relies on various sources to help validate right-sizing decisions, including networking, benchmarking, market studies, and other consultative venues.

Staffing Plans/Human Resources

Although some aspects of maintaining appropriate human internal audit resources are delegated to other high-level associates in the internal audit function (for example, directors and managers may do much of the recruiting and initial selection of candidates), the CAE "must ensure that internal audit resources are appropriate, sufficient, and effectively deployed to achieve the approved plan," according to Standard 2030.

The CAE also must assign independent and objective human resources effectively, meaning that internal auditors are assigned to engagements for which they are qualified and capable of performing. In some instances, individuals with specialized knowledge and/or skills from elsewhere in the organization (or from sources outside the organization) may assist with an internal audit engagement when the necessary competencies are not present within the internal audit function.

From a broader perspective, the CAE takes succession planning into consideration and ensures that there is a robust staff evaluation and development program in place. As with other areas of managing the internal audit function, the CAE must maintain open communication with senior management and the board regarding human resources. Typically, this communication takes the form of regular updates during quarterly board meetings, such as audit committee meetings. These updates can include a summary of status and adequacy of resources along with metrics, goals, and objectives to monitor the overall adequacy of resources including comparisons of resources to the internal audit plan, the impact of temporary shortages or vacancies, educational and training activities, and changes to specific skill needs based on changes in the organization's business, operations, programs, systems, and controls.

Hiring Practices

The CAE is responsible for hiring associates to fill the organizational structure of the internal audit function in a way that maximizes efficiency, effectively provides the necessary skill base, and makes good use of the financial budget. To do this, the CAE typically tries to hire individuals with training and expertise in a variety of areas, including financial accounting and reporting, IT, business operations, applicable laws and regulations, and the organization's industry.

Strategic Sourcing

Strategic sourcing, also referred to as co-sourcing or outsourcing, allows the CAE to optimize both the skill base and the financial considerations related to staffing. The CAE, with the use of strategic sourcing, is able to maintain a cost effective

Strategic Sourcing

Supplements the in-house internal audit function through the use of third-party vendor services for the purposes of gaining subject matter expertise for a specific engagement or filling a gap in needed resources to complete the internal audit plan.

internal audit function by hiring permanent associates who have a broad, more generalized base of skills while maintaining the flexibility of bringing in technical experts that are necessary for specific projects or engagements but who would be cost prohibitive to keep permanently on staff. Strategic sourcing also is used in scheduling when the projected hours necessary to accomplish the internal audit plan exceed the number of hours available from the permanent staff, but when hiring another staff member would be inefficient, cost prohibitive, or impractical under existing market conditions.

Training and Mentoring

Staff development is of particular importance for an internal audit function due to the requirements placed on it regarding proficiency and due professional care as discussed earlier in this chapter. While IIA Standard 1220: Due Professional Care specifically points out that infallibility is not required, it is incumbent on the staff to remain current in their knowledge of the industry and audit skills. This is done primarily through ongoing training and mentoring, as well as continued professional education. Individual internal audit functions establish minimum training and professional development requirements, which typically include professional certifications (for example, Certified Internal Auditor [CIA], Certified Public Accountant [CPA], Certified Information Systems Auditor [CISA], and Certified Fraud Examiner [CFE]) and the related minimum continued professional education required to maintain them.

Career Planning and Professional Development

In addition to the training and mentoring required to meet proficiency and due professional care standards, a good internal audit function will have a process in place for career development and succession planning. This allows each associate to develop and implement an overall plan to reach long-term career goals while remaining a contributing member of the internal audit function. A robust career planning and professional development process also ensures the internal audit function will continue to have qualified and capable staffing to achieve the approved audit plan and discharge its purpose, authority, and responsibility as defined in the function's charter.

Scheduling

Once the right mix of permanent associates and strategic sourcing is in place and appropriately organized within the internal audit function, the CAE can begin assigning specific engagements and projects to the personnel best suited to perform them. This is where the benefits of good hiring practices and right sizing become apparent. The CAE maximizes the financial budget by creating internal audit teams that, based on their skills and experience, will most effectively and efficiently accomplish the objectives of a specific engagement. At the same time, the CAE takes into consideration the development needs of the staff and works to balance the developmental opportunities a specific engagement can provide to them and the need to complete engagements within the scheduled time frame.

Independent Outside Auditor

A registered public accounting firm, hired by the organization's board or executive management, to perform a financial statement audit.

Financial Budget

As mentioned previously in this chapter, the financial budget is driven primarily by the internal audit plan, organizational structure, and staffing strategy. The

CAE must carefully evaluate the financial resources necessary to accomplish the objectives set forth. It should be apparent at this point that the financial budget both impacts and is impacted by each of the tasks undertaken by the CAE as described above.

Use of Professional Practice Groups

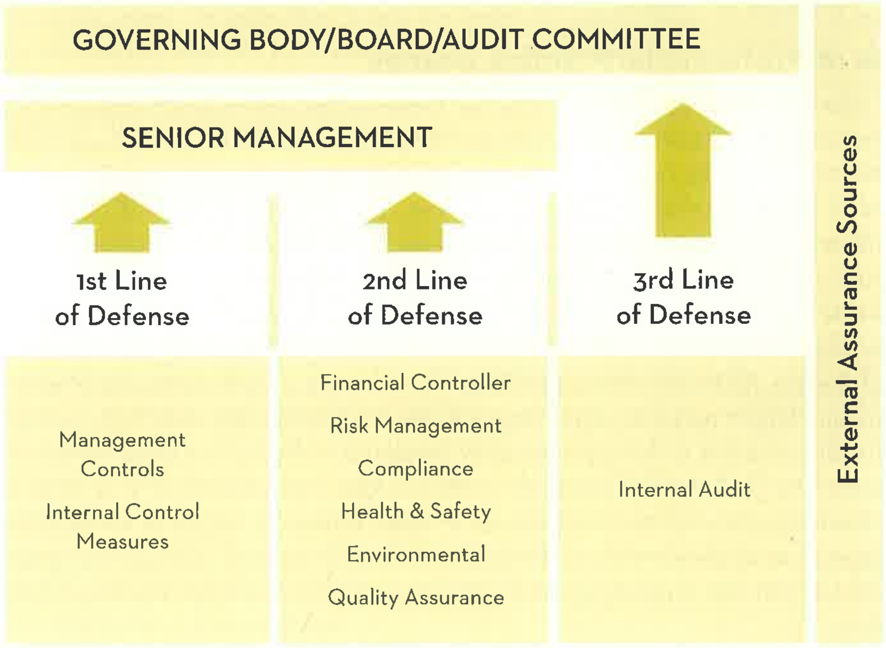
To effectively and efficiently discharge these duties, some larger organizations have been moving toward the development of Professional Practice Groups within their internal audit functions. These groups consist of the combination of roles needed by the internal audit function, but they typically include a director or manager level position and analysts, depending on the size of the function. These groups are responsible for the smooth operation of the internal audit function and serve as a centralized team that manages the needs of the function that otherwise would take time away from audit assurance work if performed by the auditors in the function. Although most individuals who are part of the Professional Practices Group no longer perform audits regularly, they typically were once high performing auditors and it is the expertise they gained as auditors that qualifies them to manage the professional practices of the internal audit function. It is common for team members of the Professional Practice Group to rotate on to assurance engagements to ensure their audit skills and knowledge stay current. The specific activities that are typically centralized within the Professional Practices Group include:

- Formalizing, documenting, and maintaining policies and procedures.
- Managing the issue tracking and follow-up process.
- Performing internal quality assurance reviews and facilitating external quality reviews.
- Managing requests for information from other assurance groups in the organization and regulatory bodies external to the organization.
- Facilitating recruiting activities.
- Creation and maintenance of onboarding activities.
- Developing and delivering training.
- Maintaining performance metrics on the function's activities.
- Managing the department schedule.
- Facilitating and documenting the risk assessment process and creation of the annual audit plan.
- Preparing materials reporting the internal audit function's activities to senior management and the audit committee.
- Performing data analytics work.

POLICIES AND PROCEDURES

The standard regarding the implementation of policies and procedures simply states, "the chief audit executive must establish policies and procedures to guide the internal audit activity" (IIA Standard 2040: Policies and Procedures). The interpretation to this standard indicates that "the form and content of policies and procedures are dependent upon the size and structure of the internal audit activity and the complexity of its work."

EXHIBIT 9-4
THREE LINES OF DEFENSE MODEL



Source: *Global Advocacy Platform* (Lake Mary, FL: The Institute of Internal Auditors Global, 2012), 9.

COORDINATING ASSURANCE EFFORTS

According to IIA Standard 2050: Coordination and Reliance, "The chief audit executive should share information and coordinate activities with other internal and external assurance and consulting service providers to ensure proper coverage and minimize duplication of efforts." Coordinating the efforts of the internal audit function with those of other internal and external providers of assurance and consulting services is important because of the increase in effectiveness and efficiencies that can be gained.

Many organizations have multiple avenues for ensuring that they operate within their risk appetite. Organizations operating in a highly regulated environment in particular have a need to demonstrate that they have mitigated the many risks that threaten them to a reasonable level. To do so, they implement a technique of assurance layering to get the risk mitigation they need or desire. One common example of this strategy is the Three Lines of Defense model, which was first discussed in chapter 3, "Governance."

In the Three Lines of Defense model, the organization layers the avenues through which they get assurance that the risks facing them are mitigated to a level within their risk appetite. Although it is referred to as three lines of defense, depending on the organization and how it is structured, there may be more than three defined lines (layers) of assurance.

Exhibit 9-4 is a popular depiction of the Three Lines of Defense model that places the external, independent assurance providers outside the model. As indicated, this model can be adapted by organizations to depict their particular approach or philosophy.

The different lines of defense illustrated in the exhibit are outlined below:

> **First line of defense.** Management owns and takes responsibility for assessing and mitigating risk and for maintaining effective internal controls. This internal line of defense is non-independent of management.
>
> **Second line of defense.** Different areas within the organization work together to assist in risk mitigation by facilitating and monitoring the risk management efforts of the organization. These areas are also involved in the communication of applicable risk-related information. This internal line of defense also is non-independent of management. The internal audit function coordinates with these areas by partnering on risk assessments, soliciting and providing feedback on changing areas of the organization, etc. These coordination efforts do not compromise the independence or objectivity of the internal audit function.
>
> **Third line of defense.** The internal audit function is the third internal line of defense. The key difference between this line of defense and the first two is that it is independent of management.

Coordination between these three lines of defense can vary greatly depending on the organization. In smaller, less regulated organizations, coordination efforts can be less formal to gain the desired efficiencies. In larger, more heavily regulated organizations, coordination can be quite formal and involved. These organizations typically have to begin by creating an assurance map that identifies where within the organization risk mitigation coverage exists, who is providing the coverage, what professional standards the different assurance providers adhere to, and the frequency and timing of the assurance activities provided. This process, commonly referred to as combined assurance, can be time intensive in the beginning, but it points out gaps in assurance and often results in beneficial efficiencies by eliminating redundant and unnecessary assurance.

The interpretation to Standard 2050: Coordination and Reliance acknowledges the benefits of such coordination and discusses the parameters necessary to keep the internal audit function independent as it coordinates its efforts with other assurance functions in the organization:

> In coordinating activities, the chief audit executive may rely on the work of other assurance and consulting service providers. A consistent process for the basis of reliance should be established, and the chief audit executive should consider the competency, objectivity, and due professional care of the assurance and consulting service providers. The chief audit executive should also have a clear understanding of the scope, objectives, and results of the work performed by other providers of assurance and consulting services. Where reliance is placed on the work of others, the chief audit executive is still accountable and responsible for ensuring adequate support for conclusions and opinions reached by the internal audit activity.
>
> **Additional lines of defense.** In addition to the internal lines of defense described above, organizations also rely on external sources for assurance that their risks are adequately mitigated. Most notably, these include the organization's independent outside auditors and applicable regulators. Whether or not an organization formally includes them in its lines of defense model, they do provide an additional layer of external, independent assurance for the organization.

While it is important to leverage the efforts of other internal and external assurance and consulting activities, the most common form of such collaboration is with the independent outside auditors. Implementation Guide 2050: Coordination and Reliance outlines the considerations the CAE can make to determine if reliance on the independent outside auditors' work is appropriate. Specifically, the guidance states that the CAE may:

- "Evaluate objectivity by considering whether the provider has, or may appear to have, any conflicts of interest and whether they have been disclosed.
- Consider independence by examining the provider's reporting relationships and the impact of this arrangement.
- Confirm competency by verifying whether the provider's professional experience, qualifications, certifications, and affiliations are appropriate and current.
- Assess due professional care by examining elements of the practice the provider applies to complete the work (that is, the provider's methodology and whether the work was appropriately planned, supervised, documented, and reviewed."

To further capitalize on efficiencies between internal auditors and independent outside auditors, the CAE should extend the same opportunities as described above to the independent outside auditors so they, in turn, can rely on the work performed by the internal audit function. To accomplish this two-way coordination, it is a good idea for the internal auditors and the independent outside auditors to use similar techniques, methods, and terminology. This is attained through regular meetings during which planned audit activities are discussed, including completion timing and the impact, if any, of observations and recommendations on the scope of planned work. Additionally, the internal audit function should make available to the independent outside auditor all final communications, including management's responses to them, and all applicable follow-up reviews. This information allows the independent outside auditors to make any necessary adjustments to the scope and timing of their scheduled work. Likewise, the internal audit function should have access to the independent outside auditors' materials and communications so that the CAE can ensure that appropriate follow-up and corrective actions have been taken.

Although the CAE is responsible for the coordination between the internal audit function and independent outside auditors, the board is responsible for oversight of that coordination as well as the work performed by independent outside auditors. This means that the CAE needs to gain the board's support relative to coordinating the efforts of the internal audit function and the independent outside auditors effectively. The CAE keeps the board apprised of the results of ongoing assessments of these coordination efforts in general and the performance of the independent outside auditors specifically, through regular communication.

REPORTING TO THE BOARD AND SENIOR MANAGEMENT

The CAE has the responsibility to "report periodically to senior management and the board on the internal audit activity's purpose, authority, responsibility, and performance relative to its plan, and on its conformance with the *Standards*. Reporting must also include significant risk and control issues, including fraud risks, governance issues, and other matters that require the attention of senior management and/or the board" (IIA Standard 2060: Reporting to Senior

Board

The highest-level governing body (e.g., a board of directors, a supervisory board, or a board of governors or trustees) charged with the responsibility to direct and/or oversee the organization's activities and hold senior management accountable.

Management and the Board). The CAE evidences the completion of these professional responsibilities by periodically reporting the results of ongoing internal audit activities to senior management and the audit committee during routinely scheduled meetings throughout the year. Significant deviations from approved engagement work schedules, staffing plans, and financial budgets; the reasons for the deviations; and action taken or needed should be reported, as should significant engagement observations and recommendations. In instances when senior management and/or the audit committee have assumed the risk of not correcting a significant engagement observation, the CAE makes a decision regarding whether to report it to the full board depending on current circumstances, including any recent changes in management or the organization's risk profile.

Additionally, management and the CAE coordinate efforts to routinely report on various risk and control activities performed by either, in accordance with roles and responsibilities set by the board and the audit committee. This typically includes reports covering:

- Business unit monitoring and risk monitoring reports.
- Independent outside auditor activity reports.
- Key financial activity reports.
- Risk management activity reports.
- Legal and compliance monitoring reports.

In addition to this information, a report is typically submitted to the audit committee by either senior management or the CAE outlining the results of management's self-assessment regarding the design adequacy and operating effectiveness of the organization's internal controls. At minimum, the internal audit function should independently assess the process that management underwent to reach its conclusions. However, many CAEs take on the added role of independently opining on the organization's system of internal controls over financial reporting. This opinion is delivered to the audit committee concurrently with management's assertions regarding the system of internal controls. In more limited cases, the CAEs' opinions extend to internal controls over operations, compliance, and nonfinancial reporting objectives. They see this as a natural extension of completing the annual internal audit plan in which the internal audit function has already independently evaluated the organization's system of internal controls as outlined in the internal audit plan. Other CAEs disagree with this approach and argue that it creates a direct conflict with their responsibility to be independent and objective evaluators of management's self-assessment of the systems of internal control. The approach taken by an organization is largely a result of its culture.

However, because the CAE is responsible for maintaining relationships with organizations that have potentially conflicting expectations, including the audit committee, senior management, line management, and various interested outside third parties (regulators and the independent outside auditors, in particular), this is not always as straightforward as it appears. If an audit report contains no observations and the internal controls are found to be designed adequately and operating effectively, there typically is no misalignment between parties. However, if the internal audit function finds that the internal controls are designed inadequately and/or are operating ineffectively, resulting in misalignment between management and one or more of the parties, the situation becomes much more complicated. It is not enough for the CAE to simply report such a misalignment to the board and senior management. The CAE must also coordinate a resolution to the observation and report to the board and senior management how it is going to be rectified. Only in very rare cases when the CAE and management fail to reach agreement regarding the observation and/or its resolution would the CAE report an observation that was not accompanied by its resolution. Communication obligations are covered in detail in chapter 14, "Communicating Assurance Engagement Outcomes and Performing Follow-Up Procedures," and in chapter 15.

GOVERNANCE

Governance

The combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives.

Governance is defined in chapter 1 and then again in chapter 3 as "a process conducted by the board of directors to authorize, direct, and oversee management toward the achievement of the organization's objectives." Chapter 3 provides detailed information regarding the governance process and the roles and responsibilities of all parties involved. For the purposes of this chapter, however, governance will be discussed only in terms of the internal audit function's specific responsibilities.

IIA Standard 2110: Governance requires the internal audit function to "assess and make appropriate recommendations to improve the organization's governance processes for:

- Making strategic and operational decisions;
- Overseeing risk management and control;
- Promoting appropriate ethics and values within the organization;
- Ensuring effective organizational performance management and accountability;
- Communicating risk and control information to appropriate areas of the organization; and
- Coordinating the activities of, and communicating information among, the board, [independent outside] and internal auditors, other assurance providers, and management."

These responsibilities are carried out largely through the assurance services provided by the internal audit function. The internal audit charter defines what role the internal audit function plays in providing assurance relative to the governance process and should reflect the expectations of the board. Chapter 3 provides the following examples of the internal audit function's governance responsibilities:

- Evaluating whether the various risk management activities are designed adequately to manage the risks associated with unacceptable outcomes.
- Testing and evaluating whether the various risk management activities are operating as designed.
- Determining whether the assertions made by the risk owners to senior management regarding the effectiveness of the risk management activities accurately reflect the current state of risk management effectiveness.
- Determining whether the assertions made by senior management to the board regarding the effectiveness of the risk management activities provide the board with the information it desires about the current state of risk management

effectiveness.

- Evaluating whether risk tolerance information is communicated timely and effectively from the board to senior management and from senior management to the risk owners.
- Assessing whether there are any other risk areas that are currently not included in the governance process but should be (for example, a risk for which risk tolerance and reporting expectations have not been delegated to a specific risk owner).

To carry out these responsibilities, the internal audit function must have a clear understanding of the board's governance direction and expectations, including risk tolerance levels and reporting expectations. The internal audit plan should reflect that understanding by including appropriate governance assurance activities and providing opportunities for regular communication to senior management and the board regarding the effectiveness of risk management activities. Governance is covered in greater detail in chapter 3.

RISK MANAGEMENT

Generally defined, risk management is a participatory process designed to identify, document, evaluate, communicate, and monitor the most significant uncertainties facing an organization requiring risk mitigation or exploitation of opportunities to successfully achieve business objectives. In other words, risk management is a process conducted by management to understand and deal with uncertainties (that is, risk and opportunities) that could affect the organization's ability to achieve its business objectives. Risk response is an action or set of actions taken by management to achieve a desired risk management strategy. Effective execution of risk management strategies helps management achieve an organization's business objectives by reducing the potential impact or likelihood (or both) of a potential risk event or, conversely, by taking advantage of (exploiting) a perceived opportunity. Risk mitigation is the act of lessening the severity or potential impact of risks through the use of risk responses. Risk responses are discussed in detail in chapter 4, "Risk Management."

Risk Management

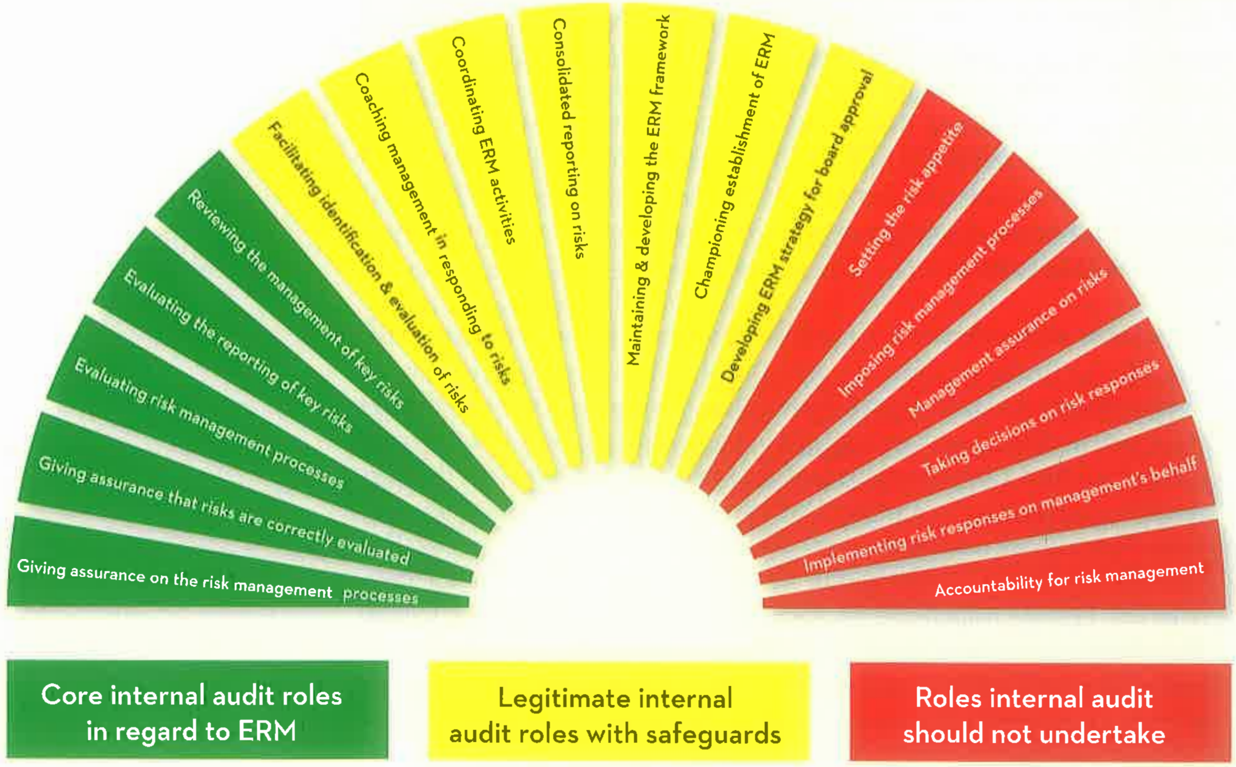
A process to identify, assess, manage, and control potential events or situations to provide reasonable assurance regarding the achievement of the organization's objectives.

Risk mitigation is most effectively accomplished when it is decentralized to the areas most affected by the specific risks. In contrast, risk management is typically more effective when it is a centralized function. Risk management is most effective when senior management is actively engaged in the process in a way in which contributors step back from their specific area/department (silo) and consider the risks confronting the organization as a whole. Unfortunately, many organizations make the mistake of letting risk management get dispersed throughout the organization along with risk mitigation. Consequently, the various silos responsible for mitigating risks also become responsible for the risk management activities described above. This results in a situation where different areas of the organization are unaware of what is happening in each other's areas to mitigate similar risk events, culminating in inconsistent risk responses and inefficiencies due to the application of differing risk appetites and mitigation approaches by the individual areas.

Historically, risk management has been designed to focus efforts on avoiding potential danger and preventing harmful actions from negatively impacting an organization. Over time, organizations' risk management models have evolved and are now focusing their risk management efforts on identifying opportunities that can be exploited in addition to risk events that have the potential to negatively affect the organization. In these models, risk management efforts are designed to facilitate the management of both risk and opportunity within a predefined risk appetite set by the board and senior management. Properly executed risk management assists the board and senior management in implementing appropriate risk responses (avoiding, reducing, sharing, and/or accepting risks or exploiting opportunities) by increasing the likelihood of achieving the desired result (mitigating a risk event or taking advantage of an opportunity). Effective risk management also provides reasonable (not absolute) assurance that the business objectives of an organization will be achieved.

As discussed earlier in the chapter, the results of a well-executed risk management process (model) also can be an essential source for identifying an organization's risk drivers and provide invaluable input for the development of the internal audit function's audit universe and audit plan. Consequently, risk management is an area in which the internal audit function can and does have a critical role to play. Just how much involvement the internal audit function should have in the organization's risk management process, however, is the subject of much discussion. Although many organizations now have formal risk management functions that

EXHIBIT 9-5
INTERNAL AUDIT ROLE IN ENTERPRISE RISK MANAGEMENT


Giving assurance on the risk management processes
Giving assurance that risks are correctly evaluated
Evaluating risk management processes
Evaluating the reporting of key risks
Reviewing the management of key risks
Facilitating identification & evaluation of risks
Coaching management in responding to risks
Coordinating ERM activities
Consolidated reporting on risks
Maintaining & developing the ERM framework
Championing establishment of ERM
Developing ERM strategy for board approval
Setting the risk appetite
Imposing risk management processes
Management assurance on risks
Taking decisions on risk responses
Implementing risk responses on management's behalf
Accountability for risk management
Core internal audit roles in regard to ERM
Legitimate internal audit roles with safeguards
Roles internal audit should not undertake

Source: This diagram is taken from "Position Statement: The Role of Internal Auditing in Enterprise-wide Risk Management," reproduced with the permission of The Institute of Internal Auditors - United Kingdom and Ireland. For the full statement, visit www.iia.org.uk. © The Institute of Internal Auditors - UK and Ireland Ltd., July 2004.

are responsible for monitoring and facilitating risk mitigation efforts throughout an organization, the role of the internal audit function varies widely and is predicated on the division of risk management responsibilities and the culture of the organization. At minimum, the internal audit function should evaluate the design adequacy and operating effectiveness of the organization's risk management processes by providing input and feedback through a periodic review (audit). It is also appropriate for the internal audit function to facilitate the identification and evaluation of risks and opportunities, coach management on appropriate ways to respond to risk events and opportunities, and help an organization coordinate enterprisewide risk management activities. Increasingly, the internal audit function coordinates more actively with other risk management groups, not only in its role as part of the third line of defense, but also in an effort to gain efficiencies for the organization by taking advantage of scheduling synergies and leveraging assurance efforts to the extent possible. As indicated earlier, however, the internal audit function should not set the organization's risk appetite, make decisions on appropriate risk responses, or assume ownership (be accountable for) the risk management processes; only management should take on these roles.

According to IIA Standard 2120: Risk Management, "The internal audit activity must evaluate the effectiveness and contribute to the improvement of risk management processes." The interpretation for this standard states:

> Determining whether risk management processes are effective is a judgment resulting from the internal auditor's assessment that:
>
> - Organizational objectives support and align with the organization's mission;
> - Significant risks are identified and assessed;
> - Appropriate risk responses are selected that align risks with the organization's risk appetite; and
> - Relevant risk information is captured and communicated in a timely manner across the organization, enabling staff, management, and the board to carry out their responsibilities.
>
> Risk management processes are monitored through ongoing management activities, separate evaluations, or both.

In practical terms, the internal audit function should enhance risk management and mitigation, providing another level of protection. Exhibit 9-5 shows a range of activities that an internal audit function might be asked to perform, detailing which activities are appropriate and which should be avoided. This exhibit was introduced as exhibit 4-4 in chapter 4, "Risk Management," where it is discussed in greater depth.

CONTROL

IIA Standard 2130: Control states, "The internal audit activity must assist the organization in maintaining effective controls by evaluating their effectiveness and efficiency and by promoting continuous improvement."

In terms of providing assurance services, the information that comes out of the risk assessment should drive the internal audit function's direction when evaluating "the adequacy and effectiveness of controls in responding to risks within the organization's governance, operations, and information systems regarding the:

Control

Any action taken by management, the board, and other parties to manage risk and increase the likelihood that established objectives and goals will be achieved. Management plans, organizes, and directs the performance of sufficient actions to provide reasonable assurance that objectives and goals will be achieved.

- Achievement of the organization's strategic objectives;
- Reliability and integrity of financial and operational [nonfinancial] information;
- Effectiveness and efficiency of operations;
- Safeguarding of assets; and
- Compliance with laws, regulations, and contracts." (Standard 2130.A1)

Additionally, the internal audit function should identify the objectives of the audited area and assess how well they align with the objectives of the organization. Assurance engagements should assess whether controls in place effectively support achievement of those objectives.

Furthermore, Standard 2130.C1 states, "Internal auditors must incorporate knowledge of controls gained from consulting engagements into evaluation of the organization's control processes."

Control is addressed in detail in chapter 6, "Internal Control."

QUALITY ASSURANCE AND IMPROVEMENT PROGRAM (QUALITY PROGRAM ASSESSMENTS)

In the current corporate governance climate, it has become imperative that internal audit functions have the appropriate tools with which to self-regulate and monitor adherence to established professional standards. In the interest of maintaining consistent standards to which internal audit functions would be held relative to self-regulation, The IIA established formal quality assurance standards that must be followed for internal audit functions to be considered in compliance with the *Standards*.

Quality Assurance

The process of assuring that an internal audit function operates according to a set of standards defining the specific elements that must be present to ensure that the findings of the internal audit function are legitimate.

Quality assurance is the process of assuring that an internal audit function adheres to a set of standards defining the specific elements that must be present to ensure that the function operates appropriately. Specifically, IIA Standard 1300: Quality Assurance and Improvement Program states that "the chief audit executive must develop and maintain a quality assurance and improvement program that covers all aspects of the internal audit activity." The interpretation for this standard goes on to explain that "a quality assurance and improvement program is designed to enable an evaluation of the internal audit activity's conformance with the *Standards* and an evaluation of whether internal auditors apply the Code of Ethics. The program also assesses the efficiency and effectiveness of the internal audit activity and identifies opportunities for improvement."

IIA Standard 1310: Requirements of the Quality Assurance and Improvement Program, IIA Standard 1311: Internal Assessments, and IIA Standard 1312: External Assessments detail the specific requirements for IIA Standard 1300 by specifying that internal audit functions must establish both internal assessment and external assessment procedures. In practical terms, internal assessment procedures are the day-to-day quality assurance steps typically outlined in an internal audit function's operating procedures (audit manual) that ensure that the *Standards* is followed, and external assessment procedures are the quality assurance steps that a qualified, independent party has performed or those that have been performed by the internal audit function and verified by a qualified, independent party. This process is commonly referred to as an independent peer review. Internal audit

EXHIBIT 9-6 THE INTERNAL AUDIT FUNCTION'S QUALITY ASSURANCE PROCEDURES AS OUTLINED BY THE IIA

Internal Assessments

1. The processes and tools used in ongoing internal assessments include:

- Engagement supervision,
- Checklists and procedures (e.g., in an audit and procedures manual) are being followed,
- Feedback from audit customers and other stakeholders,
- Selective peer reviews of workpapers by staff not involved in the respective audits,
- Project budgets, timekeeping systems, audit plan completion, and cost recoveries, and/or
- Analyses of other performance metrics (such as cycle time and recommendations accepted).

2. Conclusions are developed as to the quality of ongoing performance and follow-up action taken to ensure appropriate improvements are implemented.

3. The IIA's *Quality Assessment Manual*, or a comparable set of guidance and tools, should serve as the basis for periodic internal assessments.

4. Periodic internal assessments may:

- Include more in-depth interviews and surveys of stakeholder groups.
- Be performed by members of the internal audit activity (self-assessment).
- Be performed by Certified Internal Auditors (CIAs) or other competent audit professionals, currently assigned elsewhere in the organization.
- Encompass a combination of self-assessment and preparation of materials subsequently reviewed by CIAs or other competent audit professionals.
- Include benchmarking of the internal audit activity's practices and performance metrics against relevant best practices of the internal audit profession.

5. A periodic internal assessment performed within a short time before an external assessment can serve to facilitate and reduce the cost of the external assessment. If the periodic internal assessment is performed by a qualified, independent external reviewer or review team, the assessment results should not communicate any assurances on the outcome of the subsequent external quality assessment. The report may offer suggestions and recommendations to enhance the internal audit activities' practices. If the external assessment takes the form of a self-assessment with independent validation, the periodic internal assessment can serve as the self-assessment portion of this process.

6. Conclusions are developed as to quality of performance and appropriate action initiated to achieve improvements and conformity to the *Standards*, as necessary.

7. The chief audit executive (CAE) establishes a structure for reporting results of internal assessments that maintains appropriate credibility and objectivity. Generally, those assigned responsibility for conducting ongoing and periodic reviews report to the CAE while performing the reviews and communicate results directly to the CAE.

8. At least annually, the CAE reports the results of internal assessments, necessary action plans, and their successful implementation to senior management and the board.

functions are required to successfully complete an external assessment periodically (at least once every five years) to confirm that the internal audit function is compliant with the *Standards*. Both internal assessment and external assessment procedures must be established and followed for an internal audit function to be able to state that it "conforms with the *International Standards for the Professional Practice of Internal Auditing*" (IIA Standard 1321: Use of "Conforms with the *International Standards for the Professional Practice of Internal Auditing*"). Exhibit 9-6 presents internal audit function quality assurance procedures suggested in Implementation Guide 1311: Internal Assessments.

While Standards 1300, 1310, 1311, and 1312 may seem unambiguous, particularly when clarified by supplemental Implementation Guides, questions as to how these standards should be implemented have sparked debate within the internal audit community. "Large" internal audit functions typically have the resources to hire external sources to perform the required external assessment necessary to comply with Standard 1312. However, care must be taken when selecting the external assessment team to ensure independence is not compromised. Implementation Guide 1312 provides provide clarification regarding how private and public sector organizations, respectively, can ensure independence of the external assessment team is maintained. Additionally, Standard 1312 can be very onerous, especially for "small" internal audit functions. While the Implementation Guide has attempted to address this concern by providing for a self-assessment option with independent validation, and agreement can generally be reached on a philosophical level, problems arise when practitioners try to define what constitutes a "small" internal audit function and the term becomes relative depending on the size of the

EXHIBIT 9-7
INTERNAL AUDIT FUNCTION SELF-ASSESSMENT QUALITY ASSURANCE PROCEDURES FOR "SMALL" FUNCTIONS AS OUTLINED BY THE IIA

Self-assessment with Independent Validation

1. An external assessment by a qualified, independent reviewer or review team may be troublesome for smaller internal audit activities or there may be circumstances in other organizations where a full external assessment by an independent team is not deemed appropriate or necessary. For example, the internal audit activity may (a) be in an industry subject to extensive regulation and/or supervision, (b) be otherwise subject to extensive external oversight and direction relating to governance and internal controls, (c) have been recently subjected to external review(s) and/or consulting services in which there was extensive benchmarking with best practices, or (d) in the judgment of the chief audit executive (CAE), the benefits of self-assessment for staff development and the strength of the internal quality assurance and improvement program currently outweigh the benefits of a quality assessment by an external team.

2. A self-assessment with independent [external] validation includes:

   - A comprehensive and fully documented self-assessment process, which emulates the external assessment process, at least with respect to evaluation of conformance with the Definition of Internal Auditing, the Code of Ethics, and the *Standards*.
   - An independent, on-site validation by a qualified, independent reviewer.
   - Economical time and resource requirements—e.g., the primary focus would be on conformance with the *Standards*.
   - Limited attention to other areas—such as benchmarking, review and consultation as to employment of leading practices, and interviews with senior and operating management—may be reduced. However, the information produced by these parts of the assessment is one of the benefits of an external assessment.

3. The same guidance and criteria as set forth in Implementation Guidance 1312-1 would apply for a self-assessment with independent validation.

4. A team under the direction of the CAE performs and fully documents the self-assessment process. A draft report, similar to that for an external assessment, is prepared including the CAE's judgment on conformance with the *Standards*.

5. A qualified, independent reviewer or review team performs sufficient tests of the self-assessment so as to validate the results and express the indicated level of the activity's conformance with the Definition of Internal Auditing, the Code of Ethics, and the *Standards*. The independent validation follows the process outlined in The IIA's *Quality Assessment Manual* or a similar comprehensive process.

6. As part of the independent validation, the independent external reviewer—upon completion of a rigorous review of the self-assessment team's evaluation of conformance with the Definition of Internal Auditing, the Code of Ethics, and the *Standards*:

   - Reviews the draft report and attempts to reconcile unresolved issues (if any).
   - If in agreement with the opinion of conformance with the Definition of Internal Auditing, the Code of Ethics, and the *Standards*, adds wording (as needed) to the report, concurring with the self-assessment process and opinion and—to the extent deemed appropriate—in the report's findings, conclusions, and recommendations.
   - If not in agreement with the evaluation, adds dissenting wording to the report, specifying the points of disagreement with it and—to the extent deemed appropriate—with the significant findings, conclusions, recommendations, and opinions in the report.
   - Alternatively, may prepare a separate independent validation report—concurring or expressing disagreement as outlined above—to accompany the report of the self-assessment.

7. The final report(s) of the self-assessment with independent validation is signed by the self-assessment team and the qualified, independent external reviewer(s) and issued by the CAE to senior management and the board.

8. To provide accountability and transparency, the CAE communicates the results of external quality assessments—including specifics of planned remedial actions for significant issues and subsequent information as to accomplishment of those planned actions—with the various stakeholders of the activity, such as senior management, the board, and external auditors.

EXHIBIT 9-8
REQUIREMENTS OF THE QUALITY ASSURANCE AND IMPROVEMENT PROGRAM

Requirements of the Quality Assurance and Improvement Program

1. A quality assurance and improvement program (QAIP) is an ongoing and periodic assessment of the entire spectrum of audit and consulting work performed by the internal audit activity. These ongoing and periodic assessments are composed of rigorous, comprehensive processes; continuous supervision and testing of internal audit and consulting work; and periodic validations of conformance with the Definition of Internal Auditing, the Code of Ethics, and the *Standards*. This also includes ongoing measurements and analyses of performance metrics (e.g., internal audit plan accomplishment, cycle time, recommendations accepted, and customer satisfaction). If the assessments' results indicate areas for improvement by the internal audit activity, the chief audit executive (CAE) will implement the improvements through the QAIP.

2. Assessments evaluate and conclude on the quality of the internal audit activity and lead to recommendations for appropriate improvements. QAIPs include evaluation of:
   - Conformance with the Definition of Internal Auditing, the Code of Ethics, and the *Standards*, including timely corrective actions to remedy any significant instances of nonconformance.
   - Adequacy of the internal audit activity's charter, goals, objectives, policies, and procedures.
   - Contribution to the organization's governance, risk management, and control processes.
   - Compliance with applicable laws, regulations, and government or industry standards.
   - Effectiveness of continuous improvement activities and adoption of best practices.
   - The extent to which the internal audit activity adds value and improves the organization's operations.

3. The QAIP efforts also include follow-up on recommendations involving appropriate and timely modification of resources, technology, processes, and procedures.

4. To provide accountability and transparency, the CAE communicates the results of external and, as appropriate, internal quality program assessments to the various stakeholders of the activity (such as senior management, the board, and external auditors). At least annually, the CAE reports to the senior management and the board on the quality program efforts and results.

Nonconformance with the *Standards*

Occurs when the internal audit function is found to be deficient to the point that it impacts the overall scope or operation of the internal audit function. Nonconformance must be disclosed.

function defining it. Exhibit 9-7 presents the suggested alternative approach for "small" internal audit functions finding the external assessment quality assurance procedures to be too onerous.

Because neither the *Standards* nor the Implementation Guides make any distinction between functions that are primarily sourced internally to an organization and those that are primarily sourced from outside the organization (strategic sourcing arrangements), much discussion continues about the applicability of, and how best to comply with, the *Standards* when the function is primarily outsourced.

Quality Assurance and Improvement Program

An ongoing and periodic assessment of the entire spectrum of audit and consulting work performed by the internal audit function.

The requirements of a properly designed quality assurance and improvement program are provided in exhibit 9-8.

Disclosure of Nonconformance

In the event that an internal audit function is found to be sufficiently deficient to impact "the overall scope or operation of the internal audit activity," IIA Standard 1322: Disclosure of Nonconformance states that "the chief audit executive must disclose the nonconformance and the impact to senior management and the board." At that time, a determination will typically be made regarding whether said noncompliance is intentional or inadvertent, as well as what, if any, corrective action will be taken. Should senior management and the board make the decision not to take corrective action and the internal audit function remains noncompliant, the internal audit function will no longer be able to state that its internal assurance and consulting services conform "with the *International Standards for the Professional Practice of Internal Auditing*" (Standard 1321). The consequences of continuing to offer internal assurance and consulting services that are not conducted in accordance with the *Standards* are far reaching and can significantly inhibit the internal audit function's relationship with interested third parties such as regulators and other interested outside parties (for example, the U.S. Securities and Exchange Commission [SEC] or the organization's independent outside audit firm).

PERFORMANCE MEASUREMENTS FOR THE INTERNAL AUDIT FUNCTION

Performance measurements are integral to the internal assessment requirement outlined in IIA Standard 1311: Internal Assessments discussed earlier. In addition to providing the criteria against which the internal audit function judges its performance in key areas, they gauge how well the internal audit function is accomplishing its mission/goals. The CAE should consider many factors when creating performance measurements, such as the size of the internal audit function, the specific services offered, industry-specific regulations, the operating environment, and the organization's culture. Performance measurements should be aligned with the internal audit function's charter, and all significant services addressed in the charter should be considered when establishing performance measurements. The customized measurement process should outline activities that contribute to the achievement of the goals identified in the charter. Performance measures should consider senior management's input and be presented to the board audit committee for approval.

USE OF TECHNOLOGY TO SUPPORT THE INTERNAL AUDIT PROCESS

Technology is playing an ever-increasing role in the internal audit process. There are more and more technological tools available that enable increased productivity and efficiency, allowing for less time spent on administrative responsibilities and more on assurance and consulting services provided to auditees and customers. In the current environment of technological advancement, it can be difficult not to be distracted by the endless improvements, but it is important to keep in mind that technology should enhance an internal audit function's productivity, not divert attention away from the task of auditing.

In addition to decreasing the amount of time spent on administrative responsibilities, technological tools also should increase productivity of internal audit engagements, allowing for less time spent documenting, retaining, and accessing supporting documentation. Three such tools have been integrated with this textbook. TeamMate, an audit management and documentation tool, can be used in conjunction with exercises and cases in applicable chapters throughout the textbook. ACL and CaseWare IDEA, popular data analysis tools, are packaged with the book so that students can become familiar with the tools used in the practice of internal auditing.

Risk and Control Self-Assessment

It should be clear at this point that the internal audit function assists an organization in assessing and mitigating risk in several ways. One way many internal audit functions do this is by establishing self-assessment teams and procedures. Typically, these teams partner with management to perform initial research and interviews to pinpoint potential risk events or scenarios facing an organization. They will assemble senior management representatives to discuss and prioritize these potential risks. The use of voting technology is becoming more widespread and can be a valuable tool in the prioritization of risk events by providing management with the opportunity to communicate their specific views of the impact and likelihood of a given risk while remaining anonymous. Often, this elicits more honest responses since individuals are not influenced by others in the meeting. Once the risk events are identified and prioritized, the internal audit function continues to assist management in identifying, documenting, evaluating, communicating, and mitigating the potential significance (that is, impact and likelihood) of the risks associated with key risk events identified. The use of technology (database repository and tracking tools) can be beneficial to the self-assessment teams, allowing them to assign the various scenarios to those individuals best equipped to manage and mitigate the specific risks causing concern for management. The repository can then be used to document and track action planning and risk mitigation efforts agreed upon with management. Without the use of modern technology, self-assessment efforts are cumbersome, inefficient, and very difficult to manage. Self-assessment can be used on a stand-alone basis to assist in evaluating risk in various areas or processes within an organization or as an effective tool in support of organizationwide risk assessment efforts.

Control Self-Assessment

A facilitated process whereby control owners provide a self-assessment of the design adequacy and operating effectiveness of controls for which they are responsible.

On an administrative level, automated risk assessment tools can provide the internal audit function with a repository that allows for the identification, documentation, and prioritization of risks, what areas of the organization own these risks, and key controls designed to manage or mitigate these risks. These tools also document the audit universe, gather information about the different areas in that universe, and are used to evaluate the risks specific to those areas. Additionally, these tools help prioritize the amount of risk that a specific area brings to the organization, which drives how often it is audited. Consequently, the resulting prioritization of the audit universe drives the budget, scheduling, audit plan, and resource requirements as described earlier in the chapter.

Many organizations apply the same techniques described above to self-assess controls. In these situations, control and process owners perform techniques that help them assess the design adequacy and operating effectiveness of the controls within their areas of responsibility. Such techniques may include the use of technology, as described above, and be facilitated by the internal audit function or another assurance group within the organization.

Data Analysis

Often there are large amounts of data, commonly referred to as "big data," that must be reviewed by the internal auditor. This can be very difficult, time consuming, and require specialized skills without the assistance of technology. Many internal audit functions have created specialist positions to support these efforts as discussed in greater detail previously in this chapter. Likewise, sampling might not be effective, practical, or preferred. Sampling also can, at times, limit the internal auditor's ability to draw definitive conclusions. In these cases, data analysis tools and techniques can be invaluable because they allow for 100 percent testing, resulting in definitive results and conclusions. In addition, these tools and techniques also can be used as a feeder source for continuous auditing, continuous monitoring, and/or fraud detection and prevention efforts. For a more extensive discussion of computer-assisted audit techniques and sampling, refer to chapter 10, "Audit Evidence and Working Papers," and chapter 11, "Audit Sampling."

Automated Monitoring

Continuous Auditing

The use of computerized techniques to perpetually audit the processing of business transactions.

Automated monitoring tools, similar to data analysis tools, allow the internal audit function to more efficiently perform continuous auditing by allowing internal auditors to monitor and evaluate large amounts of data (information) that otherwise might not be possible or practical. Continuous auditing, in contrast to periodic audit efforts, "is any method used by [the internal audit function] to perform audit-related activities on a more continuous or continual basis." Continuous auditing activities often support or supplement the internal audit function's periodic audit, control assessment, and risk assessment processes. Automated monitoring tools also can enhance the internal audit function's ongoing management communication efforts by providing "near" real-time information about the effectiveness of management's continuous monitoring activities. The availability of timely information about the design adequacy and operating effectiveness of controls can be helpful to an internal audit function in reassessing priorities for planned assurance and consulting services, thus maximizing coverage of the internal audit universe. Automated monitoring tools can better equip an internal audit function to provide value-added services, while managing its human and financial resources in the most efficient manner possible.

Automated Working Papers

The use of automated working papers by an internal audit function enhances productivity by providing a more efficient medium to document, review, store, and access information supporting audit work performed (assurance and consulting services). Productivity enhancements allow more time to be spent doing audit work rather than documenting, storing, and retrieving information. Automated working papers also serve as a repository for evidencing compliance with professional standards and due professional care.

Department Administration and Management

Most of the activities required when managing an internal audit function, including staff evaluations, tracking of time and expenses, and scheduling of audit engagements, can now be done electronically. In fact, many, if not all, of these activities can be done within the same tools that support the automated working papers and risk assessment procedures. This allows for much more efficient management of the internal audit function. Generally, the more activities that can be done with one tool, the more efficient and cost effective it is to implement the tool. When it is not possible to choose a tool that does all of these activities, it is a good idea to choose tools that can easily interact (communicate). Many of the tools available today are cost effective enough to be viable for organizations of all sizes.

The Internet

In addition to the audit-specific tools mentioned above, the internet can be an effective tool if used properly. It is an efficient way to do research, speeding up access to information that previously had to be retrieved through hard-copy format. An increasing number of internal audit functions use internet links to enhance the planning and delivery of services and gain access to work programs, working papers, policies, procedures, and other audit tools and resources, which results in increased efficiency and productivity.

OPPORTUNITIES TO PROVIDE INSIGHT

Effective management of the internal audit function is critical to support senior management's achievement of entity objectives. Exhibit 9-9 outlines the opportunities that exist to provide insight through effective management of the internal audit function.

EXHIBIT 9-9
OPPORTUNITIES FOR INTERNAL AUDIT TO PROVIDE INSIGHT THROUGH EFFECTIVE MANAGEMENT OF THE INTERNAL AUDIT FUNCTION

1. Create a charter designed to provide the organization with independent, objective feedback designed to improve operations by enhancing the effectiveness and efficiency of risk management, control, and governance processes.
2. Coordinate assurance services with other internal and external providers to ensure proper coverage and minimize duplication of efforts and cost.
3. Assist the organization in developing and implementing effective risk management strategies that help management achieve business objectives by reducing the impact and/or likelihood of potential risk events.
4. Assist the organization in establishing and maintaining effective controls by evaluating their effectiveness and efficiency and promoting continuous improvement.
5. Partner with management to establish self-assessment activities designed to support an organization's risk management efforts.

SUMMARY

This chapter presented the different philosophies regarding placement of the internal audit function within an organization and the drawbacks and benefits of each. The roles and responsibilities of the key positions within the internal audit function were identified and discussed. The policies and procedures of internal auditing were presented and how those policies and procedures guide the internal audit function was examined. Various risk management models were explored along with what role the internal audit function should take in the organization's risk management processes. Likewise, the internal audit function's responsibility regarding governance was addressed and examples of how those responsibilities can be carried out were provided. The quality assurance requirements, as stated by The IIA, were discussed and the importance of those requirements to the internal audit function was explained. The benefits of using technology, particularly as it relates to the management of the internal audit function, were discussed in detail. It should be clear that managing the internal audit function is a complex undertaking that requires a substantial amount of good judgment from the CAE. For that reason, it is imperative that the CAE use all of the tools available, including guidance from The IIA, and that the internal audit function be staffed with skilled, knowledgeable individuals at every level to assist the CAE in providing the organization with assurance and consulting services that add value and support senior management in the achievement of the organization's objectives.

REVIEW QUESTIONS

1. What are the advantages of positioning the CAE on a senior management level within the organization?

2. What information should be included in an internal audit charter?

3. According to the Interpretation of Standard 2000, the CAE has four specific management responsibilities. What are they?

4. What are the differences between organizational independence and individual objectivity?

5. What circumstances could cause impairment of internal audit function independence or internal auditor objectivity? How should an identified impairment be handled?

6. Internal audit engagements must be performed with proficiency and due professional care. What do proficiency and due professional care mean?

7. There are multiple approaches a CAE can use to create an annual internal audit plan. How is a top-down, risk-based approach conducted?

8. The CAE is required to present the internal audit plan to senior management and the board for approval. What specific information should be communicated to senior management and the board?

9. What key elements are taken into consideration when determining how to manage resources in an internal audit function?

10. What is the difference between a flat organization structure and a hierarchical organization structure in an internal audit function and what are the advantages and disadvantages of each?

11. What are the different positions within a hierarchically structured internal audit function and what are their primary responsibilities?

12. What are the lines of defense in the assurance layering strategy referred to as the Three Lines of Defense model?

13. What topics are discussed during coordination efforts between the internal audit function and the independent outside auditors?

14. What are the CAE's responsibilities when reporting to the audit committee?

15. What are the CAE's and the internal audit function's responsibilities regarding governance?

16. What is the difference between risk mitigation and risk management?

17. According to The IIA, how does an internal audit function determine whether risk management processes are effective?

18. How does the internal audit function assist the organization in maintaining effective controls?

19. Why is it important for an internal audit function to have an effective quality assurance and improvement program? What aspects of an internal audit function should a quality program assessment cover?

20. In what ways can technology be used to increase internal audit process productivity and efficiency?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. Per IIA *Standards*, internal audit functions must establish:

   a. Internal quality assurance and improvement program assessments.

   b. External quality assurance and improvement program assessments.

   c. Both internal and external quality assurance and improvement program assessments.

   d. Neither internal nor external quality assurance and improvement program assessments.

2. Senior management has requested that the internal audit function perform an operational review of the telephone marketing operations of a major division and recommend procedures and policies for improving management control over the operation. The internal audit function should:

   a. Accept the audit engagement because independence would not be impaired.

   b. Accept the engagement, but indicate to management that recommending controls would impair audit independence so that management knows that future audits of the area would be impaired.

   c. Not accept the engagement because internal audit functions are presumed to have expertise on accounting controls, not marketing controls.

   d. Not accept the engagement because recommending controls would impair future objectivity of the department regarding this client.

3. Who is ultimately responsible for determining that the objectives for an internal audit engagement have been met?

   a. The individual internal audit staff member.

   b. The CAE.

   c. The audit committee.

   d. The internal audit engagement supervisor.

4. Which of the following is the best reason for the CAE to consider the organization's strategic plan in developing the annual internal audit plan?

   a. To emphasize the importance of the internal audit function to the organization.

   b. To make recommendations to improve the strategic plan.

   c. To ensure that the internal audit plan supports the overall business objectives.

   d. To provide assurance that the strategic plan is consistent with the organization's values.

5. The *Standards* requires policies and procedures to guide the internal audit staff. Which of the following statements is false with respect to this requirement?

   a. A small internal audit function may be managed informally through close supervision and written memos.

   b. Formal administrative and technical audit manuals may not be needed by all internal audit functions.

   c. The CAE should establish the function's policies and procedures.

   d. All internal audit functions should have a detailed policies and procedures manual.

6. When conducting a consulting engagement to improve the efficiency and quality of a production process, the audit team is faced with a scope limitation because several months of the production data have been lost or are incomplete. Faced with this scope limitation, the CAE should:

   a. Resign from the consulting engagement and conduct an audit to determine why several months of data are not available.

   b. Discuss the problem with the customer and together evaluate whether the engagement should be continued.

   c. Increase the frequency of auditing the activity in question.

   d. Communicate the potential effects of the scope limitation to the audit committee.

MULTIPLE-CHOICE QUESTIONS

7. Which of the following is not a responsibility of the CAE?

   a. To communicate the internal audit function's plans and resource requirements to senior management and the board for review and approval.

   b. To oversee the establishment, administration, and assessment of the organization's system of internal controls and risk management processes.

   c. To follow up on whether appropriate management actions have been taken on significant issues cited in internal audit reports.

   d. To establish a risk-based plan to accomplish the objectives of the internal audit function consistent with the organization's goals.

8. The *Standards* requires the CAE to share information and coordinate activities with other internal and external providers of assurance services. With regard to the independent outside auditor, which of the following would not be an appropriate way for the CAE to meet this requirement?

   a. Holding a meeting between the CAE and the independent outside audit firm's partner to discuss the upcoming audit of the financial statements.

   b. Providing the independent outside auditor with access to the working papers for an audit of third-party contractors.

   c. Requiring the independent outside auditor to have the CAE's approval of their annual audit plan for conducting the financial statement audit.

   d. Requesting that the internal audit function receive a copy of the independent outside auditor's management letter.

9. Organizational independence exists if the CAE reports <List A> to some other organizational level than the CEO or similar head of the organization as long as the internal audit activity <List B> without interference:

   a. List A: administratively; List B: controls the scope and performance of work and reporting of results.

   b. List A: administratively; List B: approved the internal audit budget and risk-based internal audit plan.

   c. List A: functionally; List B: controls the scope and performance of work and reporting of results.

   d. List A: functionally; List B: approves the internal audit budget and risk-based internal audit plan.

10. Audit committees are most likely to participate in the approval of:

    a. Audit staff promotions and salary increases.

    b. The internal audit report observations and recommendations.

    c. Audit work schedules.

    d. The appointment of the CAE.

11. According to the IPPF, the independence of the internal audit activity is achieved through:

    a. Staffing and supervision.

    b. Continuing professional development and due professional care.

    c. Human relations and communications.

    d. Organizational status and objectivity.

12. Which of the following activities undertaken by the internal auditor might be in conflict with the standard of independence?

    a. Risk management consultant.

    b. Product development team leader.

    c. Ethics advocate.

    d. External audit liaison.

13. According to the IPPF, internal auditors should possess which of the following skills?

    I. Internal auditors should understand human relations and be skilled in dealing with people.

MULTIPLE-CHOICE QUESTIONS

II. Internal auditors should be able to recognize and evaluate the materiality and significance of deviations from good business practices.

III. Internal auditors should be experts on subjects such as economics, commercial law, taxation, finance, and IT.

IV. Internal auditors should be skilled in oral and written communication.

a. II only.

b. I and III only.

c. III and IV only.

d. I, II, and IV only.

14. Which of the following best describes an auditor's responsibility after noting some indicators of fraud?

a. Expand activities to determine whether an investigation is warranted.

b. Report the possibility of fraud to senior management and ask how to proceed.

c. Consult with external legal counsel to determine the course of action to be taken.

d. Report the matter to the audit committee and request funding for outside specialists to help investigate the possible fraud.

15. Which of the following activities are designed to provide feedback on the effectiveness of an internal audit activity?

I. Proper supervision.

II. Proper training.

III. Internal assessments.

IV. External assessments.

a. I, II, and III only.

b. I, II, and IV only.

c. I, III, and IV only.

d. All of these.

DISCUSSION QUESTIONS

1. How do The IIA's quality assurance and improvement program professional standards (Standard 1300) apply to a fully outsourced internal audit function? Specifically discuss the applicability of, and compliance requirements with, the external assessment procedures (Standard 1312).

2. Discuss the various options for properly positioning an internal audit function within an organization and the related advantages and disadvantages for each identified option. What are the primary factors an organization should consider when establishing an effective internal audit function? Where should an effective internal audit function be positioned within an organization?

3. Should the CAE opine on the design adequacy and/or operating effectiveness of the system of internal controls regarding:

- Reliability of financial reporting? Why or why not?
- Effectiveness and efficiency of operations? Why or why not?
- Compliance with applicable laws and regulations? Why or why not?

4. Many organizations implement assurance layering strategies to mitigate the risks they face to acceptable levels. One such strategy is the Three Lines of Defense model.

   a. Describe the first and second lines of defense included in this model.

   b. Explain what distinguishes the third line of defense from the first two.

   c. Discuss how the three lines of defense are coordinated.

   d. Identify the external sources of assurance that organizations use to augment their internal lines of defense.

5. Per IIA *Standards*, internal audit functions are required to evaluate and contribute to the improvement of their organizations' governance, risk management, and control processes.

   a. Provide several examples of governance responsibilities an internal audit function can assume.

   b. Describe 1) the risk management activities that are appropriate for an internal audit function to perform and 2) the risk management activities an internal audit function should avoid.

   c. Internal audit functions are responsible for evaluating the design adequacy and operating effectiveness of controls. Discuss the areas of control that fall within the scope of internal auditors' evaluation responsibilities.

CASES

CASE 1

Pat Goodly accepted the CAE position at a large, global organization with a well-established internal audit function. The organization is admired as an industry leader and as having very strong corporate governance practices. The organization's board is predominantly made up of outside, independent directors. The audit committee is comprised of outside, independent directors, all of whom are qualified. The chair of the audit committee is designated as the audit committee's "financial expert."

The organization's fiscal year-end is approaching; only a little over a month away. After a brief two months in the new position, Pat is preparing for the upcoming audit committee meeting. This typically is the meeting at which next year's internal audit plan and budget would be presented for approval by the audit committee, as well as any necessary fiscal year-end reporting.

Recently, Pat received a "welcome" call from the audit committee chair, indicating "full" support for Pat and the internal audit function. The audit committee chair expressed an interest in meeting Pat and gaining an understanding of the vision and direction Pat has for the internal audit function going forward. The audit committee chair indicated that periodic communications between them were important and would allow for open and candid dialog in the future.

Pat was hired by, and currently reports to, the chief financial officer (CFO). Historically, the audit committee meeting agenda, and related topic selections for such, have been performed by the CFO. The CFO also has presided over the meetings in the past.

Senior management, including the CEO and the CFO, expressed support for the internal audit function and Pat's vision for the function both during the recruiting process and subsequent to Pat's joining the organization. However, the CFO firmly stated in a recent staff meeting, "I know everyone is very busy and things are going to get even more hectic with year-end upon us. I think it is in everyone's best interest not to make any 'radical' changes in our organizational reporting structure until we get through the fiscal year-end closing and reporting cycle. If we keep our heads down and work hard, we should be able to get through this year-end okay."

In preparation for the upcoming audit committee meeting, Pat contemplated the CFO's comments and reflected on The IIA's professional standards as they relate to the CAE's reporting responsibilities to management and the board. Put yourself in Pat's position as the newly hired CAE and consider the following:

A. How should Pat proceed with the audit committee chair? What obligations does Pat have, if any, to the audit committee chair? As the CAE, what are Pat's role and responsibilities with respect to the audit committee and the audit committee chair?

B. Discuss the key issues that must be understood and addressed (and with whom) to properly discharge any reporting responsibilities noted.

CASE 2

TeamMate Practice Case Exercise 3: TeamSchedule and TeamTEC

CPI's internal audit function uses TeamSchedule and TeamTEC (Time and Expense Capture) to efficiently manage its time and resources. TeamSchedule enables internal audit management to schedule projects and assign resources to scheduled engagements. TeamTEC facilitates the recording, tracking, and reporting of time and expenses for engagements, administrative activities, and nonworking events such as vacations. TeamSchedule and TeamTEC can be used together by internal audit management to monitor and report on scheduled hours versus actual hours worked throughout the year as the annual internal audit plan is completed.

Complete Exercise 3: TeamSchedule and TeamTEC in the TeamMate Practice Case Workbook, which is included on the accompanying website.

CASES

CASE 3

KnowledgeLeader Practice Case: Multiple Lines of Defense

Background Information

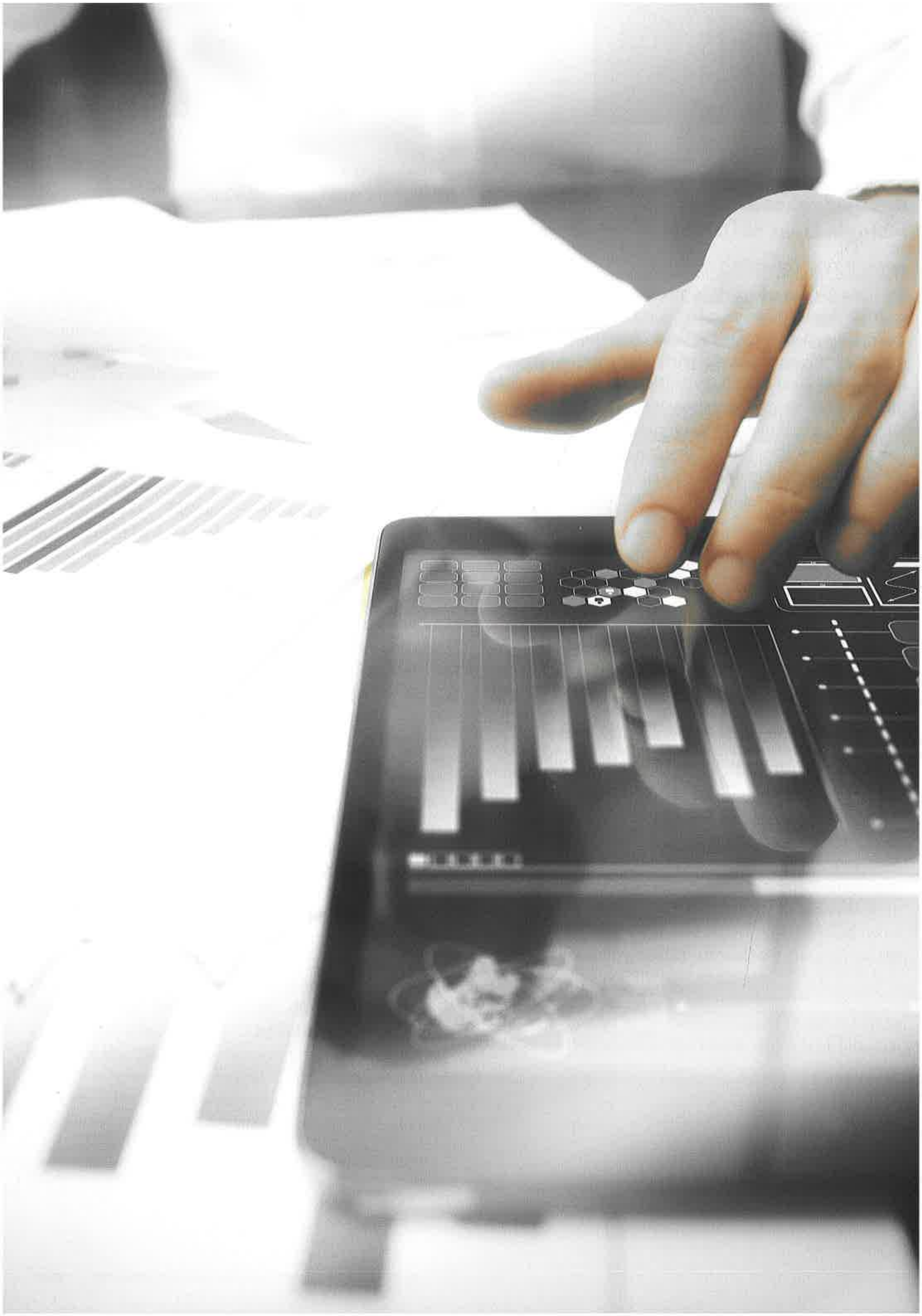
As indicated in chapter 9, many organizations have multiple avenues for ensuring that they operate within their risk appetite. Organizations operating in a highly regulated environment in particular have a need to demonstrate that they have mitigated the many risks that threaten them to a reasonable level. To do so, they implement a technique of assurance layering to get the risk mitigation they need or desire. One common example of this strategy is the Three Lines of Defense model. However, the Three Lines of Defense model is not the only model.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and identify alternative model(s) of assurance layering other than the Three Lines of Defense model. Compare and contrast the(se) models. How to they differ? How are they similar?

C. Submit a brief write-up indicating the results of your research to your instructor.



CHAPTER 10

Audit Evidence and Working Papers

LEARNING OBJECTIVES

- Understand what it means to gather and evaluate sufficient appropriate audit evidence.
- Know the manual procedures used by internal auditors to gather audit evidence.
- Be familiar with selected computer-assisted audit techniques, including generalized audit software.
- Understand the importance of well-prepared audit working papers.

In this chapter, we first focus on gathering and documenting audit evidence—a very significant component of all internal audit engagements. The quality of internal auditors' conclusions and advice depends on their ability to gather and appropriately evaluate sufficient appropriate audit evidence. Audit procedures are performed throughout the audit process to gather the evidence needed to achieve the prescribed engagement objectives. Engagement objectives are described and illustrated in chapters 12 through 15, which we refer to collectively as the Conducting Internal Audit Engagements chapters.

We then discuss audit working papers, which serve as the principal record of the procedures completed, evidence obtained, conclusions reached, and recommendations formulated by the internal auditors assigned to an engagement (that is, the internal audit team). The working papers also serve as the primary support for the internal audit team's communications to the auditee, senior management, the board of directors, and other stakeholders.

AUDIT EVIDENCE

Recall from chapter 1, "Introduction to Internal Auditing," that internal auditing is based on logic, which involves reasoning and drawing inferences. Internal auditors rely extensively on seasoned, professional judgment when they formulate conclusions and advice based on evidence they gather and evaluate. The quality of internal auditors' conclusions and advice depends on their ability to gather and evaluate sufficient appropriate evidence to support their conclusions and advice.

Gathering sufficient appropriate evidence requires extensive interaction and communication with auditee personnel throughout the engagement. Such interactions and communications are critical to conducting the engagement effectively and efficiently. It is important, therefore, for internal auditors to be open, communicative, and collaborative. The internal auditor must always be mindful, however, that the managers and employees from whom evidence is gathered may not adequately understand the purpose, objectives, and scope of the engagement, or the manner in which the engagement is conducted. Moreover, some managers or employees may see the engagement as a threat to them—in other words, think that the internal auditors are specifically looking for things they have done wrong. Unfortunately, the threat of management and/or employee errors and fraud always exists.

EXHIBIT 10-1
IPPF GUIDANCE RELEVANT TO CHAPTER 10

- **Standard 1220** - Due Professional Care
- **Standard 2200** - Engagement Planning
- **Standard 2240** - Engagement Work Program
- **Standard 2300** - Performing the Engagement
- **Standard 2310** - Identifying Information
- **Standard 2320** - Analysis and Evaluation
- **Standard 2330** - Documenting Information

Professional Skepticism and Reasonable Assurance

The internal auditor must always remember to apply a healthy level of professional skepticism when evaluating audit evidence. *Professional skepticism* means that internal auditors take nothing for granted; they continuously question what they hear and see and critically assess audit evidence. They do not assume by default that auditee personnel are either honest or dishonest. Applying professional skepticism throughout the engagement helps internal auditors remain unbiased and maintain an open mind to form judgments based on the preponderance of evidence gained during an engagement, and not just individual pieces of information. Professional skepticism is discussed in the context of fraud in chapter 8, "Risk of Fraud and Illegal Acts."

Professional Skepticism

The state of mind in which internal auditors take nothing for granted; they continuously question what they hear and see and critically assess audit evidence.

Internal auditors are rarely, if ever, in a position to provide absolute assurance regarding management's assertions regarding the system of internal controls and performance. Even experienced internal auditors are rarely convinced beyond all doubt. This is due to the nature and extent of evidence gathered and the types of decisions made. Frequently, internal auditors must rely on evidence that is persuasive rather than absolutely convincing, and audit decisions are rarely black and white. Moreover, internal auditors' conclusions and advice must be formed at a reasonable cost within a reasonable length of time to add economic value. Accordingly, internal auditors strive to obtain sufficient appropriate evidence to provide

Reasonable Assurance

A level of assurance that is supported by generally accepted auditing procedures and judgments.

a reasonable basis for formulating conclusions and advice. This concept is referred to by internal auditors as *reasonable assurance.*

Persuasiveness of Audit Evidence

Audit evidence is persuasive if it enables the internal auditor to formulate well-founded conclusions and advice confidently. To be persuasive, evidence must be:

- **Relevant.** Is the evidence pertinent to the audit objective? Does it logically support the internal auditor's conclusion or advice?
- **Reliable.** Did the evidence come from a credible source? Did the internal auditor directly obtain the evidence?
- **Sufficient.** Has the internal auditor obtained enough evidence? Do different, but related, pieces of evidence corroborate each other?

Persuasive Audit Evidence

Enables the internal auditor to formulate well-founded conclusions and advice confidently.

The American Institute of Certified Public Accountants (AICPA) states that "*Appropriateness* is the measure of the quality of audit evidence, that is, its relevance and reliability..." and that "*Sufficiency* is the measure of the quantity of audit evidence."[1] Why audit evidence must be relevant to be persuasive is clear: relying on evidence that has little or no pertinence to a specific audit objective greatly increases *audit risk*, that is, the risk of reaching invalid conclusions and/or providing faulty advice based on the audit work conducted.

Audit Risk

The risk of reaching invalid audit conclusions and/or providing faulty advice based on the audit work conducted.

Example: Assume that an internal auditor wants to determine whether a particular vehicle included in the company's fixed asset ledger exists and is owned by the company. The internal auditor locates the vehicle in the company's parking lot. Can the internal auditor reasonably conclude that the vehicle exists just by seeing it? Yes. Can the internal auditor reasonably conclude that the company owns the vehicle just by seeing it? No. The internal auditor would need to inspect pertinent documentary evidence, such as a title of ownership.

Although there are no hard and fast rules regarding reliability and sufficiency of evidence, there are useful guidelines internal auditors can follow if they remember that guidelines are generally characterized by exceptions. Such guidelines include:

- Evidence obtained from independent third parties is *more reliable* than evidence obtained from auditee personnel.
- Evidence produced by a process or system with effective controls is *more reliable* than evidence produced by a process or system with ineffective controls.
- Evidence obtained directly by the internal auditor is *more reliable* than evidence obtained indirectly.
- Documented evidence is *more reliable* than undocumented evidence.
- Timely evidence is *more reliable* than untimely evidence.
- Corroborated evidence is *more sufficient* than uncorroborated or contradictory evidence.
- Larger samples produce *more sufficient* evidence than smaller samples.

Documentary evidence is a significant portion of the evidence gathered during most internal audit engagements. The reliability of documentary evidence depends, to a large extent, on its origin and the route it follows before being examined by the internal auditor. Exhibit 10-2 illustrates this point.

Companies are facing heightened regulatory expectations. One area of particular interest is information or data produced or manipulated by employees or company systems that is relied on by management to perform key controls or to make significant business decisions. Regulators commonly refer to this information or data as information produced by the entity (IPE). When IPE is identified, regulators expect management to verify (test) the completeness and accuracy of the information or data used by management to perform key controls or relied on to make significant business decisions. There is also an expectation that both external and internal auditors will determine if IPE is appropriately verified prior to management's reliance on such information or data.

EXHIBIT 10-2
RELIABILITY OF DOCUMENTARY EVIDENCE

Levels of Reliability	Descriptions	Example Documents
High	Documents prepared by the internal auditor	Inventory test counts Process maps Risk and control matrices
	Documents sent directly from a third party to the internal auditor	Confirmations Cutoff bank statements Letters from outside attorneys
Medium	Documents created by a third party, sent to the organization, and requested from the organization by the internal auditor	Vendor invoices Customer purchase orders Bank statements
	Documents created by the organization, sent to a third party, returned to the organization, and requested from the organization by the internal auditor	Remittance advices Canceled checks Deposit slips
Low	Documents created by the organization and requested from the organization by the internal auditor	Written policy statements Receiving reports Time cards

AUDIT PROCEDURES

Audit procedures are specific tasks performed by the internal auditor to gather the evidence required to achieve the prescribed audit objectives. They are applied during the audit process to:

- Obtain a thorough understanding of the auditee, including the auditee's objectives, risks, and controls.
- Test the design adequacy and operating effectiveness of the targeted area's system of internal controls.
- Analyze plausible relationships among different elements of data.

Audit Procedures

Specific tasks performed by the internal auditor to gather the evidence required to achieve the prescribed audit objectives

- Directly test recorded financial and nonfinancial information for errors and fraud.
- Obtain sufficient appropriate evidence to achieve the prescribed audit objectives involved in determining the nature, extent, and timing of audit procedures to perform.

Nature of audit procedures. The nature of audit procedures relates to the types of tests the internal auditor performs to achieve his or her objectives. One-to-one relationships between audit objectives and audit procedures are rare. Individual audit procedures often provide evidence that is pertinent to more than one audit objective, and more than one audit procedure often is required to meet a particular audit objective. Different types of tests provide varying levels of assurance, take different amounts of time to conduct, and are more or less expensive. The internal auditor must weigh the relative benefits and costs of conducting different types of procedures. Depending on the nature of the engagement, an internal auditor may use manual audit procedures, computer-assisted audit techniques (CAATs), or a combination of the two to gather sufficient appropriate evidence. Manual audit procedures and CAATs are discussed further in subsequent sections of this chapter.

Extent of audit procedures. The extent of audit procedures pertains to how much audit evidence the internal auditor must obtain to achieve his or her objectives (sufficiency). An internal auditor must, for example, determine the appropriate combination of procedures to apply. The degree to which individual tests are to be conducted also must be determined. The internal auditor might decide, for example, that some types of transactions should be tested 100 percent, whereas others may be tested on a sample basis. Audit sampling is discussed in detail in chapter 11, "Audit Sampling." Ultimately, the internal auditor must gather and evaluate enough evidence to support well-founded conclusions and advice.

Timing of audit procedures. The timing of audit procedures pertains to when the tests are conducted and the period of time covered by the tests. For example:

- An internal auditor testing the operating effectiveness of a manual control over a period of time on a sample basis must take appropriate steps to gain assurance that the sample selected is representative of the entire period.
- An internal auditor testing whether transactions are recorded in the appropriate fiscal year will focus his or her tests on transactions immediately before and after year-end.
- An internal auditor will test the operation of a computerized application control at a given time to determine whether the control is operating effectively at that time. The internal auditor will then rely on different tests, such as tests over access and modification of application programs during a period of time, to gain assurance that the control operated consistently over that period of time.

Manual Audit Procedures

Commonly performed manual audit procedures include inquiry, observation, inspection, vouching, tracing, reperformance, analytical procedures, and confirmation. Each of these procedures is defined and discussed below. Example applications of each procedure are presented in exhibit 10-3.

EXHIBIT 10-3
ILLUSTRATIVE APPLICATIONS OF MANUAL AUDIT PROCEDURES

Procedures	Illustrative Applications
Inquiry	• Circulate a questionnaire among senior executives asking them to identify the "top 10" risks threatening the organization. • Ask the organization's outside legal counsel to provide information about any litigation, claims, and/or assessments against the organization. • Interview managers and employees involved in the cash disbursements process to identify key process controls.
Observation	• Tour the auditee's facility to gain a general understanding of day-to-day operations. • Observe the care with which employees count the year-end physical inventory. • Watch employees involved in executing and recording cash disbursement transactions to determine whether they are performing their assigned responsibilities and **only** their assigned responsibilities.
Inspection	• Review the minutes of board of directors' meetings looking for authorization of significant events (for example, the acquisition of another company). • Inspect selected inventory items to determine their condition and salability. • Read the cash disbursements policies and procedures to obtain an understanding of key elements of the process (for example, assigned roles and responsibilities).
Vouching	• Vouch a sample of inventory items from the accounting records to the warehouse to see that the inventory items exist. • Vouch a sample of sales invoices to corresponding shipping documents to verify that the shipments occurred. • Vouch a sample of check copies to supporting voucher packages to test the validity of the checks.
Tracing	• Trace internal auditor test counts of inventory to the auditee's inventory compilation records to verify that the counts are properly included in the compilation. • Trace receiving reports for goods received to the corresponding voucher and then to the voucher register to verify that the receipts of goods are properly recorded as liabilities. • Trace checks dated within a period of several days before and after year-end to the accounting records to ensure the checks were recorded in the proper year.
Reperformance	• Recalculate accumulated depreciation and depreciation expense to verify that they were calculated correctly. • Independently estimate the allowance for doubtful accounts to test the reasonableness of the accounting department's estimate. • Reperform auditee-prepared bank reconciliations to test whether they were completed correctly.
Analytical procedures	• Prepare common-size financial statements for the current year and preceding two years; look specifically for variances or unexpected trends. • Compare the organization's common-size financial statements with published industry common-size information looking for unexpected inconsistencies. • Calculate accounts payable turnover for the current year and preceding two years as evidence of vendor payment periods.
Confirmation	• Confirm a sample of accounts receivable subsidiary ledger balances with customers. • Confirm the principal balance of a notes payable and interest rate with the lender. • Confirm cash account bank balances with banks.

EXHIBIT 10-4
KEY COMPONENTS OF EFFECTIVE INTERVIEWING

Interviewing objectives:

- Gather information (that is, audit evidence) relevant to the engagement.
- Establish a rapport that fosters a positive working relationship throughout the engagement.

The interviewing process:

Prepare for the interview:

- Define the purpose.
- Identify the appropriate interviewee.
- Gather background information about the audit area and interviewee.
- Create the right set of questions (what, why, how, where, when, who).
- Establish expectations with the interviewee and identify information needs.
- Arrange logistics (date, time, location, length).
- Prepare an outline.

Conduct the interview:

- Establish rapport and create an atmosphere that encourages openness.
- Review the purpose of the interview, the topics to be covered, and the estimated time needed.
- Ask straightforward questions and meaningful follow-up questions.
- Avoid technical jargon.
- Use periods of silence effectively.
- Listen.
- Summarize and confirm key points.
- Discuss next steps.
- Arrange follow-up contact.
- Thank the interviewee.

Document the interview outcomes (as soon as possible after the interview):

- Reflect on the interview and review notes.
- Record the results of the interview in good form.

Characteristics common among effective interviewers:

- Professionalism (for example, prepared, respectful, courteous, on time).
- Outstanding interpersonal and oral communication skills, including listening skills.
- The capacity to display confidence and command respect without being arrogant.
- An innate curiosity.
- Objectivity (that is, remain impartial and refrain from interjecting personal opinions).

Common barriers to effective interviews:

- Auditee impediments such as competing demands on time, preconceived notions about internal auditors, and fear of reprisal.
- Flaws in the interview process.
- Lack of requisite competencies on the part of the internal auditor.

Critical success factors:

- Be prepared.
- Know and respect the interviewee.
- Establish credibility and trust.
- Speak the interviewee's language.
- Expect the unexpected.

Inquiry entails asking questions of auditee personnel or third parties and obtaining their oral or written responses. Inquiry produces indirect evidence, which by itself is rarely persuasive. This is especially true when inquiries are directed to auditee personnel from whom the internal auditor cannot count on receiving unbiased responses. More formal types of inquiry include interviews and circulating surveys and questionnaires. Key components of effective interviewing are outlined in exhibit 10-4.

Observation entails watching people, procedures, or processes. Observation is generally considered more persuasive than inquiry in the sense that the internal auditor is obtaining direct evidence. For example, the internal auditor's direct personal observation of an employee applying a control generally provides more assurance than simply asking the employee about the application of the control. A significant limitation of observation is that it provides evidence at a certain time. The internal auditor typically cannot conclude that what is observed is representative of what happened throughout the year, especially given the propensity of people to behave differently when they know they are being watched.

Inspection entails studying documents and records and physically examining tangible resources. Inspection of documents and records provides direct evidence of their contents. Likewise, physical examination of tangible resources (for example, a building or piece of equipment) provides the internal auditor with direct personal knowledge of the resources' existence and physical condition. Internal auditors must, however, acknowledge and take into account their level of expertise (that is, their capacity to comprehend what they read and see). For example, formulating valid conclusions about the value of precious gems based on inspection may be outside the scope of the internal auditor's expertise. The internal auditor might, in this case, need to rely on the assistance of a precious gems expert to help validate the gems' value.

Vouching

Tracking information *backward* from one document or record to a previously prepared document or record, or to a tangible resource.

Vouching entails tracking information *backward* from one document or record to a previously prepared document or record, or to a tangible resource. Vouching is performed specifically to test the *validity* of documented or recorded information. For example, a sale of goods typically should not be recorded unless the goods have been shipped. Vouching a sales invoice to a shipping document provides evidence that the shipment upon which the invoice is based actually occurred. Likewise, vouching the recording of a vehicle in the fixed asset ledger to the actual vehicle provides evidence that the vehicle really exists. Within the context of financial audits, vouching is used to test for overstatements in recorded amounts.

Tracing

Tracking information *forward* from one document, record, or tangible resource to a subsequently prepared document or record.

Tracing entails tracking information *forward* from one document, record, or tangible resource to a subsequently prepared document or record. Tracing is performed specifically to test the *completeness* of documented or recorded information. For example, purchases of goods typically should be recorded when the goods are received. Tracing a receiving report for goods received near the end of the year to the accounting records provides evidence that both the asset and liability were recorded in the same year the goods were received. Within the context of financial audits, tracing is used to test for understatements in recorded amounts.

Reperformance entails redoing controls or other procedures. Reperforming a control provides direct audit evidence regarding its operating effectiveness. Reperforming calculations provides direct evidence as to whether the auditee's calculations are correct. Independently formulating an accounting estimate, such as the allowance for bad debts, and comparing it with the auditee's estimate provides direct evidence regarding the reasonableness of the auditee's estimate.

Analytical procedures entail assessing information obtained during an engagement by comparing the information with expectations identified or developed by the internal auditor. A basic premise underlying the use of analytical procedures in internal auditing is that the internal auditor may reasonably expect certain relationships among different pieces of information to continue in the absence of known conditions to the contrary. It is important for internal auditors to develop expectations independently based on knowledge of the auditee, the organization's industry, and the economy before accumulating and analyzing information to ensure that the ensuing comparisons are unbiased.

Analytical Procedures

Assessing information obtained during an engagement by comparing the information with expectations identified or developed by the internal auditor.

Internal auditors use analytical procedures while planning and performing an engagement to identify anomalies in information such as unexpected fluctuations, differences, and correlations as well as the absence of expected fluctuations, differences, and correlations. Such anomalies may be indicative of unusual or nonrecurring transactions or events, errors, or fraudulent activities that warrant further attention and the gathering of corroborative audit evidence. Common analytical procedures performed by internal auditors include:

- **Analysis of common-size financial statements (vertical analysis).** The internal auditor expresses financial statement line items as percentages of relevant totals (for example, income statement items are expressed as percentages of sales, and balance sheet items are expressed as percentages of total assets).
- **Ratio analysis.** The internal auditor calculates pertinent financial ratios (for example, current ratio, gross profit percentage, inventory turnover, and cost of raw materials purchased divided by cost of finished goods produced) and ratios involving nonfinancial values (for example, sales divided by square footage of sales space, payroll expense divided by average number of employees, and percentage of defective units produced). Illustrative process performance ratios are presented in exhibit 10-5. It is important, however, to realize that the only true constraints on working with ratios are the availability of the necessary information to calculate the ratios and the internal auditor's creativity.
- **Trend analysis (horizontal analysis).** The internal auditor compares performance information (for example, individual amounts, common-size percentages, and/or ratios) for the current fiscal period with like information for one or more prior periods.
- **Analysis of future-oriented information.** The internal auditor compares current fiscal period information with budgets or forecasts.
- **External benchmarking.** The internal auditor compares performance information for the organization with like information of other individual organizations or the industry in which the organization operates. Published industry data for specific industries is available for comparison purposes from sources such as Dun & Bradstreet and Standard & Poor's.
- **Internal benchmarking.** The internal auditor compares performance information of one organizational unit with like information for other organizational units.

External Benchmarking

Comparing performance information for the organization with like information of other individual organizations or the industry in which the organization operates.

Internal Benchmarking

Comparing performance information of one organizational unit with like information for other organizational units.

Confirmation entails obtaining direct written verification of the accuracy of information from independent third parties. Evidence obtained via confirmation generally is considered very reliable because it comes to the internal auditor directly from independent sources. There are two common types of confirmation requests: *positive confirmations* ask recipients to respond regardless of whether or not they believe the information provided to them is correct, and *negative confirmations* ask recipients to respond only when they believe the information provided to them is incorrect. A positive confirmation may ask the recipient to provide the information of interest (referred to as a blank confirmation) or include the information of interest and ask the recipient to indicate agreement or disagreement with the information.

Computer-Assisted Audit Techniques

"In exercising due professional care, internal auditors must consider the use of technology-based audit and other data analysis techniques." (Standard 1220.A2)

EXHIBIT 10-5
ILLUSTRATIVE PROCESS PERFORMANCE RATIOS

Sales, Accounts Receivable, and Cash Receipts:

Net Sales ÷ Average or Year-End Net Accounts Receivable (Accounts Receivable Turnover)

365 ÷ Accounts Receivable Turnover (Average Days to Collect)

Net Sales ÷ Square Footage of Sales Space

On-Time Deliveries to Customers ÷ Total Deliveries to Customers

Bad Debt Expense ÷ Net Sales

Year-End Allowance for Bad Debts ÷ Year-End Accounts Receivable

Purchases, Accounts Payable, and Cash Disbursements:

Raw Materials Purchased ÷ Cost of Finished Goods Produced

On-Time Deliveries from Suppliers ÷ Total Deliveries from Supplies

Purchase Returns ÷ Total Purchases or Cost of Goods Sold

Cost of Goods Sold or Net Purchases ÷ Average or Year-End Accounts Payable (Accounts Payable Turnover)

Inventory and Cost of Goods Sold:

Cost of Goods Sold ÷ Average or Year-End Inventory (Inventory Turnover)

365 ÷ Inventory Turnover (Average Days to Sell)

Number of Defective Units Produced ÷ Total Units Produced

Cost or Scrap/Waste/Spoilage ÷ Net Sales or Cost of Goods Sold

Gross Profit ÷ Net Sales (Gross Profit Percentage)

Human Resources and Payroll:

Number of Employees Leaving Voluntarily and/or Involuntarily During the Year ÷ Average or Year-End Number of Employees (Employee Turnover)

Man Days Lost to Absenteeism ÷ Total Man Days

Number of Overtime Hours Worked ÷ Total Hours Worked

Payroll Expense ÷ Average or Year-End Number of Employees

ISACA (formerly known as the Information Systems Audit and Control Association) defines a technology-based audit technique, or CAAT, as "any automated audit technique, such as generalized audit software (GAS), test data generators, computerized audit programs and specialized audit utilities."[2] Some of the more common CAATs are defined by ISACA as follows:

> *Generalized audit software* (GAS) is "multipurpose software that can be used for [general purposes] such as record selection, matching, recalculation and reporting."
>
> *Utility software* is comprised of "computer programs provided by a computer hardware manufacturer or software vendor and used in running the system... This technique can be used to examine processing activities; to test programs, system activities, and operational procedures; to evaluate data file activity; and, to analyze job accounting data."
>
> *Test data* are "simulated transactions that can be used to test processing logic, computations and controls actually programmed in computer applications. Individual programs or an entire system can be tested... This technique includes integrated test facilities (ITFs) and base case system evaluations (BCSEs)."
>
> *Application software tracing and mapping* are "specialized tools that can be used to analyze the flow of data through the processing logic of the application software and document the logic, paths, control conditions and processing sequences...Both the command language or job control statements and programming language can be analyzed. This technique includes program/system: mapping, tracing, snapshots, parallel simulations and code comparisons."
>
> *Audit expert systems* are "expert or decision support systems that can be used to assist IS [information systems] auditors in the decision-making process by automating the knowledge of experts in the field...This technique includes automated risk analysis, system software and control objectives software packages."
>
> *Continuous auditing* "allows IS auditors to monitor system reliability on a continuous basis and to gather selective audit evidence through the computer."[3]

Generalized Audit Software (GAS)

Multipurpose software that can be used for audit purposes such as record selection, matching, recalculation, and reporting.

Continuous Auditing

Using computerized techniques to perpetually audit the processing of business transactions.

These definitions indicate that internal auditors can use CAATs to directly test 1) controls built into computerized information systems and 2) data contained in computer files. It should be noted that, by directly testing data contained in computer files, internal auditors obtain indirect evidence about the effectiveness of the controls in the application that processed the data.

> **Example**: An internal auditor uses generalized audit software to directly test whether any duplicate payments of invoices exist in the company's cash disbursements transaction file. The internal auditor uncovers several duplicate payments made throughout the year. The internal auditor may correctly infer that controls to prevent and/or detect such payments on a timely basis did not exist, were designed inadequately, or did not operate effectively.

An in-depth discussion of each type of CAAT defined above is beyond the scope of this textbook. To ensure CAATs are properly deployed on an assurance engagement, an auditor with specialized training in the performance of technology-based audit techniques should be leveraged. The most commonly recognized designation indicating such training is the Certified Information Systems Auditor (CISA).

ISACA sponsors the CISA designation. However, GAS and the types of data analyses internal auditors can perform with GAS warrant a bit more attention.

Some internal auditors continue to harbor the belief that GAS is a tool to be used only by IT audit specialists. However, as indicated by the following quote from "GTAG: Data Analysis Technologies" (of The IIA's Global Technology Audit Guide series), this is no longer true.

> "A reality of today's highly automated world is that almost every auditor must analyze data. What was once considered a special expertise, a job for IT auditors, or a task that was easily outsourced to another department or organization, has become a core competency for the profession of internal auditing."

Fortunately, GAS has advanced to the stage where it is relatively easy to use, even by internal auditors with little audit-related IT training. It combines a user-friendly interface with powerful data analysis functionalities such as:

- Examining files and records for validity, completeness, and accuracy.
- Recalculating recorded values and calculating other values of audit interest.
- Selecting and printing samples and calculating sample results.
- Comparing information in separate files.
- Summarizing, resequencing, and reformatting data.
- Creating pivot tables for multidimensional analysis.
- Searching for anomalies in data that may indicate errors or fraud.
- Preparing and printing reports.
- Automatically generating a historical log of data analyses performed.

Benefits of using GAS. There are many benefits of using GAS:

- It allows internal auditors to conduct audit procedures in a wide variety of hardware and software environments with minimal customization.
- It enables internal auditors to perform tests on data independently of the company's IT personnel.
- Using GAS enables the internal auditor to deftly analyze very large quantities of data.
- Some applications of GAS facilitate 100 percent examination of data populations almost instantaneously as opposed to testing a sample of data items manually.
- Using GAS to perform necessary but routine audit tasks frees up time for the internal auditor to think analytically.

Obstacles to implementing GAS successfully. There are also legitimate obstacles that an internal auditor must overcome to implement GAS successfully:

- Obtaining access privileges to relevant and reliable data.
- Gaining physical access to the data.
- Understanding how the data is stored and formatted in the system.

- Extracting the data and downloading it to the internal auditor's personal computer.
- Importing the data in a usable format into the audit software.

Overcoming these obstacles might, in some cases, require the assistance of an IT audit expert. However, the only "show-stopper" limitations of adding value by using GAS are the availability of relevant data in electronic format and the internal auditor's ingenuity.

ACL® and CaseWare IDEA software. The two predominant GAS programs used by internal auditors, ACL (*Audit Command Language®*) and IDEA (originally an acronym for Interactive Data Extraction and Analysis), accompany this textbook. Both the ACL data analysis software and IDEA are Windows-based and can be operated easily on the internal auditor's personal computer.

ACL and CaseWare IDEA

The two most widely used, commercially available, audit software programs.

The ACL software is a product of ACL Services Ltd. Interested readers can learn more about ACL Services by visiting the company's website at www.acl.com. There is a link to a trial version of ACL on the website accompanying this textbook, which provides the following materials relevant to ACL in addition to the ACL software itself:

- Getting Started manual.
- ACL in Practice manual.
- Data Access Guide.
- ACL Help.

The ACL in Practice manual contains an extensive tutorial involving a hypothetical company and real-world data, which provides a good introduction to ACL's analysis and reporting capabilities.

The IDEA software is a product of CaseWare IDEA Inc., a privately held software development and marketing company. Audimation Services Inc. is the U.S. business partner with CaseWare IDEA Inc. Interested readers can learn more about these companies and IDEA by visiting their websites: www.CaseWare-IDEA.com and www.audimation.com. The link to the website accompanying this textbook contains the following materials relevant to IDEA in addition to the software itself:

- Installation Guide.
- IDEA Tutorial.
- Report Reader Tutorial.
- IDEA Help.
- Case Study for IDEA Version Eight.
- IDEA Advanced Statistical Methods Case Study.

The Getting Started Tutorial in Section Four of the IDEA Tutorial, which can be completed by using the sample data files located on the site, provides a good introduction to IDEA's functionality. The Case Study for IDEA Version Eight and the IDEA Advanced Statistical Methods Case Study can be used for supplemental practice with the software.

WORKING PAPERS

IIA Standard 2330: Documenting Information requires internal auditors to record the evidence they accumulate as support for engagement outcomes. Implementation Guide 2330: Documenting Information provides supplemental guidance regarding properly preparing and documenting information in the internal auditor's working papers.

Purposes and Content of Working Papers

Because of the many purposes working papers serve, it is difficult to overstate their importance. For example, working papers:

- Aid in planning and performing the engagement.
- Facilitate supervision of the engagement and review of the work completed.
- Indicate whether engagement objectives were achieved.
- Provide the principal support for the internal auditors' communications to the auditee, senior management, the board of directors, and appropriate third parties.
- Serve as a basis for evaluating the internal audit function's quality assurance program.
- Contribute to the professional development of the internal audit staff.
- Demonstrate the internal audit function's compliance with The IIA's *International Standards for the Professional Practice of Internal Auditing*.

The content of internal audit engagement working papers will depend on the nature of the engagement. They should always, however, provide complete, accurate, and concise documentation of the engagement process.

Types of Working Papers

A wide variety of working papers are prepared during an internal audit engagement. The following list is intended to be illustrative rather than all-inclusive:

- Work programs used to document the nature, extent, and timing of the specific audit procedures.
- Engagement time budgets and resource allocation worksheets.
- Questionnaires used to obtain information about the auditee, including its objectives, risks, controls, operating activities, etc.
- Process maps or flowcharts used to document process activities, risks, and controls. (Common process mapping symbols and illustrative process maps are presented in chapter 5, "Business Processes and Risks." Common flowcharting symbols and illustrative flowcharts are presented in chapter 13, "Conducting the Assurance Engagement.")
- Charts, graphs, and diagrams, such as a risk map used to plot the impact and likelihood of business risks (an illustrative risk map is presented in chapter 13).
- Agendas for internal audit team meetings and meetings with the auditee.
- Narrative memoranda used to document the results of interviews and other meetings with auditees.

- Pertinent auditee organizational information, such as organization charts, job descriptions, and operating and financial policies and procedures.
- Copies of source documents, such as purchase requisitions, purchase orders, receiving reports, vendor invoices, vouchers, and checks.
- Copies of other important documents, such as minutes of meetings and contracts.
- IT-related documents, such as program listings and exception reports.
- Accounting records, such as trial balances and excerpts from journals and ledgers.
- Evidence obtained from third parties, such as confirmation responses from customers and representations from outside legal counsel.
- Worksheets prepared by the internal auditor, such as a risk and control matrix used to document process-level risks, key control descriptions, the internal auditor's evaluation of control design adequacy, the tests of controls performed, and the test results. (An illustrative risk and control matrix is presented in chapter 13.)
- Other types of working papers prepared by the internal auditor that reflect work performed (for example, analytical procedures, computerized data analysis, and direct tests of transactions, events, account balances, and performance measurements).
- Evidence compiled by the auditee and tested by the internal auditor.
- Controls performed by the auditee and reperformed by the internal auditor (for example, bank reconciliations).
- Written correspondence and documentation of oral correspondence with the auditee during the engagement.
- The internal audit team's write-ups of observations, recommendations, and conclusions. (Illustrative write-ups are discussed in chapter 13.)
- Final engagement communications and management's responses. (Illustrative audit communications are presented in chapter 14, "Communicating Assurance Engagement Outcomes and Performing Follow-Up Procedures.")

Guidelines for Working Paper Preparation

The chief audit executive (CAE) is responsible for establishing working paper policies and procedures. Well-written policies and procedures promote effective and efficient work and facilitate consistent adherence to quality assurance standards.

Standardized working paper formats help to streamline the audit process and facilitate consistent, high-quality work across engagements. Care should be taken, however, not to standardize working papers so rigidly that they inhibit internal auditor ingenuity and creativity. Appropriate working paper standardization may include:

- A uniform cross-referencing system for all engagements.
- Consistent working paper layouts.
- Standardized "tick marks" (that is, symbols used on working papers to represent specific audit procedures).
- A prescription for the types of information to store in permanent or carry-forward files (that is, files containing pertinent information of continuing importance for a particular auditee).

Working paper files should be complete and well-organized. At the end of an engagement, the files should be cleared out so they contain only the final versions of the working papers completed during the engagement. Each individual working paper should stand on its own merits. This means, for example, that each working paper should:

- Contain an appropriate index or reference number.
- Identify the engagement and describe the purpose or contents of the working paper.
- Be signed (or initialed) and dated by both the internal auditor who performed the work and the internal auditor(s) who reviewed the work. (Note that such a signature may be electronic.)
- Clearly identify the sources of auditee data included on the working paper.
- Include clear explanations of the specific procedures performed.
- Be clearly written and easy to understand by internal auditors unfamiliar with the work performed (for example, an internal auditor who refers to the working paper at a later date).

The bottom line is that the working paper should contain sufficient information for an internal auditor, other than the one who performed the work, to be able to reperform it. On the other hand, working papers should not contain more information than is necessary; they should be as concise as possible.

Moreover, because time is a precious audit resource, internal auditors must always strive to prepare working papers the right way the first time. There is no time allocated for rewriting them. The vital need for working papers to be prepared correctly, clearly, concisely, and quickly is one important reason why internal auditor proficiency in written communications is not an option—it is imperative.

Working papers may be prepared in paper form, electronic form, or both. Using automated working paper software, whether purchased from outside vendors or developed in-house, is now common. This software increases efficiency and facilitates consistent organization and retention of documentation supporting an internal audit engagement. The TeamMate® case assignments at the end of chapter 6, "Internal Control," and chapter 12, "Introduction to the Engagement Process," provide readers an opportunity to gain hands-on experience with the TeamMate EWP (Electronic Working Papers) software.

SUMMARY

This chapter focused on gathering and documenting audit evidence. The chapter began with a discussion of audit evidence and the procedures, both manual procedures and CAATs, that internal auditors use to gather sufficient appropriate evidence. The chapter concluded with a discussion of working papers, which serve as the principal record of the procedures completed, evidence obtained, conclusions reached, and recommendations formulated by the internal audit team during the engagement. Eleven important things to remember about audit evidence and working papers are listed in exhibit 10-6.

EXHIBIT 10-6
11 IMPORTANT THINGS TO REMEMBER ABOUT AUDIT EVIDENCE AND WORKING PAPERS

1. The quality of internal auditors' conclusions and advice depends on their ability to gather and evaluate sufficient appropriate supporting evidence.
2. *Professional skepticism* means that internal auditors take nothing for granted; they continuously question what they hear and see and critically assess audit evidence.
3. To be persuasive, audit evidence must be relevant, reliable, and sufficient.
4. *Audit procedures* are specific tasks performed to gather the evidence required to achieve prescribed audit objectives.
5. *Vouching* involves tracking information *backward*; it is used to test the *validity* of information.
6. *Tracing* involves tracking information *forward*; it is used to test the *completeness* of information.
7. *Analytical procedures* involve the comparison of information obtained during an engagement with predetermined expectations.
8. Internal auditors must know how to use generalized audit software (GAS), such as ACL or CaseWare IDEA, to extract and analyze electronically stored data.
9. Working papers serve as the principal record of the procedures completed, evidence obtained, conclusions reached, and recommendations formulated during an internal audit engagement.
10. Working papers also serve as the primary support for the internal audit team's communications to the auditee, senior management, the board of directors, and other stakeholders.
11. Electronic working papers, such as TeamMate EWP, increase audit efficiency and facilitate consistent organization and retention of audit documentation.

REVIEW QUESTIONS

1. What does "professional skepticism" mean?

2. What does "reasonable assurance" mean? Why do internal auditors provide reasonable assurance rather than absolute assurance?

3. What are the defining characteristics of persuasive audit evidence?

4. What is the relationship between audit objectives and audit procedures?

5. What do internal auditors mean when they refer to the nature, extent, and timing of audit procedures?

6. What are some common characteristics of effective interviewers?

7. What is the difference between vouching and tracing?

8. What types of analytical procedures are used by internal auditors?

9. What are some common types of CAATs?

10. What types of data analysis procedures can internal auditors perform with generalized audit software?

11. What are the two predominant generalized audit software programs used by internal auditors?

12. What are the purposes of internal audit working papers?

13. What are some common types of working papers?

14. What are the key characteristics of well-prepared working papers?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. Professional skepticism means that internal auditors beginning an assurance engagement should:

   a. Assume client personnel are dishonest until they gather evidence that clearly indicates otherwise.

   b. Assume client personnel are honest until they gather evidence that clearly indicates otherwise.

   c. Neither assume client personnel are honest nor assume they are dishonest.

   d. Assume that internal controls are designed inadequately and/or operating ineffectively.

2. Which of the following statements regarding audit evidence would be the least appropriate for an internal auditor to make?

   a. "I consider the level of risk involved when deciding the kind of evidence I will gather."

   b. "I do not perform procedures that provide persuasive evidence because I must obtain convincing evidence."

   c. "I evaluate both the usefulness of the evidence I can obtain and the cost to obtain it."

   d. "I am seldom absolutely certain about the conclusions I reach based on the evidence I examine."

3. Audit evidence is generally considered sufficient when:

   a. It is appropriate.

   b. There is enough of it to support well-founded conclusions.

   c. It is relevant, reliable, and free from bias.

   d. It has been obtained via random sampling.

4. Documentary evidence is one of the principal types of corroborating information used by an internal auditor. Which one of the following examples of documentary evidence generally is considered the most reliable?

   a. A vendor's invoice obtained from the accounts payable department.

   b. A credit memorandum prepared by the credit manager.

   c. A receiving report obtained from the receiving department.

   d. A copy of a sales invoice prepared by the sales department.

5. An internal auditor must weigh the cost of an audit procedure against the persuasiveness of the evidence to be gathered. Observation is one audit procedure that involves cost-benefit tradeoffs. Which of the following statements regarding observation as an audit procedure is/are correct?

   I. Observation is limited because individuals may react differently when being watched.

   II. Observation is more effective for testing completeness than it is for testing existence.

   III. Observation provides evidence about whether certain controls are operating as designed.

   a. I only.

   b. II only.

   c. I and III.

   d. I, II, and III.

MULTIPLE-CHOICE QUESTIONS

6. Your audit objective is to determine that purchases of office supplies have been properly authorized. If purchases of office supplies are made through the purchasing department, which of the following procedures is most appropriate?

   a. Vouch purchase orders to approved purchase requisitions.

   b. Trace approved purchase requisitions to purchase orders.

   c. Inspect purchase requisitions for proper approval.

   d. Vouch receiving reports to approved purchase orders.

7. A production manager of MSM Company ordered excessive raw materials and had them delivered to a side business he operated. The manager falsified receiving reports and approved the invoices for payment. Which of the following procedures would most likely detect this fraud?

   a. Vouch cash disbursements to receiving reports and invoices.

   b. Confirm the amounts of raw materials purchased, purchase prices, and dates of shipment with vendors.

   c. Perform ratio and trend analysis. Compare the cost of raw materials purchased with the cost of goods produced.

   d. Observe the receiving dock and count materials received. Compare the counts with receiving reports completed by receiving personnel.

8. An internal auditor is concerned that fraud, in the form of payments to fictitious vendors, may exist. Company purchasers, responsible for purchases of specific product lines, have been granted the authority to approve expenditures up to $10,000. Which of the following applications of generalized audit software would be most effective in addressing the auditor's concern?

   a. List all purchases over $10,000 to determine whether they were properly approved.

   b. Take a random sample of all expenditures under $10,000 to determine whether they were properly approved.

   c. List all major vendors by product line. Select a sample of major vendors and examine supporting documentation for goods or services received.

   d. List all major vendors by product line. Select a sample of major vendors and send negative confirmations to validate that they actually provided goods or services.

9. Which of the following most completely describes the appropriate content of internal audit assurance engagement working papers?

   a. Objectives, procedures, and conclusions.

   b. Purpose, criteria, techniques, and conclusions.

   c. Objectives, procedures, facts, conclusions, and recommendations.

   d. Subject, purpose, sampling information, and analysis.

10. Internal audit engagement teams prepare working papers primarily for the benefit of the:

    a. Auditee.

    b. Internal audit function.

    c. Board and senior management.

    d. Independent outside auditor.

11. Which of the following represents the most competent evidence that trade receivables actually exist?

    a. Positive confirmations.

    b. Sales invoices.

    c. Receiving reports.

    d. Bills of lading.

12. Competent evidence is best defined as evidence that:

    a. Is reasonably free from error and bias and faithfully represents that which it purports to represent.

    b. Is obtained by observing people, property, and events.

    c. Is supplementary to other evidence already gathered and that tends to strengthen or confirm it.

    d. Proves an intermediate fact, or group of facts, from which still other facts can be inferred.

MULTIPLE-CHOICE QUESTIONS

13. Workpaper summaries, if prepared, can be used to:

    a. Promote efficient workpaper review by internal audit supervisors.

    b. Replace the detailed workpaper files for permanent retention.

    c. Serve as an engagement final communication to senior management.

    d. Document the full development of engagement observations and recommendations.

14. When using a rational decision-making process, the next step after defining the problem is:

    a. Developing alternative solutions.

    b. Identifying acceptable levels of risk.

    c. Recognizing the gap between reality and expectations.

    d. Confirming hypotheses.

15. An internal auditor gathered the following accounts receivable trend and ratio analysis information:

	Year		
	3	2	1
Net accounts receivable as a percentage of total assets	30.8%	27.3%	23.4%
Accounts receivable turnover (net sales ÷ average accounts receivable)	5.21	6.05	6.98

Which of the following is the least reasonable explanation for the changes observed by the auditor?

a. Fictitious sales may have been recorded in years 2 and 3.

b. The effectiveness of credit and collection procedures deteriorated over the three-year period.

c. Sales returned for credit were overstated in years 2 and 3.

d. The allowance for bad debts was understated in years 2 and 3.

DISCUSSION QUESTIONS

1. You are studying in the campus library for your next internal audit exam with Mark and Ann, two of your classmates.

   Mark says: "I really don't understand this vouching and tracing stuff. For example, what difference does it make whether I start with sales invoices and match them with shipping documents or start with shipping documents and match them with sales invoices?"

   Ann replies: "I don't get it either. I hope there's nothing on the exam about it."

   You respond: "I really don't want to take that chance. Professor Smart seems to enjoy asking us hard questions. I think we better figure it out and be prepared. I'd rather be safe than sorry."

   Consider the following two audit objectives: 1) determine whether sales billed to customers have been shipped and 2) determine whether shipments to customers have been billed. Answer the following questions:

   a. What is the difference between the two audit objectives?

   b. What audit procedure would you perform to achieve each audit objective? Be specific.

   c. Why is it important that for each audit objective, you select the proper document as the starting point for your audit test and match that document with the other document?

2. A division of your company purchased a large quantity of new desktop computers during the current fiscal year. An internal audit manager has asked you to audit the process used to acquire the computers. He also wants you to determine whether the computers have been used properly and accounted for correctly. The manager specified a set of audit objectives to guide your tests. For example, he wants you to determine whether:

   1. The purchases of the computers were properly authorized.
   2. Responsibilities regarding the computers are properly segregated.
   3. The computers, as well as the software and information they contain, are properly safeguarded. Consider both physical and logical access.
   4. Laws and regulations regarding software usage have been complied with.
   5. The computers recorded as being purchased actually exist.
   6. All of the computers that were purchased have been recorded.
   7. The amounts at which the computers are recorded are correct.
   8. The estimated useful lives and salvage values of the computers are reasonable.
   9. Depreciation expense was calculated correctly.

   a. Describe the procedures you might use to gain an understanding of how the computers were acquired, used, and accounted for.

   b. Describe the audit procedure(s) you might use to achieve each of the audit objectives listed above. Be specific.

DISCUSSION QUESTIONS

3. The following information is available for MVF Company (dollar amounts are in millions):

	2016	2015	2014	2013
Net sales	$23.2	$21.7	$19.6	$17.4
Cost of goods sold	17.1	16.8	15.2	13.5
Beginning finished goods inventory	2.3	2.1	1.9	1.5
Ending finished goods inventory	2.9	2.3	2.1	1.9
Materials purchased	10.6	8.8	7.5	7.1

   a. Calculate the following ratios for each year:
      - Gross profit percentage.
      - Inventory turnover.
      - Cost of materials purchased to cost of finished goods produced.

   b. Analyze the results obtained in 3.a. above:
      - Describe the change in each ratio you observe in 2016.
      - Discuss at least two possible causes of each change observed.[4]

4. All of Kola Company's sales are credit sales shipped free on board (FOB) shipping point. Kola typically records sales transactions (that is, sales and cost of sales) throughout the year on the billing date. The internal auditor gathered the following information and documented it in his working papers.

Invoice Number	Date Shipped	Date Billed
8351	12/28/2015	12/29/2015
8352	12/29/2015	1/2/2016
8353	1/2/2016	12/31/2015
8354	1/2/2016	1/3/2016

   a. Describe the specific audit procedures that should be performed to determine whether sales transactions occurring immediately before and after year-end are recorded in the proper period.

   b. Record the adjusting journal entries (ignore dollar amounts) the internal auditor should propose based on the cutoff information documented above. Include a clear and concise explanation for each proposed entry.

5. Internal auditors are required to document their work in working papers that provide complete, accurate, and concise documentation of the engagement process. Discuss the potential adverse consequences of poorly prepared internal audit working papers.

CASES

If you have not already done so, visit the ACL® and CaseWare IDEA sites through the website that accompanies this textbook.

CASE 1

The purpose of this case is to familiarize you with the ACL software and give you an opportunity to practice its application.

A. Print and read the Getting Started manual.

B. Print the ACL in Practice manual. Work through the tutorial contained in the manual. Beginning in chapter 2, "Examine Employee Data," print the outcomes of the tasks you are asked to complete.

CASE 2

The purpose of this case is to familiarize you with the CaseWare IDEA software and give you an opportunity to practice its application.

A. Print the IDEA Tutorial. Read:

- The Foreword and Preface.
- Section One, IDEA Overview.
- Section Two, What's On the IDEA Screen.
- Section Three, IDEA Windows and Toolbars.

B. Work through Section Four, Getting Started Tutorial. Print selected task outcomes as you go. The outcomes you print should clearly show that you completed the entire tutorial.

CASE 3

KnowledgeLeader Practice Case: Information Produced by Entity

Background Information

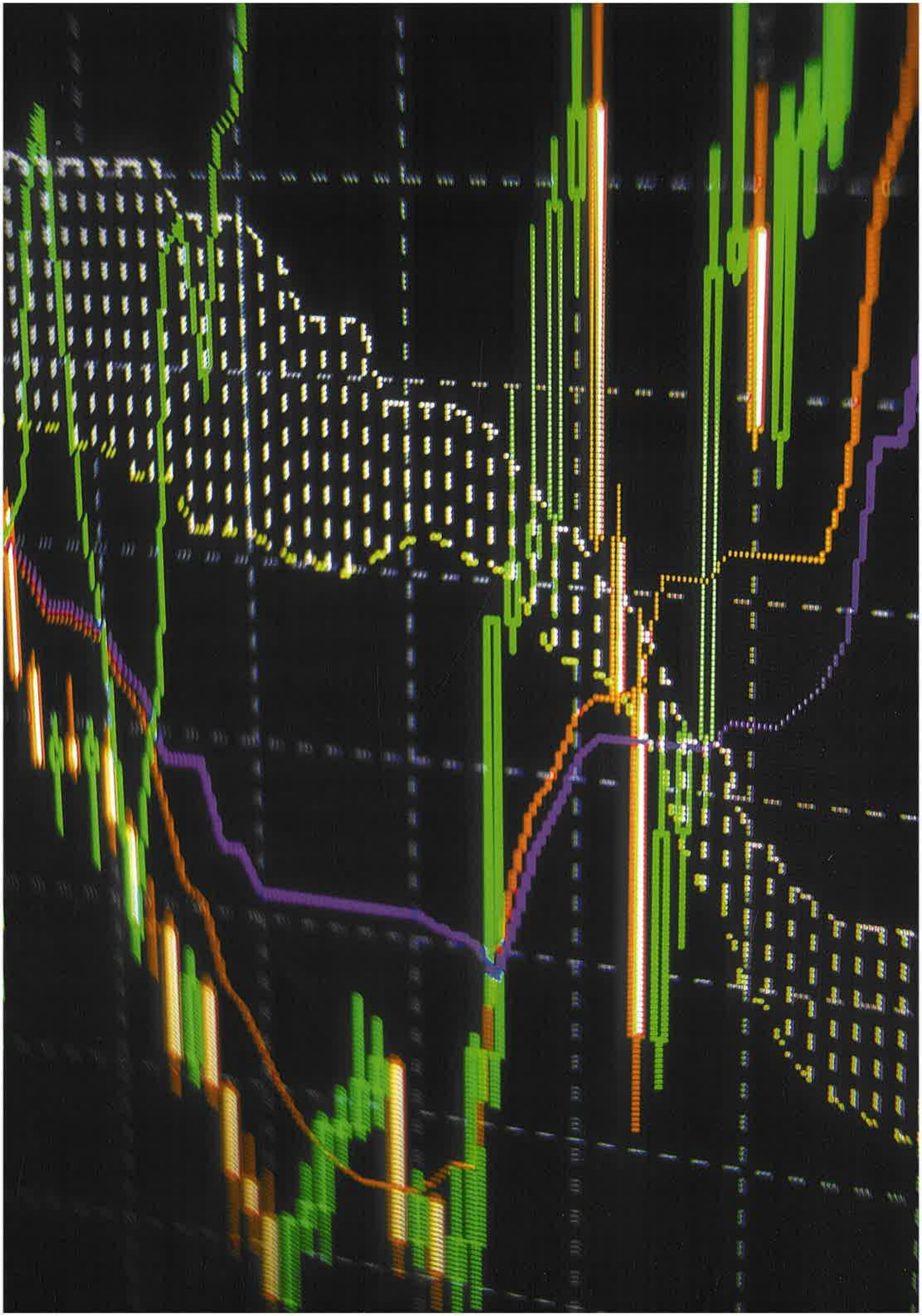
Companies are facing heightened regulatory expectations. One area of particular interest is information or data produced or manipulated by employees or company systems that is relied on by management to perform key controls or to make significant business decisions. Regulators commonly refer to this information or data as information produced by the entity (IPE). When IPE is identified, regulators expect management to verify (test) the completeness and accuracy of the information or data used by management to perform key controls or that is relied on to make significant business decisions. There is also an expectation that both external and internal auditors will determine if IPE is appropriately verified prior to management's reliance on such information or data.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and identify the most common types or forms of IPE. What are key risks associated with management's reliance on IPE? Identify the most common strategies for testing IPE.

C. Submit a brief write-up indicating the results of your research to your instructor.



CHAPTER 11

Data Analytics and Audit Sampling

LEARNING OBJECTIVES

- Understand where best to use audit software to perform audit tasks.
- Describe the steps to develop an audit approach for data analysis.
- Describe opportunities to expand audit opportunities to be predictive and proactive in internal audit work.
- Understand the future direction for use of data analytics in internal audit.
- Understand audit sampling and the audit risk concepts associated with sampling.
- Know how to apply statistical and nonstatistical audit sampling in tests of controls.
- Be aware of alternative statistical sampling approaches used in tests of monetary values.

Obtaining sufficient appropriate evidence to achieve engagement objectives depends on the nature, extent, and timing of the procedures performed. This chapter focuses on the *extent* of the procedures the internal auditor must perform to obtain the amount of audit evidence required to achieve the engagement objectives. While economic and time constraints have historically precluded internal auditors from testing 100 percent of a given population, advances in data analysis have made it more possible than ever before as many constraints such as disk storage, processing power, ease of using software, and auditor ability to interpret results from large volumes of data have been minimized.

Audit sampling is, by definition, the application of an audit procedure to less than 100 percent of the items in a population of audit interest for the purpose of drawing an inference about the entire population. It is used most commonly by internal auditors to test the operating effectiveness of controls. Increasingly, however, internal auditors can apply analysis to large populations of data to identify anomalies that could indicate a need for remediation. Audit sampling (both statistical and nonstatistical) and data analytics will be covered as they are applied by internal auditors in tests of controls. Many times, testing is required in the case of manual controls or when documented information is not stored electronically.

In this chapter, both the new data analytics approach and the traditional sampling approach to draw conclusions about data populations will be discussed.

DATA ANALYTICS

Data Analytics

Use of data analytics allows internal auditors to analyze the total population of information and scrutinize exceptions more closely.

For data analytics to be effective for internal audit, you need to have people, processes, and technology in place.

Internal audit functions are working to effectively utilize the large volumes of data available to them. As stated in *Data Analytics: Elevating Internal Audit's Value*, the four Vs of data: volume, velocity, variety, and veracity create unlimited possibilities for internal auditors to take full advantage of all the possibilities of data analytics. However, many internal audit functions still are not taking full advantage of the opportunities provided through complete analysis of the data files. Through the use of data analytics software, internal auditors have been able to take advantage of the large volumes of data available today.[1]

Data analytics is the process of gathering and analyzing data and then using the results to make better decisions. Surveys of chief audit executives (CAEs) revealed the most popular meanings for the term "data analytics" as follows:

1. Analysis of operational, financial, and other data that quantifies and highlights risk and/or opportunity.
2. Data-mining information across multiple sources to provide actionable results.
3. Repeatable and automated processes that search for patterns and identify anomalies.

The first two definitions are common across departments. They include the analysis of business data to identify and take action on risk or improve organizational performance (for example, the marketing department mines data to identify who is purchasing what product). The last definition, however, is focused on using data to detect exceptions and has unique applications for internal auditing.[2]

Internal auditors using data analytics to identify anomalies must be well versed in the four attributes of the current data environment that were introduced previously. Specifically:

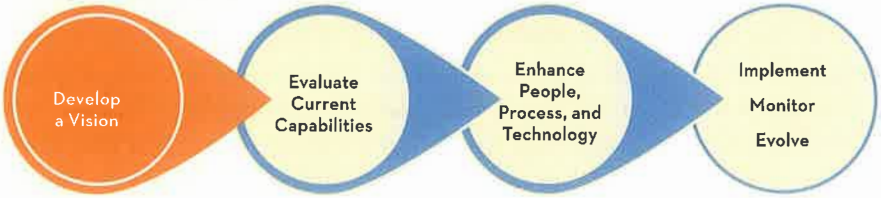
- The *volume* of data is significantly greater than ever before due to collecting data from the internet of things, data from internet searches, and various forms of unstructured data. The composition of data has grown exponentially from the typical accounts payable, payroll, and banking transactions from the past. This has led to new opportunities as big data is providing not only business opportunities but new opportunities for internal audit to mine data for many purposes. For data analytics to provide value, organizations must develop data analytics infrastructures that can handle an appropriate volume of data.
- Data *velocity* is increasing as the number of devices, the vast amount of data being collected, and today's globalization and connectivity result in data being produced at incredible and increasing speeds. One culprit is the proliferation of devices and machines with sensors that generate data constantly.

User-generated content, such as photos and videos, also contributes significantly to the mountain of digital information. Data velocity may have an inverse effect on internal auditing as additional sources of data enter the environment. This will require a strategic focus on which data points are relevant and how to process the data that will lead to analysis that adds value.

- Data is being identified, captured, and stored from an increasing number of sources, which provides a significant degree of *variety*. From customer transactions to transmissions from outer space, the variety of data defies comprehension. Today, data is categorized as structured and unstructured. Structured data is captured neatly in columns and rows. Unstructured data has no predefined manner or format. To be successful going forward, data analysis must consider differing types of data.
- *Veracity* is key. For data analytics to be successful, the underlying data must be cleaned and normalized to limit the possibility of a "garbage in, garbage out" scenario. In other words, the data must faithfully reflect the truth. This fourth "V" is the most frequently overlooked attribute of data analytics as it is often difficult to determine the quality or accuracy of data. In organizations that lack a strong data governance culture, records can be incomplete, entries could have errors, and data might be inconsistently formatted. All of these issues can compromise analysis and produce inaccurate results.[3]

A data analytics framework is shown in exhibit 11-1, which shows that the first step in implementing data analytics is to determine the long-term vision of where the internal audit function would like to take such a program. In mapping the vision and determining the resources required, the next steps are to evaluate the current capabilities and determining the resource requirements for people, process, and technology. The next section describes the framework in more detail.

EXHIBIT 11-1
DATA ANALYTICS FRAMEWORK


Develop a Vision
Evaluate Current Capabilities
Enhance People, Process, and Technology
Implement
Monitor
Evolve

Source: Warren W. Stippich Jr. and Bradley J. Preber, *Data Analytics: Elevating Internal Audit's Value* (Lake Mary, FL: Internal Audit Foundation, 2016).

Developing a Vision for Data Analytics

The most effective data analytics visions seek to answer a well-defined question such as "What are the top issues facing the organization?" or "How can the internal audit function add more value?" The answers to these questions help develop the data analytics vision, which should be achievable, aspirational, and filled with small wins that lead to a long-term objective. For example, a CAE might set a target of increased automation of repeatable processes, using data analytics for specific types of audits, and working on higher-value work or streamlining processes. To do so, the CAE must construct a vision that includes three overarching concepts: 1) align with organization goals, 2) balance short-term obligations with long-term gains, and 3) communicate progress.

Evaluating Current Capabilities

Once the internal auditors articulate a vision for how data analytics can serve them, the next step is to determine their progress in building data analytics capabilities—and what steps they must take to elevate performance. The good news is that many internal audit functions have taken at least some initial steps on the data analytics journey.

Enhancing People, Processes, and Technology

Once internal audit functions have developed a well-articulated vision for how data analytics can support their work and performed a diagnostic to gain a better understanding of the current status of data analytics, the next steps require spending money in two critical areas: talent (training and staffing) and technology (software and hardware). Meanwhile, departments must devote time and resources to improving processes to secure data.

People

Audit groups are evolving to add a data scientist as a key member of the staff.

Processes

It is imperative that data analytics be integrated into the annual planning process and at the early stages of every audit.

Technology

Advancements in data visualization tools have made information come to life for management presentations. Every internal auditor should be well-versed in the capabilities and use of data analytics tools.

Implementing, Monitoring, and Evolving

Implementing a new technology plan is not as simple as flipping a switch. Much time and effort must be devoted to coordinating across people, processes, and technology. The implementation should be addressed in stages and differentiate between solution components.

The internal audit function has a twofold role to play in tracking the progress of its data analytics vision: by turning the lens on itself to gauge the department's level of adoption and acting as an independent party to help other areas of the organization improve their use of data analytics. A foundational element of this effort includes creating a culture of data stewardship to increase data access, quality, and consistency.

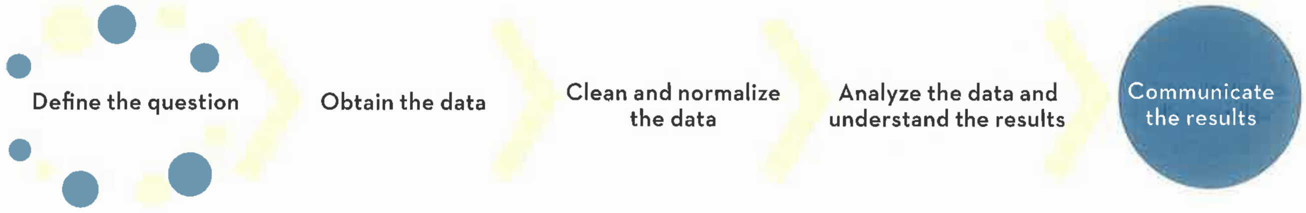
The pace of technological advancements, a changing business environment, and an organization's growth can each alter the original calculus for the vision. As conditions evolve, so too must the strategy. The CAE should articulate the objectives for each initiative, along with a timeline, resource needs, and investment strategy. To the extent possible, internal audit leaders should also document their approach. The internal audit function should review and integrate new tools as they become available—something that is occurring in shorter and shorter intervals. Software will continue to be upgraded, adding more powerful features, and enterprise systems will also enable improved access to data. Both developments can require adjustments to the data analytics vision.

As quickly as technology can change the equation, CAEs will also need to manage a much slower-evolving asset—their team members. Because internal audit functions are constantly asked to cover more ground without additional resources, the development of existing team members is a longer-term project. In addition to investing in targeted training to get audit professionals more comfortable with data analytics, CAEs can also seek to hire new employees to fill any gaps. Assuming the internal audit function has approval to expand, a promising internal audit data analyst candidate would have experience in data analytics, as well as some background in auditing and industry knowledge.[4]

STEPS TO INTERNAL AUDIT DATA ANALYTICS

Data analytics allow internal auditors to focus their resources on high-risk transactions and provide management with a higher level of operational assurance. A proven process for developing an internal audit data analytics program is defined in exhibit 11-2.

EXHIBIT 11-2
INTERNAL AUDIT DATA ANALYTICS PROCESS


Define the question
Obtain the data
Clean and normalize the data
Analyze the data and understand the results
Communicate the results

Source: Warren W. Stippich Jr. and Bradley J. Preber, *Data Analytics: Elevating Internal Audit's Value* (Lake Mary, FL: Internal Audit Foundation, 2016).

Step 1: Define the question you want to answer.

The internal audit function must first define what it is trying to achieve and the value that is anticipated. For example, an internal audit function might be asked to determine where potential fraud is occurring and what parties are involved. By beginning with that business question, multiple data sources can be interrogated and profiled. The result of this exercise provides an initial answer to the question and helps to determine the technologies needed to execute the query.

Step 2: Obtain the data.

The next step is to gain access to the data needed for analysis, a process commonly referred to as information discovery. Getting access to data and making it usable can be difficult and expensive. Indeed, the internal audit executives surveyed identified obtaining data as the top challenge to incorporating data analytics into their internal audit functions. In large companies, business units often use completely different systems, and exporting data through each software's canned report is sometimes the only way to retrieve it. Complex systems, legacy systems, and business units that are overly protective of their own data can also present obstacles. However, today's data analytics tools include the functionality to review and profile source data to determine which data to extract, normalize, and validate to a nonrelated source (for example, validating that the net amount from a transactional dataset totals the sales total on a financial statement).

Step 3: Clean and normalize the data.

Cleaning data involves actions such as eliminating duplicative information and making sure that data fields with the same names from different systems mean the same thing. Forward-thinking companies have addressed the issue of data quality by instituting data governance programs with a committee charged with ensuring the integrity and usability of data throughout the organization. Like data governance programs, enterprise data warehouses—where data from disparate sources throughout an organization are integrated—can give internal auditors a head start on clean data.

Normalizing the data (the process of organizing data to minimize redundancy and making it useable for a specific purpose) may be the most frequently overlooked step in the data analytics process. Anomalies—data points that are unexpected, peculiar, nonconforming, or otherwise not easily classified—might represent actual problems (or hidden opportunities). They might also be the result of peculiarities that are introduced as the data is gathered, recorded, or transferred from one platform to the next. In such cases, those peculiarities must be identified and corrected to enable analysts to reach accurate conclusions. Most new software programs include modules that allow data analysts to spot and fix peculiarities more easily.

Step 4: Analyze the data.

With clean data in hand, real analysis can begin. While the actual analyses differ depending upon the purpose of the inquiry, standard data analytics software packages can help complete the analyses. Once the data is processed, the results must be interpreted. Anomalies must be studied to determine, for example, when an error has occurred or whether a feature in a system or process led to the result—and if the latter, are the business process owners aware of the feature and its consequences? Internal auditors will often trace results to the underlying source documentation (an invoice or purchase order, for example) to confirm the nature, timing, and details of the event or transaction. At this stage, internal auditors review and refine the preliminary analyses based on the initial results and determine when nonconformance simply reflects an error or violates company policy. Even with careful analysis, data alone will not provide clarity on a specific control, requiring internal auditors to work closely with business units to interpret the results.

Step 5: Communicate the results.

Insights from data are worthless if executives cannot grasp them. Of course, a failure to devote adequate resources to helping people truly understand the results of data analysis (frequently manifested in dry tables full of numbers) can mean the failure of the entire program. Internal auditors can slice and dice data and uncover compelling results, but without effectively communicating results, the analysis is not understood and often discounted. Innovative data visualization (the graphical presentation of data) is the best way to inform and enhance decision-making. Many off-the-shelf software data visualization packages have built-in tools that audit professionals can use to convey findings in accessible ways.[5]

USE OF DATA ANALYTICS

Internal audit functions are increasingly using data analytics—especially as more demands are being thrust upon them. Despite this progress, most functions have just begun to discover what is possible. Internal audit functions have deployed data analytics to high-priority areas, which can differ markedly by industry, regulatory pressures, and department capabilities. The uses for data analytics in internal audit functions fall into four common categories: compliance, fraud detection and investigation, operational performance, and internal controls. Exhibit 11-3 provides representative examples of typical software currently deployed by internal audit functions today. These data analytics have been used for many years by internal audit groups and have been effective in providing descriptive, diagnostic, predictive, and prescriptive analysis, as noted in exhibit 11-4.[6]

EXHIBIT 11-3
EXAMPLES OF INTERNAL AUDIT DATA ANALYTICS USAGE

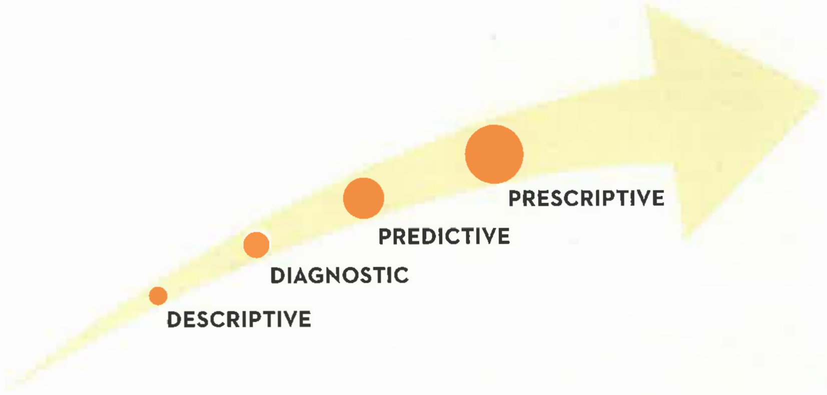
Internal Audit Function	Data Analytics Use Examples
Compliance	■ Evaluate expense reports and purchase card usage for all transactions. ■ Perform vendor audits by utilizing line item billing data to identify anomalies and trends to investigate. ■ Assess regulatory requirements (e.g., receiving an alert when the words "pay to play" are noted on an expense report; could be indicative of a Foreign Corrupt Practices Act violation). ■ Identify poor data quality and integrity around various data systems that are key drivers to (non)compliance risks.
Fraud Detection and Investigation	■ Identify ghost employees, potential false vendors, and related party or employee-vendor relationships. ■ Highlight data anomalies that pose the greatest financial and/or reputational risk to the organization. ■ Investigate symptoms of an asset misappropriation scheme to answer the "*who, what, where, when*" questions.
Operational Performance	■ Key metrics around spend analysis (e.g., payment timing, forgone early-payment discounts, and payment efficiency). ■ Duplicate payment analysis and recovery. ■ Perform revenue assurance/cost leakage analysis. ■ Slow-moving inventory analysis. ■ Identify key performance and key risk indicators across industries and business lines.
Internal Controls	■ Segregation of duties analysis. ■ User access analysis. ■ Assessing control performance. ■ Identify potential outliers that would indicate control failures or weaknesses.

Source: Warren W. Stippich Jr. and Bradley J. Preber, *Data Analytics: Elevating Internal Audit's Value* (Lake Mary, FL: Internal Audit Foundation, 2016).

FUTURE OF INTERNAL AUDIT DATA ANALYTICS

Internal audit functions of the future will bear little resemblance to how most currently function. Imagine an organization as a virtual electronic footprint, growing rapidly in both size and complexity. Within the internal audit function, every professional will be conversant in data analytics, all enterprise data will be available, clean, and normalized, and data analytics will become the backbone of internal audit work. Optimized audit schedules will enable the function to flag high-risk items automatically and give human users license to prioritize and investigate high-value areas. By letting computers handle the transactional, low-value tasks and engaging staff only on high-risk transactions that require human scrutiny, internal auditors will wield technology to achieve an unprecedented level of efficiency.

EXHIBIT 11-4
FOUR TYPES OF DATA ANALYTICS



Analytic Type	Internal Audit Example
DESCRIPTIVE	Analysis of accounts payable identifies all disbursements processed on Saturdays for over $1,000.
DIAGNOSTIC	Analysis of accounts payable identifies John Smith from Dallas as the accounts payable manager who approved each Saturday disbursement for over $1,000.
PREDICTIVE	Analysis of accounts payable in multiple cities identifies all Saturday disbursments over $1,000 and assigns common attributes to each occurrence (e.g., number of total vendors, employee tenure, and total accruals booked each month).
PRESCRIPTIVE	Analysis that builds and tests scenarios around different policies to determine what course of action would lead to a drop in the number of disbursments over $1,000 processed on Saturdays.

Source: Warren W. Stippich Jr. and Bradley J. Preber, *Data Analytics: Elevating Internal Audit's Value* (Lake Mary, FL: Internal Audit Foundation, 2016).

The application of machine learning—the ability of a computer algorithm to learn and make predictions—will eventually replace many of the data analysis functions currently performed by humans. Whereas people exhibit a gradual learning curve, machine learning will enable computers to accumulate knowledge and then quickly surpass the human ability to analyze data. Currently, humans are more adept at processing complex information, understanding relationships, and planning future actions—advantages that may erode as computers gain the ability to process data with a purpose, understand unstructured data, and use intuition.

As organizations across all industries become more sophisticated, data analytics will be a critical tool to ensure that the internal audit function can help them improve their processes and controls. These more advanced data analytics techniques could help internal audit functions achieve more meaningful results. However, many functions are currently using these techniques indiscriminately without determining how data analytics can best meet their strategic needs. Instead, internal audit leaders must develop a vision as a first step for how data analytics can serve their organization and then ensure they have the people, process, and technology to execute effectively.[7]

AUDIT SAMPLING

While data analytics takes a holistic approach to obtaining information from large data sets, audit sampling attempts to draw conclusions from looking a just a portion of the data and projecting the conclusion to the population of interest. As indicated above, *audit sampling* is the application of an audit procedure to less than 100 percent of the items in a population for the purpose of drawing an inference about the entire population. An audit population might be, for example, all receiving reports prepared during the year or all customer account balances in an accounts receivable subsidiary ledger. Sampling is used most commonly in performing audit procedures such as vouching and tracing, which involve the inspection of some form of manually prepared documentary audit trail. It also may be applicable to the performance of audit procedures such as inquiry and observation. Walking a small set of transactions through a particular process to gain a better understanding of how the process works is not sampling because the purpose is not to reach a conclusion about an entire population of items.

Advances in IT and data analytics, as discussed earlier, have reduced the extent to which internal auditors use audit sampling. One reason for this is that the operational effectiveness of a control embedded in an application program needs to be tested only once to determine whether the control is operating effectively at a given time. The internal auditor will then rely on different procedures, such as testing the controls over changes to the application program, to gain assurance that the control operated consistently over a period of time. A second reason is that it is often more expedient to directly test 100 percent of the items stored in a computer file using data analytics and generalized audit software than it is to select and test a sample of the items.

Two General Approaches to Audit Sampling

There are two general approaches to sampling: statistical and nonstatistical. Both approaches require the use of professional judgment in designing the sampling plan, executing the plan, and evaluating sample results. The internal auditor's choice between the two methods is independent of the specific audit procedures he or she intends to perform, his or her evaluation of the appropriateness of the evidence obtained, and the actions he or she will take based on the outcomes of the sampling application. Both approaches can provide sufficient appropriate evidence if applied correctly. (Some people refer to nonstatistical sampling as "judgmental" sampling. The authors have chosen not to use this term to avoid potential confusion—both statistical sampling and nonstatistical sampling require expert audit judgment.)

The internal auditor's choice between the two methods boils down to a cost-benefit decision. Statistical sampling is a tool that can help the internal auditor measure the sufficiency of evidence obtained and quantitatively evaluate the sampling results. Most importantly, statistical sampling allows the internal auditor to quantify, measure, and control sampling risk. For these reasons, statistical sampling is normally thought to provide more persuasive evidence than nonstatistical sampling. However, statistical sampling also is generally thought to be costlier. It involves incremental training costs and higher costs associated with designing samples, selecting items to be examined, and evaluating sample results. Statistical sampling and nonstatistical sampling are further differentiated in subsequent sections of this chapter.

Audit Risk and Sampling Risk

As defined in chapter 10, "Audit Evidence and Working Papers," audit risk is the risk of reaching invalid conclusions and/or providing faulty advice based on the audit work conducted. Within the context of sampling, audit risk comprises two types of risk: sampling risk and nonsampling risk.

Audit Risk

The risk of reaching invalid audit conclusions and/or providing faulty advice based on the audit work conducted.

Sampling risk is the risk that the internal auditor's conclusion based on sample testing may be different than the conclusion reached if the audit procedure was applied to all items in the population. It is a function of testing less than 100 percent of the items in the population because even an appropriately selected sample may not be representative of the population. Sampling risk varies inversely with sample size. If the internal auditor tests 100 percent of a population, and therefore is not sampling, there is no sampling risk.

Sampling Risk

The risk that the internal auditor's conclusion based on sample testing may be different than the conclusion reached if the audit procedure was applied to all items in the population.

In performing tests of controls, the internal auditor is concerned with two aspects of sampling risk:

The risk of assessing control risk too low (type II risk, beta risk). Also known as the risk of overreliance, this is the risk that the assessed level of control risk based on the sample results is lower than the internal auditor would have found it to be if the population had been tested 100 percent. In other words, it is the risk that the internal auditor will incorrectly conclude that a specified control is more effective than it really is. Stated another way, it is the risk that the internal auditor will overstate the reliance that management can place on the control to reduce residual risk to an acceptably low level.

The risk of assessing control risk too high (type I risk, alpha risk). Also known as the risk of under-reliance, this is the risk that the assessed level of control risk based on the sample results is higher than the internal auditor would have found it to be if the population had been tested 100 percent. In other words, it is the risk that the internal auditor will incorrectly conclude that a specified control is less effective than it really is. Stated another way, it is the risk that the internal auditor will understate the reliance that management can place on the control to reduce residual risk to an acceptably low level.

Control risk, which is referred to for the first time in the preceding two paragraphs, is the risk that controls fail to reduce *controllable risk* to an acceptable level. Remember from chapter 6, "Internal Control," that controllable risk is that portion of inherent risk that management can reduce through day-to-day operations. Controls are implemented specifically to reduce controllable risk, with the goal of reducing it to management's level of risk tolerance (that is, the level of risk acceptable to management). *Residual risk* is the risk remaining after controls have been implemented. If residual risk exceeds management's risk tolerance, then controls are ineffective, either because they are designed inadequately or operating ineffectively. If the risk is managed to a level below management's risk tolerance, then internal controls are presumed to be designed adequately and operating effectively. However, there also is the possibility that the internal controls are excessive and using more resources than may be required.

Nonsampling Risk

The risk that occurs when an internal auditor fails to perform his or her work correctly.

Nonsampling risk, unlike sampling risk, is not associated with testing less than 100 percent of the items in a population. Instead, nonsampling risk occurs when an internal auditor fails to perform his or her work correctly. For example, performing inappropriate auditing procedures, misapplying an appropriate procedure (such as failure on the part of the internal auditor to recognize a control deviation or a dollar error), or misinterpreting sampling results may cause a nonsampling error. Nonsampling risk refers to the possibility of making such errors. Nonsampling risk is controlled (reduced to an acceptably low level) through appropriate audit planning, supervision of individual audit engagements, and the overall application of appropriate quality assurance procedures.

STATISTICAL AUDIT SAMPLING IN TESTS OF CONTROLS

Attribute Sampling Approaches

Attribute sampling is a statistical sampling approach based on binomial distribution theory that enables the user to reach a conclusion about a population in terms of a rate of occurrence. The binomial distribution is a distribution of all possible samples for which each item in the population has one of two possible states (for example, control deviation or no control deviation). The most common use of attribute sampling in auditing is to evaluate the effectiveness of a particular control. The internal auditor tests the rate of deviation from a prescribed control to determine whether the occurrence rate is "acceptable" and, accordingly, whether reliance on that control is appropriate. Typically, the most basic attribute sampling approach involves the selection of a single sample of a mathematically computed size.

Attribute Sampling

A statistical sampling approach that enables the user to reach a conclusion about a population in terms of a rate of occurrence.

Stratified attribute sampling is a variation of attribute sampling from a population that can be subdivided. For example, a population of purchase transactions may be divided into those of a relatively small amount, which local managers are allowed to authorize, those of moderately large amounts that regional managers approve, and those of large amounts requiring central management approval. When different controls are applied to different levels of like transactions, the different levels of transactions should be considered separately as different populations. The reason for this is simple: the levels of control effectiveness may vary when different controls are applied.

Stop-or-go sampling is another variation of attribute sampling. Its use is most appropriate when very low deviation rates are expected. Stop-or-go sampling is valuable in these situations because it minimizes the required sample size for a specified level of sampling risk. An initial, relatively small, sample is drawn and analyzed. The internal auditor then decides, based on the results of this initial sample, whether the sample size should be increased. If a sufficiently low number of deviations are found in the initial sample, the internal auditor stops sampling and formulates his or her conclusion. If more than a sufficiently low number of deviations are found, more sample items are drawn and analyzed before a conclusion is reached.

Discovery sampling is a third variation of attribute sampling. The sample is designed to be large enough to detect at least one deviation if the rate of deviations in the population is at or above a specified rate. A statistical sample is drawn in a manner that enables the internal auditor to test the likelihood of finding at least one deviation. This sampling approach is used most commonly to test for fraud. Its use is appropriate when the expected deviation rate is very low and the internal auditor wants to design a sample based on a specified probability of finding one occurrence. Due to the context in which it is applied and the nature of the potential deviations being investigated, discovery sampling sample sizes are generally much larger than those used in regular attribute sampling applications.

Designing an Attribute Sampling Plan, Executing the Plan, and Evaluating the Sample Results

Attribute sampling involves the following nine steps:

1. Identify a specific internal control objective and the prescribed control(s) aimed at achieving that objective.
2. Define what is meant by a control deviation.
3. Define the population and sampling unit.
4. Determine the appropriate values of the parameters affecting sample size.
5. Determine the appropriate sample size.
6. Randomly select the sample.
7. Audit the sample items selected and count the number of deviations from the prescribed control.
8. Determine the achieved upper deviation limit.
9. Evaluate the sample results.

Each of these steps is described here with the following hypothetical situation used as the context for illustrating each step:

> An internal auditor has been instructed to use statistical sampling in her tests of controls over materials acquisitions. The specific audit objective of interest is to determine whether all purchases of materials have been appropriately authorized.

Step 1: Identify a specific internal control objective and the prescribed control(s) aimed at achieving that objective.

The specified audit objective is the key factor in determining what is to be sampled. The audit objective expressed in our illustrative situation above is to determine whether all purchases of materials have been appropriately authorized. This audit objective pertains to the business objective of validity. Management wants to be confident that all purchases are valid—in other words, that no unauthorized purchases have been made. The internal control objective pertaining to this objective is to provide reasonable assurance that management's objective is achieved—specifically, that all purchases are appropriately authorized. Carefully defining the control objective and the control aimed at achieving that objective is very important. If the internal auditor does not do this, there is a risk of performing inappropriate audit procedures and, consequently, drawing inappropriate conclusions. This is an example of nonsampling risk.

For the illustrative example, assume that the company's materials acquisition policies specify that purchases of materials are initiated by authorized warehouse personnel preparing formal written requests (purchase requisitions) for the materials needed. Approved purchase requisitions are forwarded to the purchasing department, where they serve as authorization to order the materials requested. The purchasing department prepares prenumbered purchase orders, which become part of the trail of documentary evidence supporting purchase transactions. The internal auditor decides to test, on a sample basis, whether purchase orders prepared during the past 12 months are supported by appropriately approved purchase requisitions.

Step 2: Define what is meant by a control deviation.

Carefully defining what is meant by a deviation from a prescribed control (that is, the control attribute of interest) is just as important as carefully defining the control.objective and control procedure. If the internal auditor fails to do this, there is a risk of not recognizing a deviation, which is another example of nonsampling risk.

In the illustrative example, the internal auditor wants to make sure that purchase orders are supported by appropriately approved purchase requisitions. A deviation from the prescribed control would include any one of the following: a missing purchase requisition, no evidence of a purchase requisition approval, approval by an unauthorized person, or a difference between the item purchased per the purchase order and the item requested per the purchase requisition.

Step 3: Define the population and sampling unit.

As stated in step 1, the audit objective in this example is to test the validity of purchase orders. Vouching tests the validity of recorded information. It is applied by testing backward to determine whether information in a document is supported by information in previously prepared documents.

The population of interest to the internal auditor in this example is the population of prenumbered purchase orders prepared during the past 12 months. The sampling unit is each purchase order that is tested to determine whether it is supported by an appropriately approved purchase requisition. To test this, the internal auditor will vouch each purchase order to the corresponding purchase requisition.

Why would it be inappropriate in this example for the internal auditor to trace purchase orders forward to determine whether a corresponding purchase order was prepared? Remember the audit objective—to determine whether purchase orders are supported by appropriately approved purchase requisitions. If the internal auditor selects a sample of purchase requisitions and traces them forward to subsequently prepared purchase orders, there is absolutely no chance of uncovering a situation in which a purchase requisition was not prepared for an existing purchase order.

Step 4: Determine the appropriate values of the parameters affecting sample size.

In attribute sampling, the internal auditor must specify, using audit judgment, the appropriate values for three factors affecting sample size:

- The acceptable risk of assessing control risk too low.
- The tolerable deviation rate.
- The expected population deviation rate.

Note that the size of the population has little effect on attribute sample size unless the population is very small. For populations that are smaller than 200 items, the sample size directly correlates to population size. Sample sizes will increase nominally for populations ranging between 200 and 2,000 items.[8] The statistically derived sample size tables presented in exhibit 11-1 are based on large population sizes, that is, more than 2,000 items. It is, therefore, conservative to use these tables for populations of less than 2,000. It may be appropriate, however, for an

Factors Affecting Attribute Sample Sizes:

– Acceptable risk of assessing control risk too low

– Tolerable deviation rate

– Expected population deviation rate

internal auditor to consider population size for audit efficiency purposes if a control is applied infrequently (for example, no more than once per week).

Assume for the example above that the population contains 2,500 individual purchase orders.

Risk of Assessing Control Risk Too Low

The risk that the internal auditor will incorrectly conclude that a specified control is more effective than it really is.

The acceptable risk of assessing control risk too low. Recall that the risk of assessing control risk too low is the risk that the internal auditor will incorrectly conclude that a specified control is more effective than it really is. The risk of assessing control risk too low is inversely related to sample size; in other words, the lower the acceptable level of risk, the larger the sample size.

The internal auditor's judgment about the acceptable level of assessing control risk too low is based on how confident he or she wants to be in drawing a correct inference about the operating effectiveness of the control procedure being tested. In fact, the risk of assessing control risk too low is the complement of confidence (for example, if the internal auditor chooses to specify a 5 percent risk of assessing control risk too low, he or she is indicating that 95 percent confidence in drawing a correct conclusion is desired). The two most commonly used levels of acceptable risk of assessing control risk too low are 5 percent and 10 percent. For our case, assume the internal auditor decides to set the acceptable level of control risk at 10 percent. (Note that the risk of assessing control risk too high is not explicitly controlled in determining the appropriate sample size for an attribute sampling application.)

Tolerable Deviation Rate

The maximum rate of deviations the internal auditor is willing to accept and still conclude that the control is acceptably effective.

The tolerable deviation rate. This rate is the maximum rate of deviations the internal auditor is willing to accept and still conclude that the control is acceptably effective (that is, the control can be relied upon to reduce residual risk to an acceptably low level). The tolerable deviation rate is inversely related to sample size.

The internal auditor's judgment about the tolerable deviation rate is based on the relative importance of the control being tested. If, for example, the internal auditor deems the control to be critical, a low tolerable deviation rate will be set. Assume for the example that the tolerable deviation rate is set at 5 percent.

Expected Population Deviation Rate

The internal auditor's best estimate of the actual deviation rate in the population of items being examined

The expected population deviation rate. This is the internal auditor's best estimate of the actual deviation rate in the population of items being examined. The expected population deviation rate has a direct effect on sample size. However, this rate will be less than the tolerable rate, or the internal auditor will not conduct the attribute sampling application being considered. Internal auditors refer to the difference between the tolerable deviation rate and the expected population deviation rate as the *planned allowance for sampling risk or planned precision.*

If the internal auditor has previously used attribute sampling to test the effectiveness of a particular control, an appropriate expected population deviation rate would be the one used in the prior audit, adjusted for any known changes in the application of the control. Otherwise, the internal auditor might select and audit a small presample to determine the expected population deviation rate. Assume for the example that the internal auditor estimates the population deviation rate to be 1 percent.

Step 5: Determine the appropriate sample size.

Once the internal auditor has assigned the values of the factors affecting sample size, the easiest way to determine the appropriate sample size is to refer to readily available sample-size tables such as those presented in exhibit 11-5.

The internal auditor in the example has set the risk of assessing control risk too low at 10 percent, the tolerable deviation rate at 5 percent, and the estimated population deviation rate at 1 percent. Exhibit 11-5 shows that the appropriate sample size is 77. The internal auditor might round the sample size up to 80 for reasons discussed in step 8 below.

Note that this calculation of sample size illustrates a key benefit of statistical sampling. If the internal auditor wanted to be 100 percent confident in the conclusion reached about the validity of purchase orders, 100 percent of them would have to be vouched; however, a conclusion with 90 percent confidence (the complement of 10 percent risk of assessing control risk too low) can be reached based on the sample results of vouching 80 purchase orders.

EXHIBIT 11-5
ATTRIBUTE SAMPLING SAMPLE SIZE TABLES

5% Risk of Assessing Control Risk Too Low

Expected Population Deviation Rate (%)	Tolerable Deviation Rate (Number of Expected Errors)								
	2%	3%	4%	5%	6%	7%	8%	9%	10%
0.00	149 (0)	99 (0)	74 (0)	59 (0)	49 (0)	42 (0)	36 (0)	32 (0)	29 (0)
0.50	313 (2)	157 (1)	117 (1)	93 (1)	78 (1)	66 (1)	58 (1)	51 (1)	46 (1)
1.00	590 (6)	257 (3)	156 (2)	93 (1)	78 (1)	66 (1)	58 (1)	51 (1)	46 (1)
1.50	—	392 (6)	192 (3)	124 (2)	103 (2)	66 (1)	58 (1)	51 (1)	46 (1)
2.00	—	846 (17)	294 (6)	181 (4)	127 (3)	88 (2)	77 (2)	68 (2)	46 (1)
2.50	—	—	513 (13)	234 (6)	150 (4)	109 (3)	77 (2)	68 (2)	61 (2)
3.00	—	—	1,098 (33)	361 (11)	195 (6)	129 (4)	95 (3)	84 (3)	61 (2)
4.00	—	—	—	1,348 (54)	421 (17)	221 (9)	146 (6)	100 (4)	89 (4)
5.00	—	—	—	—	1,580 (79)	478 (24)	240 (12)	158 (8)	116 (6)
6.00	—	—	—	—	—	1,832 (110)	532 (32)	266 (16)	179 (11)

10% Risk of Assessing Control Risk Too Low

Expected Population Deviation Rate (%)	Tolerable Deviation Rate (Number of Expected Errors)								
	2%	3%	4%	5%	6%	7%	8%	9%	10%
0.00	114 (0)	76 (0)	57 (0)	45 (0)	38 (0)	32 (0)	28 (0)	25 (0)	22 (0)
0.50	194 (1)	129 (1)	96 (1)	77 (1)	64 (1)	55 (1)	48 (1)	42 (1)	38 (1)
1.00	398 (4)	176 (2)	96 (1)	77 (1)	64 (1)	55 (1)	48 (1)	42 (1)	38 (1)
1.50	1,463 (22)	265 (4)	132 (2)	105 (2)	64 (1)	55 (1)	48 (1)	42 (1)	38 (1)
2.00	—	590 (12)	198 (4)	132 (3)	88 (2)	75 (2)	48 (1)	42 (1)	38 (1)
2.50	—	—	353 (9)	158 (4)	110 (3)	75 (2)	65 (2)	58(2)	38 (1)
3.00	—	—	730 (22)	258 (8)	132 (4)	94 (3)	65 (2)	58 (2)	52 (2)
4.00	—	—	—	873 (35)	274 (11)	149 (6)	98 (4)	73 (3)	65 (3)
5.00	—	—	—	—	1,019 (51)	318 (16)	160 (8)	115 (6)	78 (4)
6.00	—	—	—	—	—	1,150 (69)	349 (21)	182 (11)	116 (7)

Note: Sample sizes over 2,000 are not shown. This table assumes a large population.

Source: Adapted from *Audit Guide: Audit Sampling* (American Institute of Certified Public Accountants, 2008), 112-113. Copyright 2008 by AICPA. Adapted with permission.

Random Sampling

Each item in the defined population has an equal opportunity of being selected.

Step 6: Randomly select the sample.

When applying sampling in tests of controls, it is important that items from the entire period under audit have a chance of being selected. When applying statistical sampling, it also is very important that the internal auditor use a random-based selection technique (that is, each item in the defined population must have an equal opportunity of being selected). The two most common approaches used to select random attribute samples are simple random sampling and systematic sampling with one or more random starts.

Simple random sampling generally is the easiest approach when sampling prenumbered documents. Using a random number table is one way for the internal auditor to achieve randomness. Another way is to use a computerized random number generator program.

Systematic sampling involves the internal auditor randomly identifying a starting point and then selecting every nth item after that. Systematic sampling is appropriate when there is no reason to believe that the equal intervals will systematically bias the sample. To reduce the likelihood of selecting a biased sample, internal auditors will sometimes select multiple random starting points. Internal auditors most commonly use systematic selection when individual items of the population are not prenumbered.

In the example used in this chapter, the purchase orders are prenumbered, so the internal auditor decides to use a computerized random number generator program to select a random sample of purchase orders prepared during the past 12 months. The 12-month period covers the last three months of the preceding fiscal year and the first nine months of the current fiscal year. Note that it is not always feasible, in terms of timing, for an internal auditor to draw a sample covering one entire fiscal year. He or she needs to take this into consideration when evaluating sample results.

Step 7: Audit the sample items selected and count the number of deviations from the prescribed control.

In the example, the internal auditor vouches each purchase order in the sample to the corresponding purchase requisition. Each purchase requisition is inspected for evidence of approval by an authorized person and correspondence of the item purchased per the purchase order with the item requested per the purchase requisition. Assume two possible outcomes: 1) the internal auditor finds one deviation (that is, one case in which no purchase requisition was found for the purchase order in the sample), and 2) the internal auditor finds two deviations (that is, two cases in which no purchase requisition was found for the purchase order in the sample).

Step 8: Determine the achieved upper deviation limit.

Internal auditors use attribute sampling evaluation tables such as those presented in exhibit 11-6 to determine the achieved upper deviation limit for an attribute sampling application.

EXHIBIT 11-6
ATTRIBUTE SAMPLING EVALUATION TABLES (UPPER DEVIATION LIMITS)

5% Risk of Assessing Control Risk Too Low

Sample Size	Actual Number of Deviations Found								
	0	1	2	3	4	5	6	7	8
20	14.0	21.7	28.3	34.4	40.2	45.6	50.8	55.9	60.7
25	11.3	17.7	23.2	28.2	33.0	37.6	42.0	46.3	50.4
30	9.6	14.9	19.6	23.9	28.0	31.9	35.8	39.4	43.0
35	8.3	12.9	17.0	20.7	24.3	27.8	31.1	34.4	37.5
40	7.3	11.4	15.0	18.3	21.5	24.6	27.5	30.4	33.3
45	6.5	10.2	13.4	16.4	19.2	22.0	24.7	27.3	29.8
50	5.9	9.2	12.1	14.8	17.4	19.9	22.4	24.7	27.1
55	5.4	8.4	11.1	13.5	15.9	18.2	20.5	22.6	24.8
60	4.9	7.7	10.2	12.5	14.7	16.8	18.8	20.8	22.8
65	4.6	7.1	9.4	11.5	13.6	15.5	17.5	19.3	21.2
70	4.2	6.6	8.8	10.8	12.7	14.5	16.3	18.0	19.7
75	4.0	6.2	8.2	10.1	11.8	13.6	15.2	16.9	18.5
80	3.7	5.8	7.7	9.5	11.1	12.7	14.3	15.9	17.4
90	3.3	5.2	6.9	8.4	9.9	11.4	12.8	14.2	15.5
100	3.0	4.7	6.2	7.6	9.0	10.3	11.5	12.8	14.0
125	2.4	3.8	5.0	6.1	7.2	8.3	9.3	10.3	11.3
150	2.0	3.2	4.2	5.1	6.0	6.9	7.8	8.6	9.5
200	1.5	2.4	3.2	3.9	4.6	5.2	5.9	6.5	7.2

10% Risk of Assessing Control Risk Too Low

Sample Size	Actual Number of Deviations Found								
	0	1	2	3	4	5	6	7	8
20	10.9	18.1	24.5	30.5	36.1	41.5	46.8	51.9	56.8
25	8.8	14.7	20.0	24.9	29.5	34.0	38.4	42.6	46.8
30	7.4	12.4	16.8	21.0	24.9	28.8	32.5	36.2	39.7
35	6.4	10.7	14.5	18.2	21.6	24.9	28.2	31.4	34.5
40	5.6	9.4	12.8	16.0	19.0	22.0	24.9	27.7	30.5
45	5.0	8.4	11.4	14.3	17.0	19.7	22.3	24.8	27.3
50	4.6	7.6	10.3	12.9	15.4	17.8	20.2	22.5	24.7
55	4.2	6.9	9.4	11.8	14.1	16.3	18.4	20.5	22.6
60	3.8	6.4	8.7	10.8	12.9	15.0	16.9	18.9	20.8
65	3.5	5.9	8.0	10.0	12.0	13.9	15.7	17.5	19.3
70	3.3	5.5	7.5	9.3	11.1	12.9	14.6	16.3	18.0
75	3.1	5.1	7.0	8.7	10.4	12.1	13.7	15.2	16.8
80	2.9	4.8	6.6	8.2	9.8	11.3	12.8	14.3	15.8
90	2.6	4.3	5.9	7.3	8.7	10.1	11.5	12.8	14.1
100	2.3	3.9	5.3	6.6	7.9	9.1	10.3	11.5	12.7
125	1.9	3.1	4.3	5.3	6.3	7.3	8.3	9.3	10.2
150	1.6	2.6	3.6	4.4	5.3	6.1	7.0	7.8	8.6
200	1.2	2.0	2.7	3.4	4.0	4.6	5.3	5.9	6.5

Note: This table presents upper limits (body of table) as percentages. This table assumes a large population

Source: Adapted from *Audit Guide: Audit Sampling* (American Institute of Certified Public Accountants, 2008), 114-115. Copyright 2008 by AICPA. Adapted with permission.

The upper deviation limits for the two possible outcomes indicated would be:

Number of Sample Deviations	Upper Deviation Limit
1	4.8%
2	6.6%

The reason it was indicated in step 5 that the internal auditor might round the determined sample size of 77 up to 80 is now apparent—the tables presented in exhibit 11-6 do not contain upper deviation limits for every possible sample size. Rounding the sample size up to the next number in the evaluation table is conservative. An alternative approach would be to audit a sample of 77 items and calculate the achieved upper deviation limit using interpolation.

Step 9: Evaluate the sample results.

Evaluating the results of an attribute sampling application involves:

- Formulating a statistical conclusion.
- Making an audit decision based on the quantitative sample results.
- Considering qualitative aspects of the sample results.

Formulating a statistical conclusion. A key advantage of statistical sampling over nonstatistical sampling is that statistical sampling enables the internal auditor to quantify, measure, and control sampling risk. In attribute sampling, the internal auditor explicitly controls the risk of assessing control risk too low, which is the complement of confidence. In the example, the internal auditor specified a 10 percent risk of assessing control risk too low, and this value was used to determine the appropriate sample size. When determining the achieved upper deviation limit for the example, refer to the table for a 10 percent risk of assessing control risk too low.

The internal auditor's best estimate of the deviation rate in the population for the first hypothetical outcome of 1 sample deviation is 1/80 = 1.25 percent. The internal auditor's best estimate of population deviation rate for the second hypothetical outcome of 2 sample deviations is 2/80 = 2.5 percent. However, there is uncertainty in these estimates due to the fact that the internal auditor performed the audit procedure on a sample basis as opposed to testing 100 percent. In other words, the internal auditor cannot conclude with certainty that the population deviation rate is 1.25 percent or 2.5 percent.

For hypothetical outcome number 1 (one sample deviation), the internal auditor can express the statistical conclusion:

> *I am 90 percent confident that the true, but unknown, population deviation rate is less than or equal to 4.8 percent.*

For hypothetical outcome number 2 (two sample deviations), the internal auditor can express the statistical conclusion:

> *I am 90 percent confident that the true, but unknown, population deviation rate is less than or equal to 6.6 percent.*

Note that the difference between the best estimate of the population deviation rate (the sample deviation rate) and the achieved upper deviation limit is referred to as the *achieved allowance for sampling risk or achieved precision.*

Making an audit decision based on the quantitative sample results. The attribute sampling application was designed so that the internal auditor would conclude that the control was effective, based on the sample results, if 90 percent confidence could be achieved that the true, but unknown, population rate was less than or equal to 5 percent (the internal auditor's specified tolerable deviation rate). The first hypothetical outcome meets this test because the achieved upper deviation limit (4.8 percent) is less than 5 percent. The second hypothetical case does not meet this test because the achieved upper deviation limit (6.6 percent) is greater than 5 percent.

Achieved Allowance for Sampling Risk

The difference between the sample deviation rate and the achieved upper deviation limit.

If the achieved upper deviation limit is less than or equal to the tolerable deviation rate, the quantitative attribute sampling results indicate that the tested control is acceptably effective (that is, it can be relied upon to reduce residual risk to an acceptably low level). Conversely, if the achieved upper deviation limit is greater than the tolerable deviation rate, the quantitative results indicate that the tested control is not acceptably effective (that is, it cannot be relied upon to reduce residual risk to an acceptably low level).

At this point, the internal auditor is ready to interpret the quantitative sample results. Recall that the audit objective expressed in our illustrative situation is to determine whether all purchases of materials have been authorized appropriately. The internal auditor predetermined that the goal was to be 90 percent confident that the true, but unknown, deviation rate is less than 5 percent. As indicated above, the first hypothetical case meets this test, but the second one does not. Accordingly, the internal auditor should conclude for the first case that the level of control effectiveness over the validity of merchandise shipments is acceptable—that is, the sample results indicate that the control can be relied upon to reduce residual risk to an acceptably low level. For the second case, however, the internal auditor should conclude that the level of control effectiveness is not acceptable—that is, the sample results indicate that the control cannot be relied upon to reduce residual risk to an acceptably low level. The second case constitutes an audit observation that the internal auditor should document and include in the engagement communication.

It is important to note that the internal auditor's interpretation of the quantitative sample results pertain to the effectiveness of the control over the past 12 months (the last three months of the preceding fiscal year and the first nine months of the current fiscal year). It would be inappropriate for the internal auditor to draw a conclusion based on the sampling results regarding the effectiveness of the control over the last three months of the current fiscal year because the sample did not include purchase orders from those three months.

Considering qualitative aspects of the sample results. In addition to evaluating the quantitative attribute sampling results, the internal auditor should consider the qualitative aspects of any deviations from prescribed controls uncovered. Of particular importance is the possibility that the deviations might be the result of fraud. Assume, for example, that the quantitative sample results support the conclusion that the control is operating effectively. Evidence that deviations from the control found in the sample were caused by fraud might very well offset the quantitative results and prompt the internal auditor to conclude that the control is not effective (that is, it cannot be relied upon to reduce residual risk to an acceptably low level). The internal auditor also must consider what, if any, impact the discovery of fraud might have on other aspects of the engagement.

Cases of missing or voided documents. What should an internal auditor do if documents pertinent to tests of controls are missing or have been voided? Consider the following cases:

> **Case 1**. As in the illustrative example above, the internal auditor vouches a sample of purchase orders to corresponding purchase requisitions, and two purchase requisitions cannot be found. The two missing purchase requisitions are clearly control deviations; there is no documentary evidence of authorization to prepare the two purchase orders.
>
> **Case 2**. The internal auditor has randomly selected purchase orders by number to be tested and finds that one of them was voided. It is determined, after follow-up on the voided purchase order is done, that nothing is amiss. It would be appropriate in this case to select another purchase order for testing purposes. A significant number of voided purchase orders could be indicative of a separate problem warranting further audit attention.
>
> **Case 3**. The internal auditor has randomly selected purchase orders by number to be tested and finds that one of them is missing. The internal auditor follows up on the missing purchase order and is unable to obtain a reasonable explanation for why it is missing. The internal auditor obviously cannot apply audit procedures to a selected item that cannot be found. Should this be considered a deviation from the prescribed control? The American Institute of Certified Public Accountants (AICPA) says yes: "If the auditor is not able to apply the planned audit procedure or appropriate alternative procedures to selected items, he should consider the reasons for this limitation, and he should ordinarily consider these selected items to be deviations from the prescribed policy or procedure for the purpose of evaluating the sample."[9] Some internal auditors disagree with this view because it is impossible to perform the prescribed test of controls to a missing document. They further argue that the missing document represents a different problem that warrants separate consideration. They would select another purchase order for testing purposes. Regardless of whether the missing purchase order is considered a deviation from the prescribed control or a different problem that warrants separate consideration, the internal auditor should document the missing purchase order in the working papers and decide whether it is significant enough to be written up as an audit observation.

NONSTATISTICAL AUDIT SAMPLING IN TESTS OF CONTROLS

Selecting and Evaluating a Nonstatistical Sample

Statistical sampling requires two fundamental things: 1) the sample must be selected randomly, and 2) the sample results must be evaluated mathematically based on probability theory. Nonstatistical sampling allows the internal auditor more latitude regarding sample selection and evaluation.

However, the internal auditor must still select a sample that is thought to be representative of the population, taking into consideration the factors that affect sample size. *Haphazard sampling* is a nonrandom selection technique that is used by internal auditors to select a sample that is expected to be representative of the population. Haphazard, in this context, does not mean careless or reckless. It means that the internal auditor selects the sample without deliberately deciding to include or exclude certain items.

Haphazard Sampling

A nonrandom selection technique that is used by internal auditors to select a sample that is expected to be representative of the population.

An internal auditor using nonstatistical sampling also must project the sample results to the population. Moreover, the internal auditor must still gather sufficient appropriate evidence to support a valid conclusion. It is not appropriate, for example, to use nonstatistical sampling to avoid having to justify the size of the sample chosen. In fact, it can be argued that internal auditors applying nonstatistical sampling should err on the side of selecting larger samples to compensate for the less rigorous selection method and the inability to quantitatively control sampling risk.

The inability to quantify sampling risk statistically is the key feature of nonstatistical sampling that differentiates it from statistical sampling. The internal auditor's conclusion about the population from which the sample is drawn is strictly judgmental instead of being based on probability theory. Therefore, it is important for the internal auditors to determine whether they can reach valid conclusions using nonstatistical sampling as opposed to using the potentially more costly and time-consuming statistical sampling approach, which requires random sampling and conclusions based on probability theory.

Commonly Used Nonstatistical Sampling Approaches

One common approach to nonstatistical sampling is to select a relatively small sample haphazardly, such as 25 items for all sampling applications based on a presumption of no control deviations in the population, and to conclude that the control is not acceptably effective if one or more deviations are found. This approach is convenient but also has a significant shortcoming—it does not take into consideration two of the fundamental factors internal auditors should consider when determining appropriate sample sizes: risk of assessing control risk too low and tolerable deviation rate.

To reinforce this point, take a closer look at exhibit 11-5. Is there a sample size of 25 items or fewer? The answer is only in the first row of the lower table in the last two columns. What does this mean? It means that if the internal auditor had used statistical sampling to determine the sample size, the following parameters were used: 10 percent risk of assessing control risk too low, 9 to 10 percent tolerable deviation rate, and 0 percent expected deviation rate. These are very liberal parameters that may not be appropriate across all audit sampling applications used to test the operating effectiveness of controls.

Exhibit 11-7 illustrates a slightly more conservative approach used by some internal auditors to determine nonstatistical sample sizes. This is one firm's view of the sample sizes required to support conclusions that controls are operating effectively if no deviations are found for samples taken from populations of varying sizes. The internal auditor adjusts the sample size within each range, taking into consideration the factors that affect sample size. If, for example, the control being tested is deemed to be critical and the internal auditor wants to assume less sampling risk, sample size at the high end of the relevant range will be used.

A Nonstatistical Sampling Example

Consider the following hypothetical situation:

> An internal auditor has been instructed to test, on a nonstatistical sample basis, whether the bank reconciliations prepared over the past 10 months were completed correctly. The company has 10 bank accounts, all of which were reconciled over the past 10 months by the same person using a prescribed template and method. The internal auditor's expectation is that no incorrectly completed reconciliations will be found. If one or more reconciliations are found that were not completed accurately, the internal auditor will conclude that the operating effectiveness of the bank reconciliation control was unacceptable over the past 10 months.

Using exhibit 11-7 as a guide, how many bank reconciliations should be tested? The internal auditor could reasonably decide to test two to five reconciliations for each bank account since the accounts are reconciled monthly. This approach would require the internal auditor to reach a separate conclusion for each account. Another reasonable approach would be to consider the 100 bank reconciliations as one population, because the reconciliations for the 10 accounts are subject to the same controls. In this case, the appropriate sample size range per exhibit 11-7 falls between the ranges prescribed for controls applied weekly and control applied daily. They might logically decide, in this case, to test 20 to 25 of the 100 bank reconciliations. This approach allows the internal auditor to reach one overall conclusion. Care must be taken, however, to select a sample that can be expected to be representative of the population. Consequently, haphazardly selecting sample items across the entire population of 100 bank reconciliations would be appropriate.

EXHIBIT 11-7
ILLUSTRATIVE NONSTATISTICAL SAMPLE SIZES

Frequency of Control Application	Appropriate Sample Size
Annually	1
Quarterly	2
Monthly	2 to 5
Weekly	5 to 15
Daily	20 to 40
Multiple times per day	25 to 60

Source: Adapted from *Sarbanes-Oxley Act: Section 404 – Practical Guidance for Management* (PricewaterhouseCoopers, July 2004), 61.

Assume the internal auditor haphazardly selects 25 bank reconciliations. After testing the 25 reconciliations, it is determined that each reconciliation was performed correctly. What can the internal auditor conclude? A statistical conclusion about the population of 100 bank reconciliations cannot be expressed, but it would be appropriate to say that the sample result supports the conclusion that bank reconciliations were performed correctly (that is, that the bank reconciliation control was acceptably effective) over the past 10 months.

Assume instead that the internal auditor finds that one of the 25 reconciliations was not performed correctly, which is inconsistent with the expectation that none would be found. Now what should be concluded? Because a control deviation was found, the internal auditor should conclude that the bank reconciliation control was not acceptably effective over the past 10 months. This constitutes an observation that the internal auditor should document and include in the engagement communication.

STATISTICAL SAMPLING IN TESTS OF MONETARY VALUES

In addition to using sampling within the context of testing controls, internal auditors also apply sampling when performing tests designed to obtain direct evidence about the correctness of monetary values (for example, the recorded value of an account balance such as inventory). When performing tests of monetary values, the internal auditor is concerned with two aspects of sampling risk:

> **The risk of incorrect acceptance (type II risk, beta risk).** This is the risk that the sample supports the conclusion that a recorded value (for example, an account balance) is not materially misstated when it is.
>
> **The risk of incorrect rejection (type I risk, alpha risk).** This is the risk that the sample supports the conclusion that a recorded amount (for example, an account balance) is materially misstated when it is not.

Probability-Proportional-to-Size Sampling

Probability-proportional-to-size (PPS) sampling, also called monetary-unit sampling or dollar-unit sampling, is a modified form of attribute sampling that is used to reach conclusions regarding monetary amounts rather than rates of occurrence. PPS sampling is primarily applicable for testing recorded monetary amounts for overstatement, especially when the expected number of individual overstatements in the population is small. It is not likely to be a cost-effective sampling approach if these conditions are not met.

Selecting the sample. As with attribute sampling, it is very important in PPS sampling that the sample be randomly selected—that is, each item in the defined population should have an equal opportunity of being selected. The population in a PPS sampling application is the population of individual monetary units contained in the particular account being tested. The sampling unit is the individual monetary unit. The internal auditor uses a systematic sampling approach to select every nth monetary unit in the population after a random start. However, the individual monetary units selected are not the items of audit interest. The items of interest are the "logical units" containing the individual monetary units. A logical unit might be, for example, a specific item of inventory recorded in the inventory records. Larger logical units are more apt to be selected for testing than smaller logical units. In fact, the likelihood of a logical unit being selected is proportional to its size—thus the name probability-proportional-to-size sampling.

PPS Sampling

A modified form of attribute sampling that is used to reach conclusions regarding monetary amounts rather than rates of occurrence.

The following factors affect PPS sample sizes:

- **Monetary book value of the population.** The book value of the population (for example, the recorded total value of year-end inventory) has a direct effect on sample size.
- **Risk of incorrect acceptance.** The risk of incorrect acceptance was defined above as the risk that the sample supports the conclusion that a recorded value (for example, the recorded inventory balance) is not materially misstated when

it is materially misstated. The risk of incorrect acceptance is a component of sampling risk and has an inverse effect on sample size.

- **Tolerable misstatement.** Tolerable misstatement is the maximum misstatement that can exist in the recorded value before the internal auditor considers it materially misstated. It has an inverse effect on sample size.
- **Anticipated misstatement.** Anticipated or expected misstatement is the amount of misstatement the internal auditor expects there to be in the recorded value. It has a direct effect on sample size.

Evaluating the sample results. After selecting and auditing the sample, an internal auditor, using PPS sampling, extrapolates the sample results to the population, formulates a statistical conclusion, and determines whether the quantitative and qualitative sample evidence indicates that the recorded monetary value is fairly stated or materially misstated. A description of how an internal auditor performs these steps is beyond the scope of this textbook.

Classical Variables Sampling

Classical variables sampling is a statistical sampling approach based on normal distribution theory that is used to reach conclusions regarding monetary amounts. It generally is considered more difficult to apply than PPS sampling, largely because it involves much more complex calculations in determining appropriate sample sizes and evaluating sample results.

Classical Variables Sampling

A statistical sampling approach based on normal distribution theory.

Selecting the sample. Again, it is very important in classical variables sampling that the sample be randomly selected. The two approaches used to select random classical variable samples are simple random sampling and systematic sampling with a random start.

Factors Affecting PPS Sample Sizes:

- Monetary book value of the population
- Risk of incorrect acceptance
- Tolerable misstatement
- Anticipated misstatement

The following factors affect classical variable sample sizes:

- **Population size.** The population size is the number of items in the population (for example, the number of different inventory items recorded in the accounting records). It has a direct effect on sample size.
- **Estimated population standard deviation.** The estimated population standard deviation, a measure of population variability, has a direct effect on sample size.
- **Risk of incorrect acceptance.** The risk of incorrect acceptance was defined above as the risk that the sample supports the conclusion that a recorded value (for example, the recorded inventory balance) is not materially misstated when it is materially misstated. The risk of incorrect acceptance is a component of sampling risk and has an inverse effect on sample size.
- **Risk of incorrect rejection.** The risk of incorrect rejection was defined above as the risk that the sample supports the conclusion that a recorded value (for example, the recorded inventory balance) is materially misstated when it is not materially misstated. The risk of incorrect rejection, the second component of sampling risk, has an inverse effect on sample size.
- **Tolerable misstatement.** Tolerable misstatement is the maximum misstatement that can exist in the recorded value before the internal auditor considers it materially misstated. It has an inverse effect on sample size.

Factors Affecting Classical Variable Sample Sizes:

- Population size
- Estimated population standard deviation
- Risk of incorrect acceptance
- Risk of incorrect rejection
- Tolerable misstatement

Evaluating the sample results. As with PPS sampling, after selecting and auditing the sample, an internal auditor—using classical variables sampling—extrapolates the sample results to the population, formulates a statistical conclusion, and determines whether the quantitative and qualitative sample evidence indicates that the recorded monetary value is fairly stated or materially misstated. The sample evaluation process is more complex for classical variables sampling than for PPS sampling. A description of how an internal auditor performs the evaluation process is beyond the scope of this textbook.

Probability-Proportional-to-Size Sampling versus Classical Variables Sampling

Both PPS sampling and classical variables sampling have significant advantages and disadvantages that internal auditors must consider when choosing which approach is best for a particular sampling application. Exhibit 11-8 presents the key advantages and disadvantages of each approach.

EXHIBIT 11-8 PROBABILITY-PROPORTIONAL-TO-SIZE SAMPLING VERSUS CLASSICAL VARIABLES SAMPLING

Probability-Proportional-to-Size Sampling

Key advantages:

- Simpler calculations make PPS sampling easier to use.
- The sample size calculation does not involve any measure of estimated population variation.
- PPS sampling automatically results in a stratified sample because sample items are selected in proportion to their size.
- PPS sample selection automatically identifies any individually significant population items, that is, population items exceeding a predetermined cutoff dollar amount.
- PPS sampling generally is more efficient (that is, requires a smaller sample size) when the population contains zero or very few misstatements.

Key disadvantages:

- Special design considerations are required when understatements or audit values less than zero are expected.
- Identification of understatements in the sample requires special evaluation considerations.
- PPS sampling produces overly conservative results when errors are detected. This increases the risk of incorrect rejection.
- The appropriate sample size increases quickly as the number of expected misstatements increases. When more than a few misstatements are expected, PPS sampling may be less efficient.

Classical Variables Sampling

Key advantages:

- Samples are generally easier to expand if the internal auditor should find it necessary.
- Zero balances and negative balances do not require special sample design considerations.
- The internal auditor's objective may be met with a smaller sample size if there is a large number of misstatements, that is, differences between audit values and recorded values.

Key disadvantages:

- Classical variables sampling is more complex. The internal auditor may need to use a computer program to cost-effectively design and evaluate a sample.
- Calculation of the proper sample size requires that the internal auditor first estimate the population standard deviation.

SUMMARY

This chapter focused on data analytics and audit sampling as tools for applying certain audit procedures to support engagement objectives. It began with a discussion of the increasing potential for internal auditors to use data analytics and an introduction to statistical and nonstatistical sampling and descriptions of sampling and nonsampling risk. This was followed by an in-depth discussion of how internal auditors can use data analytics, statistical sampling, and nonstatistical sampling in tests of controls. The chapter concluded with an overview of two statistical sampling approaches internal auditors use to obtain direct evidence about the correctness of monetary values. Ten important things to remember about data analytics and audit sampling are listed in exhibit 11-9.

EXHIBIT 11-9
10 OPPORTUNITIES FOR DATA ANALYTICS AND AUDIT SAMPLING

1. Develop a strategic view of data analytics in the internal audit plan to determine which audits will employ data analytics.
2. Provide for adequate staffing and support of data analytics within the internal audit group.
3. Evaluate use of data analytics at the beginning of each audit and determine how data analytics can contribute to the effective and efficient completion of internal audits.
4. Modify the internal audit process to take full advantage of data analytics.
5. Leverage key technologies within the organization and supplement with additional internal audit data analytics tools.
6. Take advantage of data visualization tools to enhance audit results and presentations to management.
7. Both statistical sampling and nonstatistical sampling require the use of professional judgment in designing the sampling plan, executing the plan, and evaluating sampling results.
8. An important advantage of statistical sampling over nonstatistical sampling is that statistical sampling allows the internal auditor to quantify, measure, and control sampling risk.
9. Attribute sampling is a statistical sampling approach that enables the user to reach a conclusion about a population in terms of a rate of occurrence.
10. Evaluating the results of an attribute sampling application involves formulating a statistical conclusion, making an audit decision based on the quantitative sample results, and considering qualitative aspects of the sample results.

REVIEW QUESTIONS

1. What is internal audit data analytics?

2. What are the key steps involved when the internal audit function performs data analytics?

3. What are some of the key areas to which internal auditors can apply the use of data analytics?

4. Describe the challenges that internal audit functions encounter when implementing a successful data analytics program.

5. How is "audit sampling" defined in this chapter?

6. What are the two general types of audit sampling?

7. How is "sampling risk" defined in this chapter? What are the two aspects of sampling risk that an internal auditor considers when performing tests of controls?

8. How does nonsampling risk differ from sampling risk?

9. What is attribute sampling? What are the three variations of attribute sampling described in this chapter?

10. What are the nine steps involved in attribute sampling?

11. What factors affect the size of an attribute sample?

12. What steps are involved in evaluating the results of an attribute sampling application?

13. What should an internal auditor do if documents pertinent to tests of controls are missing?

14. How is "haphazard sampling" defined in this chapter?

15. What is the key advantage of statistical sampling over nonstatistical sampling?

16. Why do internal auditors sometimes choose to use nonstatistical sampling instead of statistical sampling?

17. How does the purpose of statistical sampling in tests of monetary values differ from the purpose of statistical sampling in tests of controls?

18. What factors affect probability-proportional-to-size (PPS) sample sizes?

19. What are the key advantages of PPS sampling over classical variables sampling? What are the key disadvantages?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. In which phase(s) of the internal audit engagement can data analytics be used?

   I. Planning the individual engagement.

   II. Testing effectiveness and efficiency of controls.

   III. Assessing risk to determine which areas of the organization to audit.

   a. I only.

   b. II only.

   c. I and III only.

   d. I, II, and III.

2. Which of the following is true?

   a. Continuous monitoring is the CAE's responsibility.

   b. If a control breakdown is identified through continuous auditing, it should be reported to management on a timely basis.

   c. Data analytic technologies cannot be used for substantive testing.

   d. Continuous auditing routines developed by internal auditors should not be shared with management.

3. Which of the following is/are barriers to widespread use of data analytics by internal audit functions?

   I. The scope of the intended use of data analytics is not well defined.

   II. The amount of time required to clean and prepare data for analysis.

   III. The extensive programing skills required to perform data analytics.

   IV. Not understanding the data to be analyzed (its source, context, use, and meaning).

   a. II and III only.

   b. I and IV only.

   c. I, II, and IV only.

   d. I, II, III, and IV.

4. Which of the following is *not* typically a barrier to internal auditors using data analytics in achieving the engagement objective?

   a. Knowing what data exists and where to find it.

   b. Poorly defining the scope of the intended use of data analytics.

   c. Data analytic software is limited by the number of records it can process.

   d. The effort required to cleanse and prepare data for import to the data analytic tool.

5. Which of the following is the most significant to the internal audit client in providing information related to the future direction and actions that can improve the operation of the organization?

   a. Descriptive.

   b. Diagnostic.

   c. Predictive.

   d. Prescriptive.

6. The primary reason for an internal auditor to use statistical sampling rather than nonstatistical sampling is to:

   a. Allow the auditor to quantify, and therefore control, the risk of making an incorrect decision based on sample evidence.

   b. Obtain a smaller sample than would be required if nonstatistical sampling were used.

   c. Reduce the problems associated with the auditor's judgment concerning the competency of the evidence gathered when nonstatistical sampling is used.

   d. Obtain a sample more representative of the population than would be obtained if nonstatistical sampling techniques were used.

7. Which of the following is an element of sampling risk as opposed to an element of nonsampling risk?

   a. Determining a sample size that is too small.

   b. Performing an inappropriate audit procedure.

   c. Failing to detect a control deviation.

   d. Forgetting to perform a specified audit procedure.

MULTIPLE-CHOICE QUESTIONS

8. For which of the following would an internal auditor most likely use attribute sampling?

   a. Determining whether the year-end inventory balance is overstated.
   b. Selecting fixed asset additions to inspect.
   c. Choosing inventory items to test count.
   d. Inspecting employee time cards for proper approval.

9. If all other factors specified in an attribute sampling plan remain constant, changing the expected population deviation rate from 1 percent to 2 percent and changing the tolerable deviation rate from 7 percent to 6 percent would cause the required sample size to:

   a. Increase.
   b. Decrease.
   c. Remain the same.
   d. Change by 2 percent.

10. An internal auditor selects a sample of sales invoices and matches them to shipping documents. This procedure most directly addresses which of the following assertions?

    a. All shipments to customers are recorded as receivables.
    b. All billed sales are for goods shipped to customers.
    c. All recorded receivables represent goods shipped to customers.
    d. All shipments to customers are billed.

11. An internal auditor is testing cash disbursement transactions. Internal control policies require every check request to be accompanied by an approved voucher (that is, a package of documents evidencing that a good or service has been received and invoiced by the vendor). The voucher approval is based on a three-way matching of a purchase order, receiving report, and vendor's invoice. To determine whether checks have proper support, the internal auditor should begin her testing procedures by selecting items from the population of:

    a. Check copies.
    b. Purchase orders.
    c. Receiving reports.
    d. Approved vouchers.

12. The achieved upper deviation limit is 7 percent and the risk of assessing control risk too low is 5 percent. How should the internal auditor interpret this attribute sampling outcome?

    a. There is a 7 percent chance that the deviation rate in the population is less than or equal to 5 percent.
    b. There is a 5 percent chance that the deviation rate in the population is less than 7 percent.
    c. There is a 5 percent chance that the deviation rate in the population exceeds 7 percent.
    d. There is a 95 percent chance that the deviation rate in the population equals 7 percent.

13. An internal auditor should consider the qualitative aspects of deviations found in a sample in addition to evaluating the number of deviations. For which of the following situations should the internal auditor be most concerned?

    a. There were fewer deviations in the sample than expected.
    b. The deviations found are similar in nature to those found during the last audit of the area.
    c. The deviations found appear to have been caused by an employee's misunderstanding of instructions.
    d. The deviations found may have been caused intentionally.

14. If all other factors specified in a PPS sampling plan remain constant, changing the specified tolerable misstatement from $200,000 to $100,000 and changing the specified risk of incorrect acceptance from 10 percent to 5 percent would cause the required sample size to:

    a. Increase.
    b. Decrease.
    c. Remain the same.
    d. Change by 5 percent.

MULTIPLE-CHOICE QUESTIONS

15. An internal auditor wants to test customers' accounts receivable balances for overstatement on a sample basis. Which of the following would be the least valid reason for deciding to use PPS sampling rather than classical variables sampling?

    a. PPS sampling is generally thought to be easier to use than classical variables sampling.

    b. The internal auditor expects to find no misstatements and PPS sampling typically requires a smaller sample size than classical variables sampling in this situation.

    c. PPS sampling automatically stratifies the population.

    d. Using PPS sampling eliminates the need for professional judgment in determining the appropriate sample size and evaluating the sample results.

DISCUSSION QUESTIONS

1. The CAE of HVR Company has asked you to explain the fundamental differences between statistical and nonstatistical sampling in a manner that will help him make an informed decision about the nature of the sampling training that his internal audit staff needs. Explain to the CAE how the two sampling approaches differ with respect to:

   a. Sample size determination.

   b. Sample selection.

   c. Evaluating sample results.

2. You and a friend are studying audit sampling together. Your friend is having a hard time understanding the various aspects of risk associated with attribute sampling and has put together the following list of questions she wants to discuss with you. Answer each question.

   a. What is:

      - Audit risk?
      - Inherent risk?
      - Control risk?
      - Controllable risk?
      - Residual risk?

   b. What is sampling risk? How is sampling risk controlled?

   c. What are the two aspects of sampling risk that an internal auditor is concerned with when testing controls? Briefly describe each aspect.

   d. What is nonsampling risk? How is nonsampling risk controlled?

3. AVF Company processes an average of 400 vouchers payable every month. Each voucher package contains a copy of the check disbursed and supporting documents such as vendor invoices, receiving reports, and purchase orders. The internal auditor plans to examine a sample of vouchers listed in the voucher register using attribute sampling to evaluate the effectiveness of several controls. The attributes of interest include:

   - Agreement of voucher amounts with invoice amounts.
   - Voucher canceled after payment.

   Based on experience, the auditor expects a deviation rate of 2 percent for the first attribute and 1 percent for the second. He decides on a tolerable deviation rate of 7 percent for the first attribute and 6 percent for the second. He sets the risk of assessing control risk too low at 5 percent.

   Assume that the auditor's tests uncovered two occurrences of voucher amounts not agreeing with invoice amounts and two occurrences of vouchers not being canceled after payment.

   a. Complete the following schedule. (Note: round sample size per table up to next number ending in zero for sample size used.)

	Attribute 1	Attribute 2
Risk of assessing control risk too low		
Tolerable deviation rate		
Expected population deviation rate		
Sample size per table		
Sample size used		
Number of deviations identified		
Sample deviation rate		
Achieved upper deviation limit		

   b. Evaluate the sample results for the two attributes. Your answer should include:

   - A statistical conclusion for each attribute.
   - The audit decision you would make based on the quantitative sample results for each attribute.[10]

DISCUSSION QUESTIONS

4. Probability-proportional-to-size (PPS) sampling is used by internal auditors to reach conclusions regarding monetary amounts.

   a. Describe the situation in which the application of PPS sampling is most applicable.

   b. Explain how a PPS sample should be selected.

   c. Identify the factors that affect PPS sample size. Indicate the effect each factor has on sample size.

   d. Discuss the advantages and disadvantages of PPS sampling relative to classical variables sampling that an internal auditor must consider when deciding which of the two approaches is best for a particular sampling application.

CASES

CASE 1

TeamMate Analytics Practice Exercise: TeamMate Analytics

Review the video for TeamMate Analytics at http://www.teammatesolutions.com/data-analytics.aspx. After reviewing the video, download a university-allocated version of TeamMate Analytics (Note: TeamMate Analytics will not work with Mac machines) or use a version your instructor has had installed in your school's computer lab or on your school's virtual server. Within the trial version, there is a sample data file that that can be accessed by clicking on the Help icon. Within the sample data, perform the following:

- Perform the column statistics function on the *Payables* and *Expenses* tabs.
- Run the quick visualizer on the *Expenses* tab.

1. What type of insight did you obtain from the column statistics results?
2. Were there any explanatory items revealed from applying the quick visualizer to the columns on the *Expenses* tab?

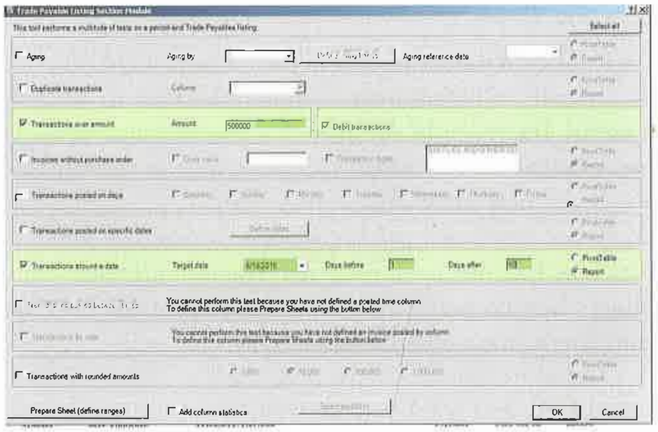
CASE 2

Review the video for TeamMate Analytics at http://www.teammatesolutions.com/data-analytics.aspx. After reviewing the video, download a university-allocated version of TeamMate Analytics (Note: TeamMate Analytics will not work with Mac machines) or use a version your instructor has had installed in your school's computer lab or on your school's virtual server.

With the push toward greater transparency in government, many cities and local governments in the United States and in the United Kingdom are posting their accounting data to websites. For example, the website for the controller of City of Los Angeles posts much of its raw financial data at https://controllerdata.lacity.org/. This includes the "Checkbook for LA" and procurement at the various department levels. For instance, one file contains all the procurement for the Los Angeles Airport (LAX) for various years.

Your instructor will assign you an appropriate data set of a city's or government unit's procurements. For the data set your instructor has selected, perform the following steps and answer the related questions.

1. Run the Column Statistics. How many transactions are included? How many transactions in 201X compared to 201Y? Are there transactions in both calendar years? What is the range of invoice dates? What is the range of transaction dates?
2. Using the "Quick Visualizer," construct a graph (a histogram) of the number of transactions by Fiscal Year Quarter (document with screen shots).
3. Using "Numeric Analysis," determine if the data on Dollar Amount conforms to Bedford's Law. Run for the first digit and then again for the first two digits.
4. Using "Extract," run the "duplicate" for the three data elements Dollar Amount, Invoice Number, and Vendor ID. Use the Excel sort feature on the output to determine if there are any likely duplicate payments.
5. Using "Custom Module" "Legacy Section Module" "Trade Payables" "Listings," run the following test:



☐ Aging   Aging by   Aging reference date

☑ Transactions over amount   Amount 500000   ☑ Debit transactions

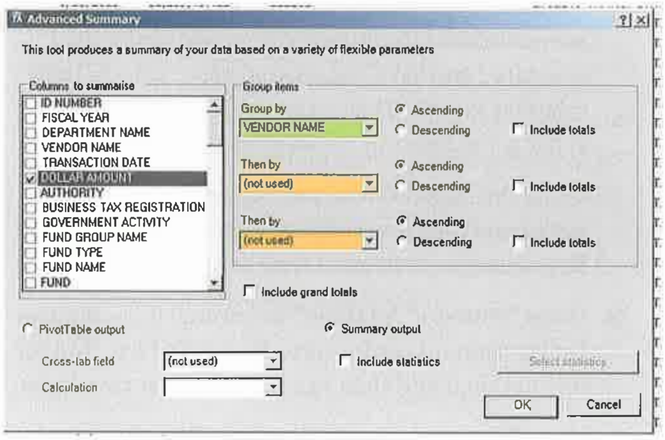
☑ Transactions around a date   Target date [illegible]   Days before 1   Days after 10   ○ PivotTable ● Report

You cannot perform this test because you have not defined a posted time column
To define this column please Prepare Sheets using the button below

☐ Transactions with rounded amounts

Turn in a) how many transactions there were for more than $500,000 and b) the list of transactions from the year end (from one day before to 10 days after).

6. Using "Summarize" "Advanced Summary," determine the top 10 vendors in terms of payment amounts. (Hint: use the Excel "sort" function to sort the "Advance Summary" output.)



Advanced Summary

This tool produces a summary of your data based on a variety of flexible parameters

Columns to summarise

- □ ID NUMBER
- □ FISCAL YEAR
- □ DEPARTMENT NAME
- □ VENDOR NAME
- □ TRANSACTION DATE
- ☑ DOLLAR AMOUNT
- □ AUTHORITY
- □ BUSINESS TAX REGISTRATION
- □ GOVERNMENT ACTIVITY
- □ FUND GROUP NAME
- □ FUND TYPE
- □ FUND NAME
- □ FUND

Group items

Group by: VENDOR NAME ● Ascending ○ Descending □ Include totals

Then by: (not used) ● Ascending ○ Descending □ Include totals

Then by: (not used) ● Ascending ○ Descending □ Include totals

□ Include grand totals

○ PivotTable output ● Summary output

Cross-tab field: (not used) □ Include statistics

Calculation:

What are the top 10 vendors in terms of number of individual payments made?

7. Using "Extract" "words and phrases," how much did the airport spend on X (your instructor will assign) in Fiscal Year 201X?

CASE 3[11]

Ira Icandoit is a staff auditor in the internal audit function of a small manufacturing company located in western Kansas. Ira recently completed a professional development course on statistical sampling and is very excited about the new knowledge he has gained. He decided to apply his newly gained knowledge during the audit to which he had just been assigned. He used attribute sampling when he performed his tests of controls over the company's procurement transactions.

Ira figured that a tolerable deviation rate of 10 percent and a 5 percent risk of assessing control risk too low were appropriate for the tests he planned to perform. He had no idea how many deviations actually might exist in the population, so he set the expected deviation rate at 2 percent to be conservative. Ira selected a sample of 100 items.

Because Ira believed larger items deserved more attention than smaller items, he selected 75 items with values greater than or equal to $2,500 and 25 items with values less than $2,500. He thought it would be most appropriate to select transactions near the end of the fiscal year, so he randomly selected items for testing from the last two months.

Ira was relieved when he found only six deviations from prescribed controls. One deviation was a missing vendor's invoice, so Ira called the vendor to make sure the transaction was valid. The phone conversation convinced him that the transaction was in fact valid. Three deviations were missing signatures by an authorized manager. The manager explained that he had not approved the invoices because he had been out of the office on the date the invoices were prepared. He reviewed the invoices and told Ira there were no problems with them. The other two deviations involved dollar errors. One was an error in the extension of an invoice, and the other was a misclassification error between expenses, which did not affect net income. Ira considered these two dollar errors to be the only two actual control deviations. He determined that the achieved upper deviation limit was 7 percent at a 5 percent risk of assessing control risk too low.

Based on these results, Ira concluded that procurement transactions for the year were unlikely to contain more deviations than the allowable rate. Accordingly, he concluded that controls over procurement transactions were effective and could be relied on by management.

Identify and explain any deficiencies you note in Ira's attribute sampling application.

CASE 4

The purpose of this case is to familiarize you with the attribute sampling functionality of the CaseWare IDEA and ACL software. Your instructor will provide you with instructions for how to access IDEA and ACL. Once you have access, complete the following:

A. Open the software. Locate the description of "Attribute Sampling" in ACL or IDEA Help. Answer the following questions.
   1. How is "attribute sampling" defined in CaseWare IDEA or ACL Help?
   2. What are the two attribute sampling planning options? Briefly describe each option.
B. Click on "Planning (Beta Risk Control)" in the Step-by-Step section of the Attribute Sampling description. Answer the following questions.

CASES

1. How is “beta risk” defined in CaseWare IDEA or ACL Help? What are some synonyms for beta risk?

2. Identify and briefly describe the five steps used to determine the minimum sample size and critical number of deviations.

C. Click on “Sample Evaluation” in the Step-by-Step section of the Attribute Sampling description. Answer the following questions.

1. What is the relationship between Planning (Beta Risk Control) and Evaluation?

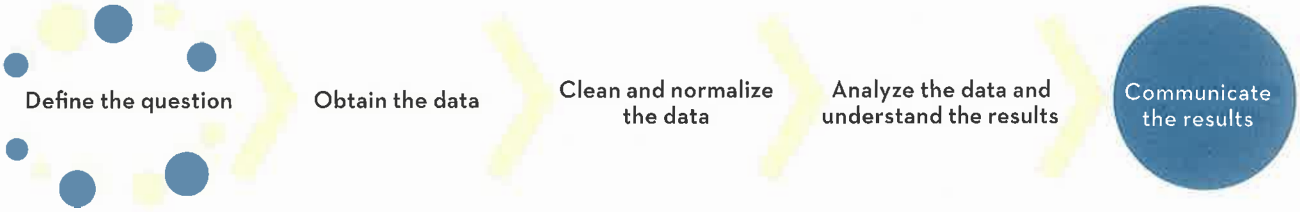
2. Identify and briefly describe the seven steps used to make inferences about the true rate of deviations in a population from which a sample has been selected and tested.

CASE 5

KnowledgeLeader Practice Case: Performing Effective Data Analytic Techniques

Background Information

Data analytics allow internal auditors to focus their resources on high-risk transactions and provide management with a higher level of operational assurance. A proven process includes the following steps:


Define the question
Obtain the data
Clean and normalize the data
Analyze the data and understand the results
Communicate the results

Source: Warren W. Stippich Jr. and Bradley J. Preber, *Data Analytics: Elevating Internal Audit’s Value* (Lake Mary, FL: Internal Audit Foundation, 2016).

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and identify various effective data analytic techniques. Compare and contrast these techniques with the model presented above and in the chapter. How do they differ? How are they similar?

C. Submit a brief write-up indicating the results of your research to your instructor.

CHAPTER 12

Introduction to the Engagement Process

LEARNING OBJECTIVES

- Understand the types of engagements internal auditors perform.
- Understand the key activities involved in planning and performing an assurance engagement and reporting the engagement outcomes.
- Describe how the consulting engagement process differs from the assurance engagement process.

The first 11 chapters of this textbook, which we refer to collectively as the Fundamental Internal Audit Concepts section, cover just that—fundamental internal audit concepts that internal auditors need to know and understand. A firm grasp of these concepts is necessary, but not sufficient, for you to understand internal auditing. You also need to understand the internal audit process, that is, how internal audit assurance and consulting engagements are planned and performed and how engagement outcomes are communicated.

This chapter is the first of four chapters we refer to collectively as the Conducting Internal Audit Engagements section of the textbook. We begin the chapter with a brief description of the types of engagements internal auditors perform. We then present an overview of the internal audit assurance engagement process. We conclude the chapter with a discussion of how consulting engagements differ from assurance engagements and the effects of these differences on the consulting engagement process. In chapter 13, "Conducting the Assurance Engagement," we discuss in detail how to conduct the assurance engagement process, while in chapter 14, "Communicating Assurance Engagement Outcomes and Performing Follow-Up Procedures," we cover the communication of assurance engagement outcomes. We shift our attention to the consulting engagement process in chapter 15, "The Consulting Engagement."

It is important to point out that throughout this chapter and those that follow, there are multiple references to the "internal audit function," "internal auditor," and the "internal audit team." While there might be subtle differences in the terms depending on the circumstances described or the context in which the terms are used, generally, all of these references are intended to communicate activities performed by the internal audit function under the supervision of the chief audit executive (CAE) and the direction and oversight of the audit committee. As discussed in detail in chapter 9, "Managing the Internal Audit Function," IIA Standard 2000: Managing the Internal Audit Activity states that "the chief audit executive must effectively manage the internal audit activity to ensure it adds value to the organization."

EXHIBIT 12-1
IPPF GUIDANCE RELEVANT TO CHAPTER 12

- **Standard 1210** - Proficiency
- **Standard 1220** - Due Professional Care
- **Standard 2000** - Managing the Internal Audit Activity
- **Standard 2200** - Engagement Planning
- **Standard 2201** - Planning Considerations
- **Standard 2210** - Engagement Objectives
- **Standard 2220** - Engagement Scope
- **Standard 2230** - Engagement Resource Allocation
- **Standard 2240** - Engagement Work Program
- **Standard 2300** - Performing the Engagement
- **Standard 2310** - Identifying Information
- **Standard 2320** - Analysis and Evaluation
- **Standard 2330** - Documenting Information
- **Standard 2340** - Engagement Supervision
- **Standard 2400** - Communicating Results
- **Standard 2410** - Criteria for Communicating
- **Standard 2420** - Quality of Communications
- **Standard 2421** - Errors and Omissions
- **Standard 2431** - Engagement Disclosure of Nonconformance
- **Standard 2440** - Disseminating Results
- **Standard 2500** - Monitoring Progress
- **Standard 2600** - Communicating the Acceptance of Risks

TYPES OF INTERNAL AUDIT ENGAGEMENTS

As indicated in chapter 1, "Introduction to Internal Auditing," internal auditors provide two types of services: assurance services and consulting services. These two types of services are defined in the Glossary to the *International Standards for the Professional Practice of Internal Auditing* in the International Professional Practices Framework (IPPF) as follows:

> **Assurance Services** – An objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization. Examples may include financial, performance, compliance, system security, and due diligence engagements.
>
> **Consulting Services** – Advisory and related [customer] service activities, the nature and scope of which are agreed with the [customer], are intended to add value and improve an organization's governance, risk management, and control processes without the internal auditor assuming management responsibility. Examples include counsel, advice, facilitation, and training.

Exhibit 12-2 presents examples of assurance and consulting engagements that internal auditors perform. As reflected in the exhibit, internal audit assurance and consulting services may be designed to focus directly on operational, reporting, and/or compliance performance or on the controls designed and implemented to provide reasonable assurance that the performance objectives are met. As discussed further in chapter 15, some engagements can be performed as assurance engagements or as consulting engagements, or, in some circumstances, blend both assurance and consulting services into a single engagement. Therefore, the examples in exhibit 12-2 should be viewed as illustrative of the respective services and are not intended to imply that the examples could not also have elements of the other type of service.

EXHIBIT 12-2
EXAMPLES OF INTERNAL AUDIT ASSURANCE AN CONSULTING ENGAGEMENTS

Illustrative Assurance Engagements:

- Assess the design adequacy and operating effectiveness of entity-level controls. Entity-level controls of interest may include, for example:
  - Controls over management override.
  - The organization's entity-level risk assessment process.
  - Controls to monitor the results of operations.
  - Controls over the period-end financial reporting process.
- Assess the design adequacy and operating effectiveness of business process controls. Process controls of interest may include, for example:
  - Controls over the effectiveness and efficiency of operations.
  - Controls over the reliability of financial and/or management reporting.
  - Controls over compliance with applicable laws and regulations.
- Assess the design adequacy and operating effectiveness of IT controls. IT controls of interest may include, for example:
  - Entity-level general controls such as system access controls and change management controls.
  - Application controls built into a specific application program.
- Directly assess business process performance. Process performance of interest may include, for example:
  - Operational effectiveness and efficiency reflected in metrics such as customer satisfaction ratings, cycle time, employee turnover, etc.
  - Reporting reliability as reflected in metrics such as the number and monetary magnitude of period-end adjusting entries.
  - Compliance with applicable laws and regulations as reflected in metrics such as the number of reportable accidents or environmental spills.

Illustrative Consulting Engagements:

- Provide advisory services such as:
  - Advice to senior management regarding the risk and control implications of implementing an advanced IT solution.
  - Advice to process owners about how they can streamline their processes to gain operational efficiencies.
  - Advice to managers at all levels of the organization about how to document and aggregate their risk and control assessments.
- Facilitate self-assessment activities such as:
  - Senior managements' assessment of the business risks threatening the organization as a whole.
  - Process owners' assessments of the risks threatening their processes.
- Conduct in-house training such as:
  - Briefing senior manage ment and the audit committee on newly released authoritative guidance pertaining to governance, risk management, and control.
  - Educating process owners and employees about fundamental governance, risk management, and control concepts.

OVERVIEW OF THE ASSURANCE ENGAGEMENT PROCESS

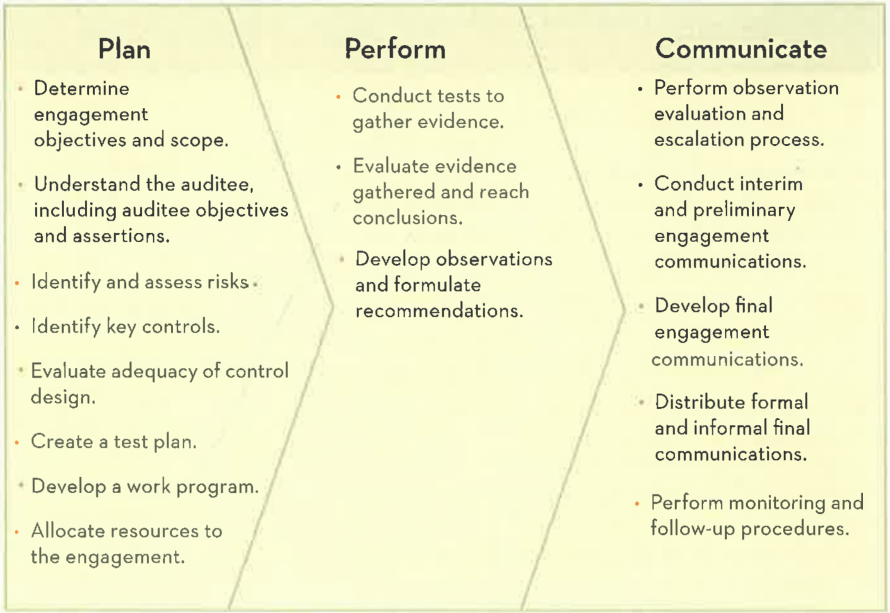
Exhibit 12-3 depicts the controls-focused assurance engagement process, which comprises three fundamental phases—planning, performing, and communicating. Although this exhibit portrays the three phases of the engagement as discrete

Controls-Focused Engagements

Focus on the design adequacy and operating effectiveness of controls implemented to provide reasonable assurance that performance objectives are met.

and sequential steps, actual internal audit engagements do not really work this way. There are no hard lines between planning, performing, and communicating. Where engagement planning ends and performance begins is debatable. In fact, planning typically continues throughout the engagement because adjustments need to be made as new evidence is uncovered. Performing the engagement begins during planning as the internal audit team applies procedures to gather information needed to plan the engagement. Communicating takes place throughout the engagement process as the team communicates important matters to the auditee on an interim basis and not just at the end of the process in the final engagement communication.

EXHIBIT 12-3
THE ASSURANCE ENGAGEMENT PROCESS



Plan

- Determine engagement objectives and scope.
- Understand the auditee, including auditee objectives and assertions.
- Identify and assess risks.
- Identify key controls.
- Evaluate adequacy of control design.
- Create a test plan.
- Develop a work program.
- Allocate resources to the engagement.

Perform

- Conduct tests to gather evidence.
- Evaluate evidence gathered and reach conclusions.
- Develop observations and formulate recommendations.

Communicate

- Perform observation evaluation and escalation process.
- Conduct interim and preliminary engagement communications.
- Develop final engagement communications.
- Distribute formal and informal final communications.
- Perform monitoring and follow-up procedures.

Exhibit 12-3 is useful because it provides a framework for discussing the various activities included in the engagement process. As previously mentioned, it is important to be aware that although various members of the internal audit function will perform the specific activities necessary to plan, perform, and communicate during an assurance engagement, the CAE retains ultimate responsibility for the work performed. Each of the activities listed in the exhibit under Plan, Perform, and Communicate is briefly described below. The first two phases of the assurance engagement process are covered thoroughly in chapter 13 and the third phase in chapter 14.

Assurance Engagement Planning Activities

Effective planning is key to the successful completion of any type of project. There is an expression, sometimes referred to as the "six Ps," that illustrates this principle: "Proper Prior Planning Prevents Poor Performance." Although it may be tempting to jump right in and start testing, following a structured and disciplined planning approach helps ensure that the engagement is performed effectively and efficiently. Conversely, failure to invest an appropriate amount of time and effort in planning increases the likelihood that the engagement will fail to achieve the desired objectives or that it will achieve the objectives inefficiently. Studying this chapter and the next should deepen readers' appreciation of another expression: "Failing to plan means planning to fail." The following paragraphs discuss planning an engagement.

Determine engagement objectives and scope. An important first step in engagement planning is to determine the engagement objectives (what the engagement is intended to achieve) and scope (what the engagement will and will not cover). One important consideration is the type of business objective that is of audit interest. For example, will the engagement focus on the operational effectiveness and efficiency of the auditee, the financial reporting aspects of the auditee, or both? Objectives could be strategic, operational, reporting, or compliance in nature. Another important consideration is the deliverables the internal audit team is expected to produce. For example, the team might be expected to limit its focus to communicating individual control observations that were identified during the engagement to the appropriate levels of management, or the team might be expected to express an overall opinion on the controls for the specific area or process in question. A third important consideration is the "boundaries" of the engagement. For example, if the auditee is a business process or subprocess, where does the process or subprocess begin and where does it end? If the auditee is a specified family of geographically separated business units, such as service branches or production facilities, which specific location(s) will the internal audit team visit and what portion(s) of each business unit will the engagement cover?

Understand the auditee, including auditee objectives and assertions. It is virtually impossible to audit effectively something that is not sufficiently understood. The success of any engagement ultimately depends largely on how well the internal audit team understands the auditee. The first thing the internal auditors must understand is the auditee's business objectives and assertions. Business objectives indicate *what the auditee is striving to achieve*. Assertions are after-the-fact statements of *what was achieved*. Although it is preferable for both business objectives and assertions to be expressed explicitly, they are often implicit.

Auditee Objectives

What the auditee is striving to achieve.

Auditee Assertions

After-the-fact statements of what was achieved.

> **Example:** The organization's service department has a written objective of responding to customers' requests for service within 48 hours after the requests are received. Implicit in this objective is the assertion that the service department has implemented the controls necessary to provide reasonable assurance that the objective is achieved. The performance report posted in the service department lobby explicitly asserts that the department met this goal for 92 percent of the customer service requests received over the past three months.

From the auditee's perspective, clear and measurable objectives serve as meaningful targets of performance, and assertions reflect the level of performance achieved. From an internal auditor's perspective, the auditee's objectives and assertions provide a framework for defining the engagement objectives (*what the internal auditor wants to achieve*). Ultimately, the direct link between business objectives and assertions and audit engagement objectives sets the stage for internal auditors to help the auditee achieve its objectives, which in turn helps the organization as a whole achieve its objectives.

Assume, for illustrative purposes, that the auditee is a business process. Other aspects of the process that the internal audit team must understand include:

- The business objectives of the process.

- How management deploys resources and assigns responsibilities to achieve the objectives of the process.
- The business risks threatening the process.
- The key controls designed and placed in operation to mitigate those risks.
- The relationships between the process and adjoining processes.
- The nature of the outputs (for example, goods and/or services) produced by the process.
- The process activities involved in producing the outputs.
- The process personnel, the responsibilities they are assigned, the authority delegated to them, and the manner in which they are held accountable.
- The tangible and intangible resources used in the process.
- How the process is measured, and what key performance indicators may exist.
- Any recent changes, changes underway, and/or expected changes affecting the process. Note that significant changes affect process risks and, therefore, the design adequacy and operating effectiveness of its controls.

Identify and assess risks. The internal audit team must identify and assess the business risks that threaten the achievement of the auditee's objectives and, ultimately, the organization's objectives. The internal audit team focuses its attention at this stage of the engagement on *inherent risk*, that is, the risk to the auditee in the absence of any direct or focused actions by management to alter its severity. Risk assessment involves gauging both the impact of the risk (if it should occur) and the likelihood of the risk occurring. Expressing risks in terms of causes and effects helps the internal auditor assess how big the potential problem is and how likely it is to occur. Take, for example, the following risk:

Inherent Risk

The combination of internal and external risk factors in their pure, uncontrolled state.

> Inefficient processing of vendor invoices for payment (the cause) may result in lost discounts, delays in payment, and vendor dissatisfaction (the effects).

Analyzing the potential effects (that is, lost discounts, delays in payment, and vendor dissatisfaction) helps the internal auditor judge the size of the potential problem and whether further attention to the risk is warranted. Analyzing the potential cause (that is, inefficiencies), together with the underlying reasons for the potential inefficiencies, helps the internal auditor judge the likelihood of the risk becoming a reality.

The internal audit team also must weigh the assessed risk levels against management's risk tolerance thresholds and decide whether risks are being managed appropriately. Risks assessed at levels within management's risk tolerance thresholds may be *accepted* at their assessed levels. Risks that exceed management's tolerance thresholds must be mitigated to an acceptable level. Response options to mitigate risks include *avoiding risks* by disbanding the activities that give rise to them, *sharing risks* by transferring a portion of them to third parties (for example, an insurance company), or *reducing risks* by implementing controls designed to lower their impact, likelihood, or both.

Identify key controls. The internal auditor's task at this stage of the engagement planning phase is to identify those controls that are most critical to reducing business risks to acceptable levels and thus providing assurance that established objectives are achieved. Controls are covered extensively in chapter 6, "Internal Control," and discussed again in chapter 13.

Key Control

An activity designed to reduce risk associated with a critical business objective.

Evaluate the adequacy of control design. The internal audit team must then decide whether the identified key controls are designed adequately to reduce risks, both individually and collectively, to acceptable levels, assuming that the controls have been placed in operation and are operating as intended. Internal auditors need to recognize at this point that the relationship between risks and controls is not one-to-one—one control may help mitigate several risks, and multiple controls may be needed to mitigate one risk effectively.

Create a test plan. The internal audit team must design the engagement to obtain sufficient appropriate evidence to achieve the engagement objectives. Creating a test plan involves determining the nature, timing, and extent of the procedures needed to gather the required audit evidence. Test plans may include direct tests of controls, tests of performance that provide indirect evidence regarding the operating effectiveness of controls, or both. A plan for testing controls already placed in operation should ensure that sufficient appropriate evidence is gathered and evaluated to determine whether adequately designed controls are operating effectively.

Develop a work program. The work program is an extremely important planning device. It specifically outlines the audit procedures required to accomplish the engagement objectives. Over the course of the engagement, internal auditors sign off on the procedures to indicate that the work has been completed. This, in turn, enables engagement team supervisors to review the work that has been finished and monitor the work that remains to be done. At the end of the engagement, the completed program serves as a record of the work completed and documents who completed the work and when it was completed.

Allocate resources to the engagement. The last step in planning the engagement is to allocate the resources that are needed to successfully (that is, effectively and efficiently) complete the engagement. This involves determining the audit expertise needed, estimating the time it will take to complete the engagement, assigning appropriate internal auditors to the engagement, and scheduling the work so that it is completed timely.

Assurance Engagement Performance Activities

The output from planning an audit must be used to execute the activities outlined in the work program. The following paragraphs discuss the different activities performed to gather evidence, evaluate the results, and develop observations and recommendations.

Engagement Work Program

A document that lists the procedures to be followed during an engagement, designed to achieve the engagement plan.

Conduct tests to gather evidence. Performing the engagement involves the application of specific audit procedures to gather evidence. Procedures include, for example, making inquiries, observing operations, inspecting documents, and analyzing the reasonableness of information. A second important aspect of gathering evidence is documenting the procedures performed and the results of performing the procedures. Documenting audit evidence is discussed in chapter 10, "Audit Evidence and Working Papers." Chapter 13 focuses specifically on conducting and documenting tests to determine whether controls are designed adequately and operating as designed.

Evaluate audit evidence gathered and reach conclusions. Evaluating the audit evidence gathered to determine, for example, whether controls are designed adequately and operating effectively requires a significant degree of professional judgment. The internal audit team must ultimately reach logical conclusions (that is, make informed decisions) based on the evidence gathered. Chapter 13 illustrates how an internal auditor documents conclusions that are reached based on the results of testing. Chapter 14 illustrates how an internal auditor formulates and documents conclusions on the engagement as a whole.

Develop observations and formulate recommendations. Observations (also referred to as *findings*) are pertinent statements of fact that emerge when criteria (the correct state) are compared with the condition (the current state). Well-written audit observations contain the following elements (sometimes referred to as the four Cs). The IIA Practice Guide "Audit Reports Communicating Assurance Results" defines the elements:

Observation

A finding, determination, or judgment derived from the internal auditor's test results.

- Criteria: Standards, measures, or expectations used in making an evaluation and/or verification of an observation (what should exist).
- Condition: Factual evidence is identified during the course of the engagement (what does exist).
- Cause: Underlying reason for the difference between the criteria and condition (why the difference exists).
- Effect: Risk or exposure encountered because the condition is not consistent with the criteria (the consequence of the difference).

Note that when the "what does exist" condition matches the "what should exist" criteria, there is no "gap" and, therefore, no consequences or causes to deal with. Stated another way, if the condition matches the criteria, there should be no observation.

Recommendations are based on the internal auditor's observations and conclusions. Audit recommendations (also referred to as *proposed corrective actions*) may be documented as part of the audit observation or separately (some internal auditors refer to corrective actions as the fifth C). Recommendations are aimed at closing the gap between the observation criteria and condition. Meaningful recommendations for corrective actions address the causes of the gap between the criteria and condition, provide long-term solutions rather than short-term fixes, and are economically feasible (that is, the benefit exceeds the cost). Recommendations that address symptoms of problems rather than root causes tend to be of little value. Chapter 14 provides more information regarding root cause analysis.

Assurance Engagement Communication Activities

Communications occur throughout the engagement, and communicating outcomes is a critical component of all internal audit engagements. Regardless of the content or form of the communication, which may vary, communication of engagement outcomes "must be accurate, objective, clear, concise, constructive, complete, and timely" (IIA Standard 2420: Quality of Communications).

Perform observation evaluation and escalation process. Once one or more observations are identified, the internal audit team must assess each observation using an evaluation and escalation process and determine the implications those observations have on the resulting communications for the area (process) under review.

Exhibit 12-4 illustrates one organization's approach to handling observations of varying levels of significance. Chapter 14 includes a detailed description of the observation evaluation and escalation process.

Conduct interim and preliminary engagement communications. As indicated, internal audit communications occur throughout the engagement, not just at the end. Matters often arise during internal audit engagements that warrant management's immediate or short-term attention. Timely communication of such matters allows management to address and resolve them sooner, sometimes before the engagement is completed. Other information that may be conveyed to the auditee on an interim basis during the engagement includes, for example, changes in engagement scope and engagement progress.

It is important for the internal audit team to give management a chance to clarify observations and express their thoughts about the team's conclusions and recommendations. Moreover, words stated in writing are sometimes interpreted differently than words spoken, and both are subject to misinterpretation. Reviewing draft versions of the report with management provides assurance that they concur with what the internal auditors have said and what they have written in their report.

EXHIBIT 12-4 OBSERVATION LEVELS AND DISPOSITION APPROACHES

Levels	Disposition Approaches
Not an observation: Further investigation reveals that the information upon which the observation is based is not correct or is not relevant.	Update the record of work done and the observation to reflect the new information and to support the appropriate conclusion.
Observation: The observation is not reportable due to mitigating or compensating controls and/or the observation is a suggested enhancement to a process and does not have a notable financial, operational, or compliance impact.	Document in the record of work done. Explain in the working papers why the observation is not reportable.
Reportable observation: The observation relates to a significant risk and the existing controls do not reduce the risk to an acceptable level.	Update the working papers to include the agreed-upon management action plan. Track the performance of the agreed-upon action plan. Include the observation in the body of the engagement communication only.
Significant observation: The observation is deemed important enough to be communicated to the audit committee.	Update the working papers to include the agreed-upon management action plan. Track the performance of the agreed-upon action plan. Include the observation in the executive summary of the engagement communication.

Develop final engagement communications. At this point, the internal audit team is ready to consolidate and synthesize all the evidence gathered during the engagement. There is no single prescribed way for expressing overall engagement results. Options include:

- Listing and prioritizing control observations but stopping short of reaching an overall conclusion or expressing any level of assurance regarding the effectiveness of the auditee's controls.
- Reaching a conclusion known as negative assurance (also referred to as limited assurance). Internal auditors express negative assurance when they conclude that nothing has come to their attention that indicates that the auditee's controls are designed inadequately or operating ineffectively.
- Reaching a conclusion known as positive assurance (also referred to as reasonable assurance). Internal auditors express positive assurance when they conclude that, in their opinion, the auditee's controls are designed adequately and operating effectively.

Distribute formal and informal final communications. Several IIA *Standards* directly pertain to preparing and issuing the final engagement report, including:

> **Standard 2410 – Criteria for Communicating.** Communications must include the engagement's objectives, scope, and results.
>
> **2410.A1** – Final communication of engagement results must include applicable conclusions, as well as applicable recommendations and/or action plans. Where appropriate, the internal auditors' opinion should be provided. An opinion must take into account the expectations of senior management, the board, and other stakeholders and must be supported by sufficient, reliable, relevant, and useful information.
>
> **2410.A2** – Internal auditors are encouraged to acknowledge satisfactory performance in engagement communications.
>
> **2410.A3** – When releasing engagement results to parties outside the organization, the communication must include limitations on distribution and use of the results.
>
> **Standard 2440 – Disseminating Results.** The chief audit executive must communicate results to the appropriate parties.
>
> **2440.A1** – The chief audit executive is responsible for communicating the final results to parties who can ensure that the results are given due consideration.
>
> **2440.A2** – If not otherwise mandated by legal, statutory, or regulatory requirements, prior to releasing results to parties outside the organization the chief audit executive must:
>
> - Assess the potential risk to the organization.
> - Consult with senior management and/or legal counsel as appropriate.
> - Control dissemination by restricting the use of the results.

As indicated, final engagement communications should include the purpose, scope, and results of the engagement. The purpose represents the engagement objectives, that is, why the engagement was conducted and what it was expected to achieve. The scope defines the activities included in the engagement, the nature and extent of work performed, and the time period covered. The scope also may identify related activities not included in the engagement, if necessary, to delineate the boundaries of the engagement. Results include observations, conclusions, opinions, recommendations, and action plans. The final engagement communications also may contain the auditee's responses to the internal audit team's conclusions, opinions, and recommendations.

The observations that should be included in the formal, final engagement communication are those that must be reported to support, or prevent misunderstanding of, the internal audit team's conclusions and recommendations. Less significant observations may be communicated informally. Conclusions and opinions express the internal audit team's evaluations of the observations. Recommendations, which are based on the observations and conclusions, are proposed actions to correct existing conditions or improve operations. Action plans document what management has agreed to do to address the internal audit team's observations, conclusions, and recommendations.

The CAE, or another high-ranking internal auditor designated by the CAE, must review and approve the final report before it is issued to the auditee's management.

The CAE, or appointed designee, must determine to whom, other than management of the area or process audited, the final engagement report will be distributed. Appropriate recipients are those members of the organization who can ensure that the engagement results will be given due consideration. Such individuals are those who are in a position to take corrective action or ensure that corrective action is taken. Summary reports, which highlight engagement results significant to the organization as a whole, may be more appropriate for senior management, the audit committee, and the board of directors.

Monitoring Progress

The follow-up process established by the CAE to ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action.

Note that according to the interpretation to Standard 2440: Disseminating Results, even if the CAE authorizes someone else to review and approve the final communication and determine to whom it will be sent, "he or she retains overall responsibility" for these duties.

Perform monitoring and follow-up procedures. As is apparent in exhibit 12-3, the assurance engagement process does not end with reporting. IIA Standard 2500: Monitoring Progress states that "the chief audit executive must establish and maintain a system to *monitor* [italics added] the disposition of results communicated to management." Standard 2500.A1 goes on to say that "the chief audit executive must establish a *follow-up* [italics added] process to monitor and ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action."

It is very important for the internal audit function to determine that corrective actions on engagement observations and recommendations were, in fact, taken by management and that the actions taken remedy the underlying conditions in a timely manner. The internal audit charter should define the internal audit function's responsibility for follow-up, and the CAE should determine the nature, timing, and extent of follow-up procedures appropriate for a particular engagement.

THE CONSULTING ENGAGEMENT PROCESS

Internal audit consulting engagements differ from assurance engagements in certain ways, including:

- Whereas the nature and scope of an assurance engagement are determined by the internal audit function, the nature and scope of a consulting engagement are subject to agreement with the engagement customer.
- Consulting engagements are, accordingly, much more discretionary in nature than assurance engagements. As indicated in the Glossary to the *Standards*, consulting services include "counsel, advice, facilitation, and training."

The consulting engagement process includes the same steps as the assurance engagement process depicted in exhibit 12-3. However, each step may not be necessary for every consulting engagement, and many of the steps may be conducted differently. As indicated in the relevant standards cited below, the three major phases of the engagement—planning, performing, and communicating—remain the same.

Engagement planning. "Internal auditors must develop and document a plan for each [consulting] engagement, including the engagement's objectives, scope, timing, and resource allocations" (IIA Standard 2200: Engagement Planning). "Internal auditors must establish an understanding with consulting engagement [customers] about objectives, scope, respective responsibilities, and other [customer] expectations" (Standard 2201.C1). The "internal auditors must ensure that the scope of the engagement is sufficient to address the agreed-upon objectives" (Standard 2220.C1). "Work programs for consulting engagements may vary in form and content depending upon the nature of the engagement" (Standard 2240.C1).

Performing the engagement. "Internal auditors must identify, analyze, evaluate, and document sufficient information to achieve the [consulting] engagement's objectives" (IIA Standard 2300: Performing the Engagement). The kind of information identified, analyzed, evaluated, and documented will vary depending on the nature of the engagement, as will the nature, timing, and extent of internal audit procedures performed.

Communicating results. "Internal auditors must communicate the results of [consulting] engagements" (IIA Standard 2400: Communicating Results). "Communications must include the engagement's objectives, scope, and results" (IIA Standard 2410: Criteria for Communicating). However, "communication of the progress and results of consulting engagements will vary in form and content depending upon the nature of the engagement and the needs of the [customer]" (Standard 2410.C1). For example, the deliverables for a consulting engagement in which the internal audit function has been asked by the customer to provide advice regarding specific matters of interest will differ from the deliverables of facilitation or training engagements.

SUMMARY

Internal auditors provide two types of services: assurance services and consulting services, either of which can be controls focused and/or performance focused. The engagement process for both types of service comprises three major phases—planning, performing, and communicating. The primary steps executed in an assurance engagement are outlined in exhibit 12-3. The nature and scope of assurance engagements are determined unilaterally by the internal audit function, and the process tends to be relatively uniform from engagement to engagement. In contrast, the nature and scope of each consulting engagement are determined jointly by the internal audit function and the customer, and the specific process steps typically vary by engagement.

This chapter is the first of four chapters referred to collectively as the Conducting Internal Audit Engagements section of the textbook. Chapter 13 describes the planning and performing phases in detail, and chapter 14 goes on to cover the communicating phase. Chapter 15 provides an in-depth discussion of consulting services and the consulting engagement process.

REVIEW QUESTIONS

1. What two types of services do internal auditors provide? Provide three examples of each type of engagement.

2. What are the three phases of the assurance engagement process?

3. What steps are included in the planning phase of an assurance engagement?

4. What is the relationship between business objectives and business assertions?

5. What does "inherent risk" mean?

6. Why is it useful for an internal auditor to express risks in terms of causes and effects?

7. What are management's risk response options?

8. What purposes does a well-written work program serve?

9. What does allocating resources to the engagement involve?

10. What steps are included in the performance phase of an assurance engagement?

11. What elements do well-written observations include?

12. What are the characteristics of meaningful recommendations?

13. What are the key quality characteristics of internal audit engagement communications?

14. What steps are included in the communication phase of an assurance engagement?

15. What is the difference between "negative assurance" and "positive assurance?"

16. What information must final assurance engagement communications include?

17. How do internal audit consulting engagements differ from assurance engagements?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. The tasks performed during an internal audit assurance engagement should address the following questions:

   I. What are the reasons for the results?

   II. How can performance be improved?

   III. What results are being achieved?

   The chronological order in which these questions should be addressed is:

   a. III, I, II.

   b. I, III, II.

   c. III, II, I.

   d. II, III, I.

2. While planning an assurance engagement, the internal auditor obtains knowledge about the auditee's operations to, among other things:

   a. Develop an attitude of professional skepticism concerning management's assertions.

   b. Make constructive suggestions to management regarding internal control improvements.

   c. Evaluate whether misstatements in the auditee's performance reports should be communicated to senior management and the audit committee.

   d. Develop an understanding of the auditee's objectives, risks, and controls.

3. Which of the following statements does not illustrate the concept of inherent business risk?

   a. Cash is more susceptible to theft than an inventory of sheet metal.

   b. A broken lock on a security gate allows employees to access a restricted area that they are not authorized to enter.

   c. Transactions involving complex calculations are more likely to be misstated than transactions involving simple calculations.

   d. Technological developments might make a particular product obsolete.

4. Comprehensive risk assessment involves analysis of both causes and effects. Which of the following statements concerning the analysis of causes and effects is false?

   a. Analyzing the causes and effects of a particular risk should only be performed after the internal auditor has first obtained evidence that a problem has occurred.

   b. Analyzing the causes and effects of a particular risk provides insights about how to best manage the risk.

   c. Analyzing the effects of a particular risk provides insights about the relative size of the risk and the relative importance of the business objective threatened by the risk.

   d. Analyzing the root causes of a particular risk helps the internal auditor formulate recommendations for reducing the risk to an acceptable level.

5. Internal auditors obtain an understanding of controls and perform tests of controls to:

   a. Detect material misstatements in account balances.

   b. Reduce control risk to an acceptable level.

   c. Evaluate the design adequacy and operating effectiveness of the controls.

   d. Assess the inherent risks associated with transactions.

6. If an internal auditor's evaluation of internal control design indicates that the controls are designed adequately, the appropriate next step would be to:

   a. Test the operating effectiveness of the controls.

   b. Prepare a flowchart depicting the system of internal controls.

   c. Conclude that residual risk is low.

   d. Conclude that control risk is high.

7. Reportable internal audit observations emerge by a process of comparing "what should be" with "what is." In determining "what should be" during an audit of a company's treasury function, which of the following would be the least desirable criterion against which to judge current operations?

   a. Best practices of the treasury function in relevant industries.

MULTIPLE-CHOICE QUESTIONS

b. Company policies and procedures delegating authority and assigning responsibilities.

c. Performance standards established by senior management.

d. The operations of the treasury function as documented during the last audit.

8. Internal auditors sometimes express opinions in addition to stating observations in their reports. Due professional care requires that internal audit opinions be:

   a. Based on sufficient appropriate evidence.

   b. Limited to the effectiveness of internal controls.

   c. Expressed only when requested by management or the audit committee.

   d. Based on experience and free from errors in judgment.

9. Which of the following statements best describes an internal audit function's responsibility for assurance engagement follow-up activities?

   a. The internal audit function should determine that corrective action has been taken and is achieving the desired results, or that senior management has assumed the risk associated with not taking corrective action on reported observations.

   b. The internal audit function should determine whether management has initiated corrective action but has no responsibility to determine whether the corrective action is achieving the desired results. That determination is management's responsibility.

   c. The CAE is responsible for scheduling audit follow-up activities only if asked to do so by senior management or the audit committee. Otherwise, such activities are discretionary.

   d. Audit follow-up activities are not necessary if the auditee has agreed in writing to implement the internal audit function's recommendations.

10. Internal auditors perform both assurance engagements and consulting engagements. Which of the following would be classified as a consulting engagement?

    a. Directly assessing the organization's compliance with laws and regulations.

    b. Assessing the design adequacy of the organization's entity-level monitoring activities.

    c. Facilitating senior management's assessment of risks threatening the organization.

    d. Assisting the independent outside auditor during the financial statement audit engagement.

11. When assessing the risk associated with an activity, an internal auditor should:

    a. Determine how the risk should best be managed.

    b. Provide assurance on the management of the risk.

    c. Update the risk management process based on risk exposures.

    d. Design controls to mitigate the identified risks.

12. In deciding whether to schedule the purchasing or the personnel department for an audit engagement, which of the following would be the least important factor?

    a. There have been major changes in operations in one of the departments.

    b. The audit staff has recently added an individual with expertise in one of the areas.

    c. There are more opportunities to achieve operating benefits in one of the departments than in the other.

    d. The potential for loss is significantly greater in one department than in the other.

13. A performance audit engagement typically involves:

    a. Review of financial statement information, including the appropriateness of various accounting treatments.

    b. Tests of compliance with policies, procedures, laws, and regulations.

    c. Appraisal of the environment and comparison against established criteria.

    d. Evaluation of organizational and departmental structures, including assessment of process flows.

DISCUSSION QUESTIONS

1. Recall the definition of inherent risk. Why is it important for internal auditors to focus on inherent risk during the planning phase of an assurance engagement?

2. One definition of risk is that it is the possibility that an event will occur and adversely affect the achievement of an objective. An illustrative objective and event are presented below:

Objective	Event
To safeguard the city's citizens and resources	An accident at a four-way intersection

   a. Identify three potential adverse consequences of the event occurring.

   b. Identify three inherent risk factors that make the event more or less probable.

   c. The city's management must decide how to respond to this risk. Two of its choices are to 1) avoid the risk or 2) reduce the risk to an acceptable level.

      1. Explain how the city can avoid the risk.

      2. Identify *two* ways the city can reduce the risk.

3. Consider the following two statements:

   Evaluating the adequacy of control design is necessary but not sufficient if the objective of an assurance engagement is to reach a conclusion regarding the overall effectiveness of controls.

   If an internal auditor determines that a control is inadequately designed, there is no good reason to test the operating effectiveness of the control.

   Do you agree with each of these statements? Explain.

4. Reflect on the following ways of expressing overall assurance engagement results introduced in this chapter:

   - Listing and prioritizing observations without expressing any level of assurance.
   - Expressing a conclusion known as negative (limited) assurance.
   - Expressing a conclusion known as positive (reasonable) assurance.

   a. Which level of assurance requires the strongest supporting audit evidence? Why?

   b. What other factors, if any, might a CAE consider when deciding which of the three options is the most appropriate for a particular assurance engagement?

5. Internal auditors provide two types of services: assurance services and consulting services.

   a. How do these two types of services differ in terms of purpose?

   b. In what other ways do consulting engagements differ from assurance engagements?

CASES

CASE 1[1]

AFR Manufacturing Company's senior management asked the internal audit function to conduct an operational safety audit of the production facility's metal drill press unit. More specifically, the internal audit function was asked to determine how well the metal drill press equipment and equipment operators comply with company safety policies.

Five downtime injuries of drill press operators occurred in the last six months. The total downtime for the five injuries was 37 hours. Management estimated that the drill press downtime, and the resultant decrease in overall productivity, reduced revenue by approximately $265,000. In addition to the downtime injuries, two drill press operators experienced detectible hearing loss during the six-month period.

The internal auditors learned that the company's safety policies include the following:

- Operators are required to wear safety glasses, ear plugs, and protective gloves.
- The drill presses are required to have a clear, plastic safety shield and a protected channel to safely feed the metal through the press.
- The drill is operated by a knee switch. The operator engages and disengages the drill by shifting his or her right knee.

The internal auditors found the equipment to be in relatively poor condition with little evidence of any regular maintenance. Drill bits were not replaced as they became dull, and broken bits often were used because new bits were not kept in supply. Two of the 10 drill press machines were missing safety shields. Five of the 10 machine operators were using the protective ear plugs at the time the auditors visited the plant and six were wearing safety glasses. Four of the knee switches were found to be sticking occasionally in both the off and on positions. The auditors perceived a general sense of negligence—negligence by production management, drill press equipment operators, and maintenance employees.

A. Based on the scenario presented above:

   1. Clearly state the internal audit engagement objective.
   2. Prepare one or more well-written internal audit observations that include: condition, criteria, consequence(s), and cause(s).

B. Refer to exhibit 12-4. At what level would you position the observation(s) you prepared in A.2. above? Clearly explain your rationale.

C. Draft a memo to senior management in which you describe a consulting engagement that the internal audit function could perform in response to the operational safety audit results.

CASE 2

TeamMate Practice Case Exercise 3: Project and the Audit Engagement Process

Using the audit file from the previous exercise, continue with the audit engagement process. Your task is to work with your audit team to prepare the audit program, perform the procedures specified in the program, document any issues you find, and draft the audit report. You have been instructed to document procedures that will meet the objectives of your audit project.

This will include:

- Document the work associated with the procedure steps and adding workpapers to support your conclusion.
- Ensure that all procedures and workpapers are signed off on as prepared and reviewed.
- For one of the procedures performed, document an observation and ensure that all elements of the observation are clearly identified.
- Provide one recommendation that would address the observation that was documented. Assign a business contact to the recommendation as the owner and provide a date of 12/31/20XX for the estimated implementation date. The owner should be the responsible party of the business unit within the organization. Refer to the Case Overview for additional information.
- After completing all of the necessary information relating to the observation, select the release button for it to be released to Implementation Tracking.

CASES

Perspectives within TeamMate+ are a way to focus on different elements within the project that will assist in the day-to-day activities. Review the various perspectives that can be used and discuss two perspectives that were seen to be most helpful. Why are the two perspectives identified considered to be the most helpful?

CASE 3

KnowledgeLeader Practice Case Exercise: Blending Assurance & Consulting Internal Audit Engagements

Background Information

Blending assurance and consulting services into a single engagement is evolving as a way for internal auditors to realize efficiencies that might not exist when these services are performed separately. In fact, some internal audit functions may be conducting "blended engagements" without even realizing it. Internal auditors can follow a principle-based model that offers professional guidance for implementing this approach without violating existing standards of practice.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and identify the primary purpose of an assurance engagement and a consulting engagement. Also, identify elements that are the same or similar. Finally, identify the concerns with combining assurance and consulting services and how a single blended engagement can be performed without jeopardizing audit effectiveness or objectivity.

C. Submit a brief write-up indicating the results of your research to your instructor.

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CHAPTER 13

Conducting the Assurance Engagement

LEARNING OBJECTIVES

- Describe how the purpose of an assurance engagement impacts the audit objectives.
- Determine engagement objectives and scope statements.
- Describe different types and sources of information that will help the internal auditor understand the process of conducting an assurance engagement.
- Document simple process flows, showing key process steps, interfaces, and departments involved.
- Perform a process-level risk assessment.
- Distinguish key controls from controls not considered key.
- Describe how to evaluate the design adequacy of process-level controls.
- Design different types of testing approaches, depending on the design of the process and engagement objectives.
- Develop a general work program to guide the engagement process.
- Describe the resource considerations that must be evaluated when determining how to staff and schedule an engagement.
- Conduct and document certain types of tests to gather evidence.
- Evaluate evidence from assurance procedures to reach conclusions based on the results of testing.
- Develop observations and formulate recommendations.

EXHIBIT 13-1
IPPF GUIDANCE RELEVANT TO CHAPTER 13

- **Standard 2200** – Engagement Planning
- **Standard 2201** – Planning Considerations
- **Standard 2210** – Engagement Objectives
- **Standard 2220** – Engagement Scope
- **Standard 2230** – Engagement Resource Allocation
- **Standard 2240** – Engagement Work Program
- **Standard 2300** – Performing the Engagement
- **Standard 2310** – Identifying Information
- **Standard 2320** – Analysis and Evaluation
- **Standard 2330** – Documenting Information
- **Standard 2340** – Engagement Supervision

This chapter describes the various steps necessary to conduct an engagement focused on internal controls. Specifically, as depicted in exhibit 13-2, which was introduced as exhibit 12-3 in the previous chapter, you will learn the key steps necessary to plan and perform the assurance engagement.

The first section of this chapter focuses on the planning steps. This is covered in considerable depth as effective planning is integral to conducting a successful engagement. Executing these steps provides confidence that the engagement will 1) be comprehensive, 2) align with the organization's objectives, and 3) support the internal audit function's charter. After reviewing this section, you should fully appreciate the expression, "failing to plan means you are planning to fail."

Assurance Engagement

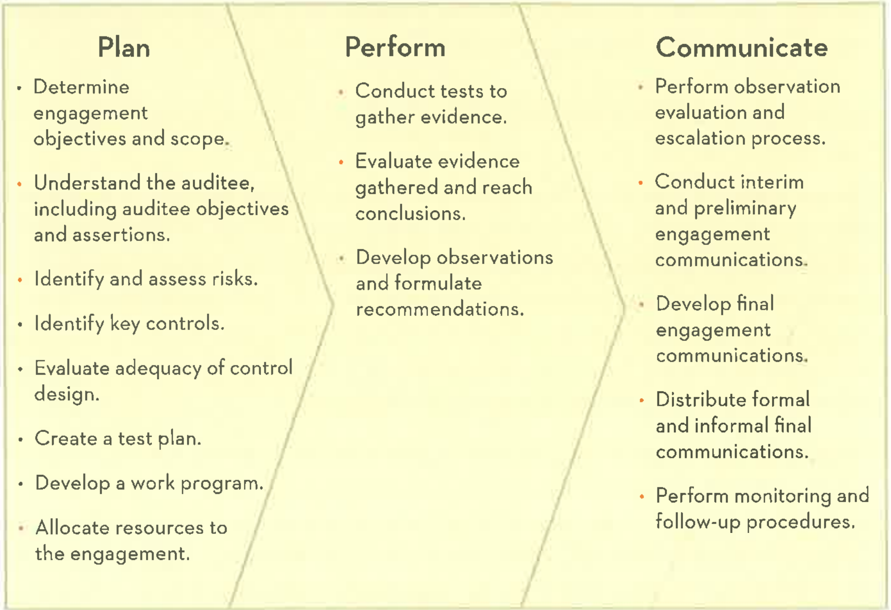
An engagement involving an objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization.

The second section of the chapter focuses on executing the test program designed during the planning stage. While performing audit tests typically takes more time than planning an engagement, this section is shorter than the planning section as there are relatively few key steps; these steps are simply performed over and over again to test different control assertions. The assurance engagement performance activities are discussed in chapter 12, "Introduction to the Engagement Process." Additionally, techniques to evaluate and report on audit observations are covered in chapter 14, "Communicating Assurance Engagement Outcomes and Performing Follow-Up Procedures." Therefore, the performance section of this chapter focuses on applying those concepts, rather than restating them. The information contained in this chapter provides a solid understanding of how to plan and perform almost any assurance engagement.

Throughout this chapter, examples are provided for many of the key steps to illustrate how they can be conducted and documented. These examples relate to a fictitious company, **BOOKS 2 BUY**, and focus on the accounts payable and disbursements process (referred to as the cash disbursements process throughout the chapter). This particular process is illustrated, as it is common to most organizations regardless of size or industry. Key facts regarding **BOOKS 2 BUY** can be found in exhibit 13-3. These facts help make the examples more realistic.

Planning is the first phase of an assurance engagement and involves several steps. Refer to exhibit 13-4 for a list of these specific steps, each of which will be discussed in more detail in the following sections.

EXHIBIT 13-2
THE ASSURANCE ENGAGEMENT PROCESS



Plan

- Determine engagement objectives and scope.
- Understand the auditee, including auditee objectives and assertions.
- Identify and assess risks.
- Identify key controls.
- Evaluate adequacy of control design.
- Create a test plan.
- Develop a work program.
- Allocate resources to the engagement.

Perform

- Conduct tests to gather evidence.
- Evaluate evidence gathered and reach conclusions.
- Develop observations and formulate recommendations.

Communicate

- Perform observation evaluation and escalation process.
- Conduct interim and preliminary engagement communications.
- Develop final engagement communications.
- Distribute formal and informal final communications.
- Perform monitoring and follow-up procedures.

EXHIBIT 13-3
FACTS SUPPORTING BOOKS 2 BUY EXAMPLES

- Books 2 Buy is a textbook publisher, providing educational tools for the K-8, high school, and post-secondary education markets.
- The company is publicly traded, is based in Atlanta, Georgia, and has customers in the United States, Canada, England, South Africa, Japan, Australia, and New Zealand.
- Books 2 Buy employs a professional editorial team and contracts with noted academics and other professionals to write the textbooks.
- All printing and binding activities are outsourced, which represents one of the most significant costs to the company.
- The company leases space for its distribution centers, which are located in all of the countries in which it does business.
- Annual revenues for Books 2 Buy total $550 million, cash expenditures approximate $480 million, noncash expenditures (for example, depreciation and amortization) approximate $25 million, and long-term capital expenditures approximate $40 million.
- On average, the $480 million in annual cash expenditures are disbursed as follows:

	% of Disbursements	**% of Dollars**
Electronic or wire transfers	10%	60%
Computer generated checks	88%	38%
Manual checks	2%	2%

- While disbursements may be made in different currencies, all are processed out of a centralized disbursements function located in Atlanta, Georgia.

DETERMINE ENGAGEMENT OBJECTIVES AND SCOPE

Reasons for Conducting an Engagement

As discussed in chapter 12, there are different types of assurance engagements and there may be different reasons for conducting any of them. The type of engagement and reasons for performing it may significantly influence how the engagement is performed. Therefore, it is important to understand the reasons for conducting the engagement before beginning the planning.

There are a number of reasons for performing assurance engagements, including, but not limited to:

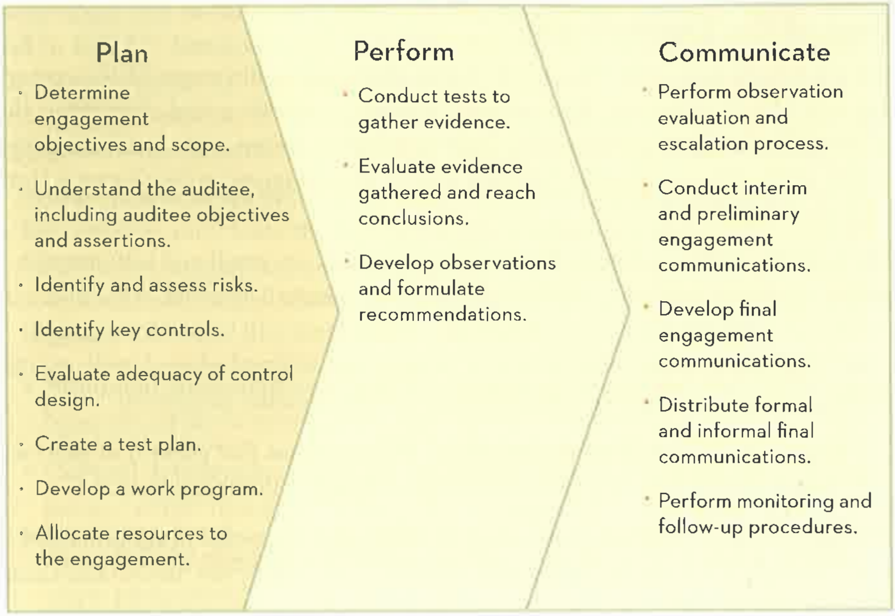
Purpose of Engagements:

– Part of plan
– Compliance requirement
– Postmortem
– Significant changes

- The engagement was identified in the internal audit plan because of inherent risks identified during the business risk assessment process, risks detected the last time the area was audited, and other relevant factors. For these engagements, the internal auditor must understand what underlying business risks caused the engagement to be included in the plan, and then design the engagement plan to provide the appropriate assurance regarding the design adequacy and operating effectiveness of controls implemented to mitigate those risks.
- The engagement is part of an annual requirement to evaluate the organization's system of internal controls for external reporting purposes, such as the U.S. Sarbanes-Oxley Act of 2002 Section 404 requirements in the United States and similar financial reporting laws in other countries. For these engagements, the internal auditor must ensure that the engagement is designed to test the areas covered by the underlying regulations (for example, provide assurance regarding the design adequacy and operating effectiveness of internal control over financial reporting).
- A recent event (for example, natural disaster, fraud, or customer bankruptcy) has tested the process under unusual circumstances and management desires a "post mortem" to determine where the process was effective and where it was not. For these engagements, the internal auditor must tailor the testing and evaluation around the specific event that occurred.
- Emerging risks or other changes in the business or industry require immediate modifications to the process and management desires a quick validation that these modifications appear to be designed appropriately to address the changes. For these engagements, the internal audit function may perform a full audit of controls or they may scope it to focus only on the controls that changed.

There may be other factors, in addition to those listed above, that make it important for the internal audit team to be aware of the reasons or drivers that caused the engagement to be performed. For example, instead of looking for assurance regarding the different assertions discussed above, management may desire an engagement be conducted to assess how a process is performing relative to expectations. This type of engagement may necessitate different tests to provide that assessment. Regardless of the reasons for conducting an engagement, understanding such reasons will help ensure that the overall objectives, scope, and focus of the engagement address those drivers and time is not devoted to other, less important drivers.

EXHIBIT 13-4
THE ASSURANCE ENGAGEMENT PROCESS



Plan

- Determine engagement objectives and scope.
- Understand the auditee, including auditee objectives and assertions.
- Identify and assess risks.
- Identify key controls.
- Evaluate adequacy of control design.
- Create a test plan.
- Develop a work program.
- Allocate resources to the engagement.

Perform

- Conduct tests to gather evidence.
- Evaluate evidence gathered and reach conclusions.
- Develop observations and formulate recommendations.

Communicate

- Perform observation evaluation and escalation process.
- Conduct interim and preliminary engagement communications.
- Develop final engagement communications.
- Distribute formal and informal final communications.
- Perform monitoring and follow-up procedures.

BOOKS 2 BUY **Example**: The cash disbursements process engagement was included in the internal audit plan because of inherent risks identified during the business risk assessment process (refer to chapter 5, "Business Processes and Risks," for discussion of the business risk assessment process).

Establishing Engagement Objectives

Once the reasons for the assurance engagement are understood, formal engagement objectives should be established. These objectives, which typically are stated in the final assurance engagement communication, articulate specifically what the engagement is trying to accomplish. While objectives may be stated in a variety of ways, it should be clear what assurance the engagement will provide. For example, objectives could start with the following phrases (different verbs can be substituted for those used in these examples):

Engagement Objectives

What internal auditors intend to achieve through the audit.

- Evaluate the design adequacy of...
- Determine the operating effectiveness of...
- Assess compliance with...
- Determine the effectiveness and efficiency of...
- Evaluate the accuracy of...
- Assess the achievement of...
- Determine the performance of...

Establishing objectives at the beginning of an engagement is a critical step. Without the establishment of formal engagement objectives, the internal audit team may not be aligned with the reasons for the engagement and, consequently, may conduct inadequate or unnecessary tasks.

BOOKS 2 BUY **Example**: The engagement objective is to evaluate the design adequacy and operating effectiveness of controls in place to mitigate risks related to the cash disbursements process.

Scope of the Engagement

Once the engagement objectives have been established, the scope of the engagement must be determined. Since an engagement may not cover everything that can be audited related to the engagement objectives, scope statements must specifically state what is or is not included within an engagement. Such scope statements may include:

Scope

What is or is not included within an engagement.

- **Boundaries of the process**. While some processes are small and self-contained, many are very broad and overlap with other processes. Therefore, it is important to define at what point in the process the engagement will begin (for example, the initial inputs from transactions or other processes) and where it will end (for example, reports, financial statements, or outputs to other processes).
- **In-scope versus out-of-scope locations**. For processes that cover multiple locations, only some of those locations may be included in the engagement.
- **Subprocesses**. Larger processes may be composed of a series of subprocesses (for example, the cash disbursements process may include the invoice matching and validation, disbursements input, and payment processing subprocesses).

Subprocess

A discrete and recognizable portion or component of a process.

- **Components.** Certain portions, or components, of a process may be omitted. For example, if the computer application supporting a process was audited relatively recently, the manual controls related to that process may be included in the scope, while the automated controls are not.
- **Time frame**. An engagement may cover a calendar year, the previous 12 months, a specific point in time (for example, as of December 31), or some other time frame.

Decisions regarding scope require a great deal of professional judgment. The internal auditor must ensure that the scope is sufficient to meet the engagement objectives. Articulating the specific scope statements will enable the internal audit team to better focus the specific tests. In addition, recipients of the communication will be better able to interpret the findings within the context of the engagement objectives.

BOOKS 2 BUY **Example**: The following will be included within the scope of this engagement:

- Cash disbursements procedures, beginning with the receipt of an invoice or a similar document evidencing the creation of a liability to pay, and ending with the disbursement of funds and recording of such disbursement in the general ledger.
- All three types of disbursements (electronic wires, computer-generated checks, and manual checks).
- Disbursements in U.S. dollars and other currencies.
- Disbursements that were processed during the last 12 months.

Expected Outcomes and Deliverables

Before moving on to the next step in the planning process, one final task should be performed. While the objectives and scope have been determined, it is helpful to apply one of the *Seven Habits of Highly Effective People*: "Begin with the end in mind."[1] There are two important "ends" to consider that will help validate the engagement objectives and scope: 1) potential outcomes of the tests to be performed during the engagement, and 2) auditee expectations regarding engagement communications. Each of these is described more fully as follows:

- **Potential outcomes of the tests to be performed during the engagement.** Being able to anticipate the different types of testing exceptions that may be identified in a given engagement helps the internal auditor plan tests to provide reasonable assurance that such discrepancies are detected. Typical exceptions include:
  - **Financial statement errors or misclassifications** within financial accounts, balances, or disclosures.
  - **Control deficiencies** indicating specific controls that are not achieving the desired effect, that is, mitigating the corresponding risks to the desired level.
  - **Shortfalls in objective achievement** due to control deficiencies or inadequate performance.
  - **Inefficiencies** due to resources not being deployed in an optimal manner.
  - **Out-of-compliance situations** when laws, regulations, or policies are not complied with consistently.
- **Auditee expectations regarding engagement communications.** Understanding the form and content of the final communication helps the internal auditor ensure that all necessary information is gathered during the engagement. While it is common for an internal audit function to have one or more standard reporting templates, it is still important to understand auditee expectations so such templates can be modified accordingly. Common types of communication include:
  - Full-scope, internal reports typically have a wide distribution and, thus, require sufficient appropriate evidence that this wide range of recipients can understand to support conclusions and recommendations for improvements.
  - Internal memoranda may be used for more limited distribution, stating the work performed and support for the conclusions and recommendation only to the extent necessary for the intended audience to understand the underlying deficiencies and conclusions.
  - Reports for third-party use should assume such parties are less familiar with policies and procedures unique to the organization and, therefore, may require greater levels of detail to ensure the readers understand the nature and context of the observations and recommendations.
  - Sometimes, a higher level of confidentiality may be necessary for certain engagements. Such instances should be fully discussed up front with process management to ensure the deliverables support the necessary level of confidentiality.

Auditee

The subsidiary, business unit, department, group, or other established subdivision of an organization that is the subject of an assurance engagement.

BOOKS 2 BUY Example: All of the potential testing exceptions could occur during this engagement and, as such, the internal audit team will need to design tests accordingly. The deliverable will be a standard, full-scope internal audit communication. Examples of possible deliverables are discussed in chapter 14.

UNDERSTAND THE AUDITEE

When planning an engagement, the internal audit team must first understand the auditee (used synonymously with the "process" or "area" within engagement scope in this chapter). Failure to gain a comprehensive understanding of the area under review may result in an incomplete testing plan or a misallocation of internal audit resources deployed in the engagement. Therefore, gaining an understanding of the process is very important.

Determining Auditee Objectives

Understanding the process begins with determining the key process objectives. This helps the internal auditor understand why the process exists, which will be important when identifying and assessing process-level risks and controls. It should be noted that this engagement step aligns with the risk, strategy, and objective-setting component of the Committee of Sponsoring Organizations of the Treadway Commission's (COSO's) *Enterprise Risk Management – Aligning Risk with Strategy and Performance*, which is discussed in more detail in chapter 4, "Risk Management," as well as elsewhere in this textbook.

Auditee Objectives

What the auditee is striving to achieve.

There may be different types of objectives for a given process. Specifically, process-level objectives may be described as follows (as well as in examples for the **BOOKS 2 BUY** cash disbursements process):

- Operations objectives are the most common type of objectives at the process level and usually define the reason the process exists. These objectives typically are governance or task-oriented, and, as a result, frequently focus on accuracy, timeliness, completeness, or control attributes. Additionally, operations objectives typically focus on ensuring the effectiveness and efficiency of operations and safeguarding of assets.

  BOOKS 2 BUY Example: A cash disbursements process may have objectives that include:

  - Pay bills accurately to avoid adjustments to future bills or penalties due to underpayment of current liabilities.
  - Pay bills timely to take advantage of discounts (if available and economically justified) or avoid late-payment penalties.
  - Record all disbursements accurately in the accounting records and in the appropriate accounting period.
  - Process disbursements within the cost-per-transaction metrics established to ensure cost-effective use of resources.
  - Ensure all disbursements represent bona fide obligations to pay.

- Reporting objectives at the process level are those designed to meet the organization's reporting needs, whether internal or external.

BOOKS 2 BUY **Example**: Information from the cash disbursements process may be used for:

- Internal reporting of cash flow information that helps the treasurer prepare weekly cash flow forecasts.
- Supporting the liquidity disclosures in the organization's regulatory filings.

- Compliance objectives at the process level may relate to compliance with external laws and regulations, internal policies, or contracts.

BOOKS 2 BUY **Example**: Cash disbursements compliance objectives may include:

- Ensure disbursements comply with applicable banking regulations and anti-money laundering laws.
- Ensure disbursements are approved in accordance with the organization's delegation of authority policy.

COSO Internal Control Objectives

– Operations
– Reporting
– Compliance

- Strategic objectives at the process level are those created to specifically align with the organization's strategic objectives. While not always evident to individuals performing the specific process tasks, these objectives are important to create a link between the day-to-day activities and the strategies that drive an organization's success. Note that this discussion of strategic objectives differs from the definition of strategic objectives in COSO's *Internal Control – Integrated Framework* discussed in chapter 6, "Internal Control." Strategic objectives per COSO exist only at the entity level. However, when conducting an assurance engagement, the internal auditor needs to approach the process as a component of the organization as a whole and, thus, certain process-level objectives can be considered strategic in nature.

BOOKS 2 BUY **Example**: A cash disbursements function may have the following objective in an organization with a specific cash flow or liquidity strategy:

- Pay bills in accordance with the cash flow directives provided by the treasury department to support the ongoing liquidity of the organization.

- Other objectives also may be created for a specific process related to individual department initiatives.

BOOKS 2 BUY **Example**: If cash disbursements management wanted to develop bench strength among the staff, the following objective may be applicable:

- Cross-train individuals in all department jobs to ensure at least two people are capable of performing all key departmental tasks.

The process owner or staff involved in the process may be able to provide a list of process objectives. However, in many cases, such objectives may not have been articulated formally. In such situations, the internal auditor may need to facilitate discussions with process individuals to determine the key process objectives. The following questions may prove helpful during such discussions, or when brainstorming among the internal audit team if process individuals are not available:

- Why does this process exist (that is, what is its primary purpose)?
- Which of the organization's strategic objectives does it affect or influence and how?
- What initiatives does/should the process undertake to help the organization achieve its strategic objectives?

- What does this process provide the organization, without which the organization would have a difficult time being successful?
- At the end of the day/week/month/year, what gives employees a sense of accomplishment with their jobs?
- What accomplishments tend to get employees recognized by management or internal customers?

Once the process objectives are understood, the internal auditor is ready to gather information about how the process operates.

Gathering Information

There are many ways to gather information about a process. The internal auditor should consider different types and sources of readily available relevant information. Additionally, analysis of data and entity-level controls can help provide additional insights into a process.

Types and Sources of Relevant Information

The starting point for understanding a process is reviewing documentation that already exists. For example, the following may be available from process owners or others familiar with the process that may provide useful information regarding how the process works:

- Policies relating to the process.
- Procedures manuals.
- Organizational charts or similar information outlining the number of employees and key reporting relationships.
- Job descriptions for people involved in the process.
- Process maps or flowcharts depicting the overall flow of the process.
- Narrative descriptions of key tasks or portions of the process.
- Copies of key contracts with customers, vendors, outsourcing partners, etc.
- Relevant information regarding laws and regulations affecting the process.
- Other documentation that may have been developed to support required reporting on the effectiveness of the system of internal controls.

This information may provide the internal auditor with much of what is needed to understand the process. However, it still may be necessary to discuss certain aspects of it with key individuals involved in performing the process. If the available documentation is not sufficiently comprehensive, it may be necessary to ask the individuals involved in the process questions such as:

- What key tasks are you responsible for performing?
- What inputs (information, documentation, etc.) do you need to perform these tasks?
- What, specifically, do you do with these inputs?
- What are the outputs that you produce from each task?

- Which other people or areas do you depend on as you perform these tasks?
- Which other people or areas depend on you performing these tasks effectively and timely?
- What information systems do you use when performing these tasks?
- How long does it take to complete each task?
- What types of exceptions or errors do you typically encounter?
- How do you handle these exceptions or errors?
- What other barriers or challenges do you typically encounter when performing these tasks?
- What do you do to remove the barriers or meet the challenges?
- In the end, how do you ensure that you perform the tasks correctly?

Gather Information About:

– Inputs
– Processing
– Output

These and other questions can help provide the internal auditor with the information needed to fully understand the process. It can be gained through individual interviews or by performing a walkthrough, which involves following a transaction through each step of a process. Regardless of the approach, it is important to understand the key tasks in sufficient detail to provide the foundation for the subsequent steps in the planning process.

Analytical Procedures

Understanding the tasks in a process, as described above, is an important step in planning an engagement. However, these tasks describe the way a process is designed to perform, but they provide little indication regarding how effectively they are carried out. Performing analytical procedures is one way internal auditors conduct high-level assessments that may reveal process activities that warrant closer attention and, accordingly, more detailed testing.

Analytical Procedures

Reviewing and evaluating existing information, which may be financial or nonfinancial, to determine whether it is consistent with predetermined expectations.

Analytical procedures involve reviewing and evaluating existing information, which may be financial or nonfinancial, to determine whether it is consistent with predetermined expectations.

> BOOKS 2 BUY **Example**: For the cash disbursements audit, this analysis may include any or all of the following:
>
> - Comparisons of financial information to prior periods, for example, trends in accounts payable balances from one quarter to the next.
> - Ratio analyses, for example, current ratio (current assets divided by current liabilities) and accounts payable turnover (cost of goods sold divided by accounts payable).
> - Comparisons of financial or nonfinancial information against budgeted information, for example, actual cash balances versus forecasted cash amounts.

Data Analysis Using Computer-Assisted Audit Techniques (CAATs)

Data analysis involves compiling and analyzing large amounts of data, typically through the use of technology. This technique is described in greater detail in chapter 10, "Audit Evidence and Working Papers." While most data analysis is conducted to test the effectiveness of a process, some data analysis tests may provide useful information during the planning process. Data analysis may provide information about the population of transactions that could prove useful when determining the internal audit approach.

Computer-Assisted Audit Techniques

Automated audit techniques, such as generalized audit software, utility software, test data, application software tracing and mapping, and audit expert systems, that help the internal auditor directly test controls built into computerized information systems and data contained in computer files.

BOOKS 2 BUY **Example**: When conducting an internal audit of the cash disbursements process, the internal audit team may perform the following data analysis tests during the planning phase:

- Number or percent of payments that are made well before or after the due date—this may provide insights into how closely cash flows are managed.
- Number of manual checks—this may indicate process design deficiencies or potential circumvention of established controls.
- Stratification of payment amounts—this may provide information about the level of small payments made, indicating the potential for procurement cards.
- Distribution of the first digits of payment amounts (Benford's Law analysis)—a distribution that does not follow Benford's Law may be an indication of unusual disbursement practices (for example, split invoicing), which may, in turn, influence the internal audit approach. Benford's Law estimates the number of times each of the 10 digits (zero through nine) will typically occur at the beginning of each number in a population with certain characteristics.
- Duplicate payment amounts to the same vendor—this may indicate potential duplicate payments, or provide insights about vendors for which recurring payments are made for like amounts.

Obtaining information about a population during the planning phase can help the internal auditor design tests that most effectively address the inherent risks in the process.

Entity-Level Controls Analysis

Entity-Level Controls

Controls that operate across an entire entity and, as such, are not bound by, or associated with, individual processes

While it is important to understand the process-level tasks and controls, it is also important to understand how the entity-level controls may influence the performance of a process. Deficiencies in entity-level controls can circumvent well-designed controls within a process and, in fact, become inherent risks to the effective operation of controls at the process level. For example, if organizationwide policies tend to be informal and inconsistently enforced, then policies specific to the process being audited may not be as important to understanding the process. Similarly, if there is little commitment to attracting, training, and developing competent employees in key areas requiring decision-making abilities and complex judgments, the testing approach may need to be altered as less reliance can be placed on individuals being able to perform complex or highly judgmental tasks.

Entity-level controls are commonly evaluated on an organizationwide basis at periodic intervals (for example, annually). Therefore, it typically will not be necessary to perform an assessment of the effectiveness of entity-level controls on each engagement. However, as described in the previous paragraph, the internal auditor should consider the results of the entity-level control assessment when planning individual engagements to ensure the approach to testing is relevant and efficient.

Documenting the Process Flow

As discussed above, there may be many types of information that can be gathered about a process from a variety of sources. To demonstrate that the internal auditor understands how the process actually operates, the key steps in the process must be documented. This process flow documentation will facilitate a review of the workpapers by the internal auditor's supervisor or others. The most common ways of documenting process flows are flowcharts (high-level or detailed) and narrative memoranda. Before providing a brief description of each, it is important to understand some subtle differences between the documentation of process flows.

Process Map

Depicts the broad inputs, activities, workflows, and interactions with other processes and outputs.

- **Process maps**, as described in chapter 5, attempt to depict the broad inputs, activities, workflows, and interactions with other processes and outputs. They provide a framework to understand the activities and subprocesses.
- **Flowcharts** include additional information, frequently depicting computer systems and applications, document flows, detailed risks and controls, manual versus automated steps, elapsed time for steps in the process, owners of key steps, and any additional information needed to help the reviewer understand the process and its flow.
- **Narrative memoranda** provide information about the process flow using only written words; there is no attempt to use symbols to depict the flow. It is common to combine flowcharts with supplemental narrative information to create a hybrid form of documentation.

Process maps tend to be most useful at the business level, as described in chapter 5, while flowcharts and hybrid documentation provide the level of information necessary to understand detailed processes. Following is a brief description of those techniques commonly used at the process level.

High-Level Flowcharts

The purpose of a high-level flowchart is to depict broad inputs, tasks, workflows, and outputs. A high-level flowchart helps reviewers understand the overall activities, systems, reports, and interfaces with other processes or subprocesses. This understanding will provide a frame of reference for identifying key subprocesses and systems that may be considered for the scope of the engagement. Flowcharts typically are drawn like a process map, with additional information added as necessary to support the understanding of the process flow. The common flowcharting symbols are shown in exhibit 13-5. These symbols expand on those used for process maps, as discussed in chapter 5.

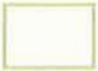
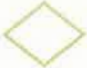
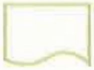
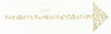
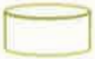
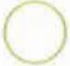
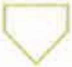
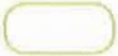
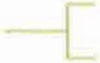
Flowchart

Expands on a process map to include computer systems and applications, document flows, detailed risks and controls, manual versus automated steps, elapsed time, and owners of key steps.

BOOKS 2 BUY **Example**: A high-level flowchart depicting the cash disbursements process is shown in exhibit 13-6.

A simple, high-level flowchart can be used to confirm the internal auditor's overall understanding of the process with the process owner, help in determining which areas or subprocesses are within scope for the engagement, and serve as a summary view of the detailed flowcharts.

EXHIBIT 13-5
COMMON FLOWCHARTING SYMBOLS

	**Process or operation** – A process, subprocess, or activity.
	**Decision** – Indicates alternative choices (for example, yes/no or accept/reject), each of which results in different flows of activities and/or documents.
	**Document** – A hard copy input source document or output report.
	**Flow line** – The direction of activities, workflow, information flow, documents, and handoffs.
	**Computer system or application** – Information technology that is used to store data, run an application, or perform other computer-based functions.
	**On-page connector** – Used to connect different parts of a flowchart on the same page without the use of flow lines.
	**Off-page connector** – Used to connect parts of a flowchart documented on different pages.
	**Terminator** – The start or end of a flow.
	**Annotation** – An explanatory note attached to a specific point in a flowchart.

Detailed Flowcharts

While the high-level flowchart is an important starting point, it does not provide the depth and level of detail needed to support the internal auditor's judgments regarding the design of the process. A detailed flowchart documents the more specific inputs, tasks, actions, systems, decisions, and outputs. In addition to providing a more detailed depiction of the process flow, detailed flowcharts provide additional information that enhances the understanding of the process. For example, detailed flowcharts may include some or all of the following:

- Key risks, which may be denoted by a symbol identifying the points in the process where something could go wrong and cause the process to not operate as designed.
- Key controls, which may be denoted by a symbol identifying the tasks, actions, or decisions that are considered critical to the adequate design of the process.
- Individuals or positions performing the key tasks or making decisions.
- The timing of when key tasks, actions, or decisions occur.
- The elapsed time it takes to perform a task or make a decision (this may be included if the flowchart is used to evaluate the efficiency of the process).

EXHIBIT 13-6
HIGH-LEVEL FLOWCHART: CASH DISBURSEMENTS PROCESS

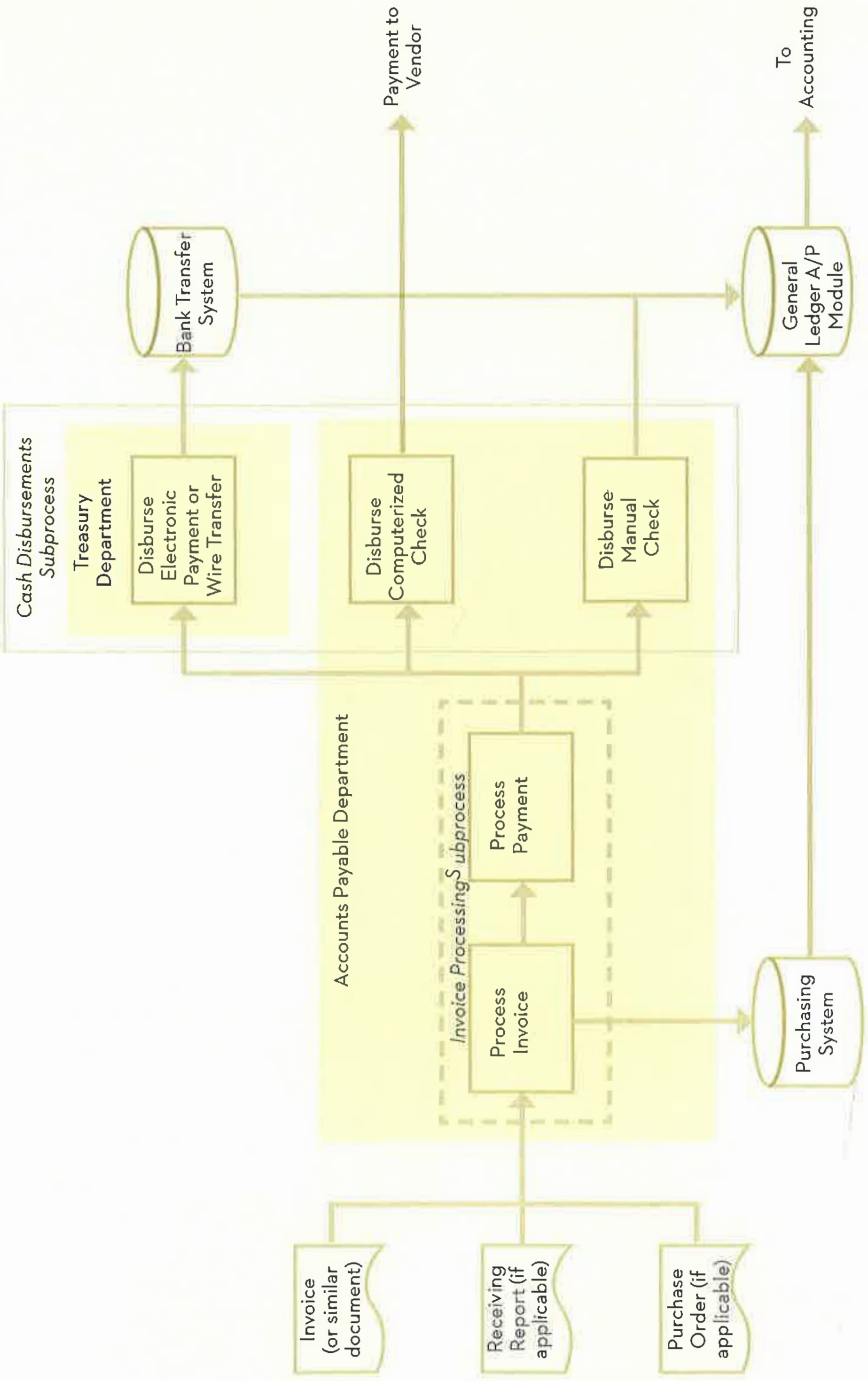
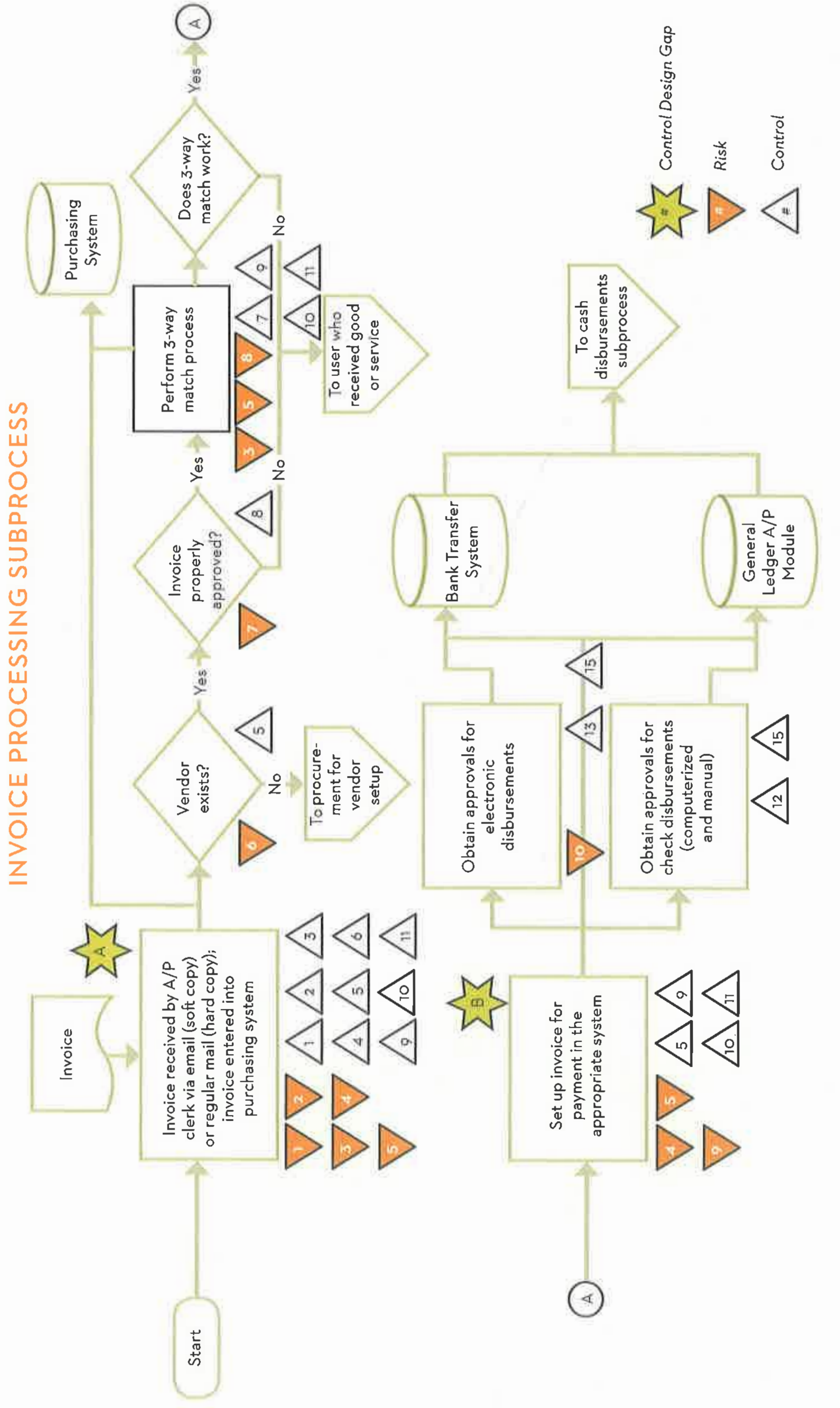

Invoice (or similar document)
Receiving Report (if applicable)
Purchase Order (if applicable)
Accounts Payable Department
Invoice ProcessingS ubprocess
Process Invoice
Process Payment
Purchasing System
Cash Disbursements Subprocess
Treasury Department
Disburse Electronic Payment or Wire Transfer
Disburse Computerized Check
Disburse Manual Check
Bank Transfer System
General Ledger A/P Module
Payment to Vendor
To Accounting

EXHIBIT 13-7 DETAILED FLOWCHART


INVOICE PROCESSING SUBPROCESS
Start
Invoice
Invoice received by A/P clerk via email (soft copy) or regular mail (hard copy); invoice entered into purchasing system
A
1
2
3
4
5
1
2
3
4
5
6
9
10
11
Purchasing System
Vendor exists?
Yes
No
6
5
To procurement for vendor setup
Invoice properly approved?
Yes
No
7
8
Perform 3-way match process
3
5
8
7
9
10
11
Does 3-way match work?
Yes
No
A
To user who received good or service
A
Set up invoice for payment in the appropriate system
B
4
5
6
5
9
10
11
Obtain approvals for electronic disbursements
10
13
15
Obtain approvals for check disbursements (computerized and manual)
12
15
Bank Transfer System
General Ledger A/P Module
To cash disbursements subprocess
#
Control Design Gap
#
Risk
#
Control

(continued next page)

EXHIBIT 13-7 DETAILED FLOWCHART, *(cont.)*

INVOICE PROCESSING RISKS

1. Invoice is not received timely by accounts payable, resulting in liability not being properly reflected in the financial statements.

2. Invoice is not processed timely by accounts payable, resulting in lost opportunities to take discounts or incurring late-payment fees.

3. Invoice information is entered inaccurately into the purchasing system, resulting in inaccurate or inappropriate payments.

4. Duplicate invoices are entered and processed for payment, resulting in payment for the same invoice twice.

5. Accounts payable personnel have inappropriate access to the various systems, allowing them to establish fictitious vendors, create phony purchase orders, and make unauthorized payments.

6. Payments are processed to the wrong or a nonexistent vendor, resulting in late payments to the correct vendor, the need to collect refunds from the incorrect vendor, or a fraudulent payment.

7. Payments are processed for invoices that have not been approved yet, resulting in payment before the good or service is received.

8. Invoices are processed that do not match purchase orders, receiving reports, or other relevant documentation, resulting in establishing a liability and paying an incorrect amount.

9. Payments are made before the due date, resulting in lost time value of money.

10. Unauthorized payments are made, resulting in payments being made by a costly or inefficient means, or in a manner inconsistent to meet the cash flow requirements.

(continued next page)

BOOKS 2 BUY Example: An example of a detailed flowchart is shown in exhibit 13-7. This example depicts the invoice processing subprocess in the cash disbursements process for **BOOKS 2 BUY**. The invoice processing subprocess is shown in the high-level flowchart in exhibit 13-6.

Because many people are visual learners and thinkers, detailed flowcharts are an effective way of presenting a great deal of information in an intuitive and understandable format. The level of information in detailed flowcharts should be sufficient to support the internal auditor's judgments regarding the identification of key controls, the adequacy of the overall process design, and the gaps between the current and desired level of specific controls.

Narrative Memoranda

There may be situations in which the internal auditor believes it is more appropriate to document the understanding of the process using narrative write-ups instead of flowcharts. These situations typically exhibit one or more of the following characteristics:

EXHIBIT 13-7 DETAILED FLOWCHART, *(cont.)*

INVOICE PROCESSING CONTROLS AND DESIGN GAPS

1 As part of the month-end close process, the A/P manager will solicit information on unprocessed invoices and will prepare an accrual accordingly.

2 Once an approved invoice is entered, the system will automatically book the credit to A/P and debit to the appropriate expense or balance sheet account.

3 Open purchase orders are reviewed once per month by the purchasing manager to determine their status.

4 The A/P clerk runs a report at the end of each week showing invoices entered but not approved. For invoices outstanding more than a week, a reminder is sent to the user.

5 The purchasing system requires that all invoice fields are completed before processing is allowed. An invoice cannot be entered without a match to an approved vendor.

6 The purchasing system alerts the A/P clerk if the vendor number, invoice number, and invoice amount match an invoice previously entered.

7 The purchasing system confirms a match between quantities and prices on an invoice, purchase order, and receiving documents. If they do not match, the invoice is placed on hold.

8 Invoice approval limits are confirmed with department heads annually and updated if necessary.

9 A user name and password is required to access all of the systems. Passwords are subject to naming parameters, and must be changed every 90 days.

10 System access rights are reviewed semiannually with department heads to ensure access capabilities align with job responsibilities.

11 A/P personnel cannot access the vendor masterfile, nor can they make changes to previously entered purchase order and receiving information.

12 Only the A/P manager can initiate the processing of a computerized check batch.

13 Only treasury department personnel are entitled to process bank transfers.

14 The purchasing system interfaces with the general ledger A/P module and the bank transfer system.

15 Computerized checks over $50,000 require a manual signature of the treasurer. Computerized checks over $100,000 require a manual signature of the CFO. Manual checks require dual signatures from the treasurer and CFO. The treasurer must authorize individual bank transfers in excess of $100,000.

A There is no check with users to determine whether any goods or services have been received but not invoiced yet (engagement observation written up on working paper Z-1).

B While the purchasing system does alert the A/P clerk to potential duplicate invoices, it does not prevent the A/P clerk from continuing to process such an invoice (engagement observation written up on working paper Z-2).

- The process is simple and, thus, the visual depiction created in flowcharting is not of great value.
- The steps are complicated, making it difficult to describe them effectively in the limited space provided in a flowchart symbol.
- The process owner would like the output to support other process documentation and prefers narrative write-ups over flowcharts.
- Narrative write-ups are a more efficient means of documenting the process.

Narrative memoranda should include the same type of information as is contained in flowcharts. While the specific sections of such a memorandum may vary between processes, a memorandum generally should include the elements from the following outline:

1. Overall description of the process
2. Key inputs
    a. Documents or communications from outside sources (for example, invoices or checks)
    b. Outputs from other processes or subprocesses
    c. Information from outside sources
    d. Data from internal systems
3. Key steps in the process
    a. Tasks that handle, check, change, or monitor the inputs
    b. Analysis that is completed
    c. Decisions or judgments that are made
    d. Computer applications that are updated
    e. New documents or information that are created
    f. Key individuals performing the tasks
    g. Elapsed time for tasks or groups of tasks
4. Key outputs
    a. Documents to be sent to outside parties (for example, bills, checks, or statements)
    b. Reports for internal use
    c. Inputs into other processes or subprocesses
    d. Data to be stored electronically
    e. Hard copy of documentation to be stored internally
5. Risks that threaten the process
6. Key controls (refer to the Identify Key Controls section later in this chapter)

Reasons for Narrative Memoranda:

– Simple process
– Complicated steps
– Process owner request
– More efficient

Regardless of whether flowcharts, narrative memoranda, or a combination of the two are used, documenting the process flows helps provide an understanding that is critical to the next steps in engagement planning. Therefore, care should be taken to invest enough time in understanding the process to enable the internal auditor's assessment of process design adequacy.

It is important to remember that in an assurance engagement, flowcharts and narrative memoranda are used to depict the current or "as is" state, not the desired or "should be" state. A common audit objective is to evaluate the design adequacy and operating effectiveness of a process. The current state is documented to help the internal auditor assess the current design adequacy. The auditee obtains the desired state only after addressing any deficiencies identified by the internal auditor.

Identifying Key Performance Indicators

Key Performance Indicator

A metric or other form of measuring whether a process or individual tasks are operating within prescribed tolerances.

After gaining an understanding of the process flow, it is helpful for the internal auditor to also understand how process-level management monitors performance. Frequently, there will be key performance indicators (KPIs), which are monitored periodically to provide process owners with information about how well the process is performing. Monitoring these KPIs may be similar to the analytical procedures the internal auditor performed, as described in the previous section, or quite different. There are certain characteristics of good key performance indicators. They should be:

- **Relevant**, that is, they measure what is important (for example, disbursement accuracy) as opposed to what is quantifiable (for example, dollar value of disbursements processed).
- **Measurable**, that is, there is quantifiable information to determine successful performance (for example, inaccurate disbursement information is tracked and compiled to monitor accuracy of disbursements).
- **Available**, that is, the information needed is available at the right time and to the right people, allowing for timely measurement of process performance (for example, disbursement statistics are available to the accounts payable manager at the close of each pay cycle).
- **Aligned** with key objectives of the business and process (for example, duplicate payment information is captured because there is an objective to have none).
- **Articulated** to the people involved in the process so that they understand what is being measured and the importance of achieving those performance levels (for example, accounts payable employees can see the statistics timely and adjust their performance accordingly).

Key performance indicators, whether formal or informal, can define the process owner's tolerance to performance deviations. Management determines what level of errors they are willing to accept when the process does not perform as expected. Knowing these tolerance levels will help the internal auditor evaluate the results of testing. For example, if the internal auditor finds a two percent error rate in a test, knowing whether this frequency of errors is acceptable will help the internal auditor determine whether this error rate is significant.

BOOKS 2 BUY **Example**: Examples of key performance indicators for the cash disbursements process are as follows:

- 100 percent of the disbursements are accurate, for example, the amount paid agrees with the invoice.
- 98 percent of disbursements are paid by the due date. Under no circumstances should the company ever have to pay interest or penalties on late payments.
- There are no duplicate payments.
- 90 percent of payables with early pay discounts exceeding one percent are paid in time to take the discount.

Evaluating Process-Level Fraud Risks

Finally, it is important to understand the potential process-level fraud risks. As discussed in the next section in this chapter, most risks are based on the uncertainty of events that may occur due to the inherent nature of the process. The inherent likelihood of certain risks occurring increases if there is intent by an individual to commit fraud and/or collusion among multiple individuals involved in the process. Therefore, before beginning the formal risk assessment process in an engagement, it is important to evaluate potential fraud scenarios in the process. This involves the following three steps:

1. **Identify potential fraud scenarios.** Brainstorming with individuals involved in the process is an effective way to identify the possible means by which individuals, working alone or in collusion with others, could circumvent the process.

BOOKS 2 BUY Example: Examples of potential cash disbursements fraud include:

- An employee creates a fictitious vendor with his or her own address, submits an invoice for processing to that vendor, and deposits the payment into his or her own account.
- An accounts payable employee processes a duplicate payment and, through collusion with the vendor, agrees to split the proceeds of the additional payment with an individual at that vendor.
- A treasury employee sets up a bank account in a name similar to an authorized vendor and wire transfers funds to that account.

2. **Understand potential fraud impact.** The potential impact of each fraud scenario should be determined. For example, an organization could:

- Suffer direct financial loss (through misappropriation of assets).
- Misrepresent financial results (through fraudulent financial reporting).
- Suffer reputational damage if the fraud reflects very negatively on the governance of the organization.

3. **Determine whether to test for specific fraud risks.** Based on the first two steps, the internal auditor can assess, based on the inherent risk of fraud within the process, whether specific tests should be designed to determine the vulnerability for fraud.

The intent of this step is not necessarily to identify the occurrence of fraud, but rather to evaluate the possibility of fraud scenarios occurring. If it is reasonably possible that such scenarios will occur, the internal auditor should consider designing specific tests to identify the occurrence of, or potential for, the fraud scenarios. Refer to chapter 8, "Risk of Fraud and Illegal Acts," for further discussion about fraud.

Fraud

Any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage.

IDENTIFY AND ASSESS RISKS

Identifying Process-Level Risk Scenarios

An organization establishes processes to execute its business plan and achieve its objectives. These processes may be discrete and focused, or they may be

cross-functional. Risks exist in all processes, regardless of their breadth, location, or focus. The first task in assessing process-level risks is to identify the risk scenarios that are inherent in the process. Risk scenarios are potential real-life events that may adversely impact the achievement of objectives.

The risks shown in exhibit 13-7 may not be identified until the internal auditor has completed this task in the planning process. It is common for these two steps—Understand the Auditee and Identify and Assess Risks—to be conducted iteratively.

Risk

The possibility that an event will occur and adversely affect the achievement of objectives.

The purpose of identifying risk scenarios is to answer the question: What can happen that would prevent the achievement of each process-level objective? To answer this question, internal auditors should brainstorm the possible risk scenarios. The following provides an outline of how this can be done.

1. Choose a single process-level objective. This exercise works best if done one objective at a time.
2. Brainstorm barriers (events, issues, circumstances, etc.) that might threaten the achievement of the objective. Examples include the following:
   a. External events for which the organization is not prepared or does not react to timely or appropriately.
   b. Inadequately designed or poorly documented procedures.
   c. Breakdowns in existing procedures.
   d. Lack of the right people, with the right skills, deployed in the right manner.
   e. Inadequate communication between interfacing areas.
   f. Employees who intentionally violate policies or act unethically.
   g. Inadequately designed or outdated computer applications.
   h. Untimely, inaccurate, or inadequate information for decision-making.
   i. Failure to measure performance.
3. Continue the exercise for the remaining process-level objectives.
4. Because some of the risk scenarios will be similar across process-level objectives, categorize and combine similar risk scenarios. The reason for combining similar risk scenarios will become more evident in the next task, Defining Process-Level Risks.

This brainstorming exercise would be optimized if individuals involved in the process participate. They may be able to identify risk scenarios based on first-hand experience. However, experienced internal auditors should be able to conduct this exercise on a preliminary basis without assistance from process-level individuals. Such preliminary assessment should be validated with process-level individuals when possible.

An effective way for internal auditors to perform such a brainstorming session is to write the different scenarios on self-sticking notes and put them up on a wall or large board. Once the brainstorming is completed, the notes can be 1) arranged by objective to ensure comprehensive coverage of each objective, and 2) categorized by similar scenario type to support risk definition.

BOOKS 2 BUY **Example**: The following are a few of the many risk scenario examples for the cash disbursements process:

- Invoices are not processed timely to permit payment by the due date.

- A duplicate payment is made due to an invoice being input twice—once from an approved invoice and a second time from a statement sent by the vendor.
- An accounts payable clerk accidentally enters the incorrect amount into the system, resulting in payment of that incorrect amount.
- Due to employee turnover in accounts payable, there are input delays resulting in late payments.
- Unauthorized individuals change payment terms within the system resulting in late or incorrect payments.

Defining Process-Level Risks

As indicated above, similar risk scenarios provide the foundation for identifying process-level risks. The risk scenarios represent the specific real-life events that could affect the achievement of objectives. Risks are broader descriptions of the causes and effects of such events. The next task in assessing process-level risks is to define the relevant risks.

There are many ways to define risks. The optimal approach depends on the culture and "risk language" of the organization. However, regardless of the unique approaches that may exist from one organization to the next, it is important to be consistent. Lack of consistency may make it more difficult for risks to be broadly understood throughout the organization.

One common and effective approach for defining risks is to use a "cause and effect" protocol. Under this approach, risks begin with a "cause" (for example, failure to... , lack of... , inability to...) and continue with the effect (for example, financial loss, personal injury, data corruption, or reputational damage).

BOOKS 2 BUY **Example**: A sample of possible cash disbursements risks includes:

- **Expectations**. Lack of well-developed and well-articulated policies, procedures, and other forms of communication from senior management may result in employees carrying out their responsibilities in a manner that is inconsistent with senior management's expectations and desires.
- **Duplicate payments**. Failure to identify multiple inputs of invoices may result in duplicate payments to vendors that could go undetected or prove difficult to collect.
- **Timeliness**. Inability to process payments on time may result in fines or penalties (for late payments) or missed discounts.
- **Systems access**. Lack of effective logical security practices may create opportunities for unauthorized individuals to access, manipulate, or delete key disbursements data.
- **Human resources**. Inability to attract, develop, deploy, and retain competent individuals may result in the cash disbursements process performing at a suboptimal level, which could cause inaccurate or untimely payments.

Once the risks are defined, they should be linked to the process-level objectives to ensure there is correlation between each of the risks and objectives. As discussed below, risk assessment involves consideration of the impact on the ability to achieve objectives.

One final task is to validate that the definitions "speak the language" of the process-level employees. Since these employees are responsible for managing the process-level risks, it is important that they have a uniform and consistent understanding of those risks. Therefore, internal auditors should share and discuss the risk definitions with process-level management and employees to validate that the risk list is complete and the definitions make sense. Success with this task will help facilitate success in the Evaluating the Impact and Likelihood of Risks task that follows.

Evaluating the Impact and Likelihood of Risks

Now that the risks have been identified and defined, the internal auditor is ready to perform a risk assessment. In this task, the focus is on determining the potential impact and likelihood of each risk. The purpose of this evaluation is to help identify the risks that will have the greatest adverse effect on the achievement of process-level objectives. Such risks deserve most of the attention during an assurance engagement.

Risk Assessment

The identification and analysis (typically in terms of impact and likelihood) of relevant risks to the achievement of an organization's objectives, forming a basis for determining how the risks should be managed.

The process for conducting a process-level risk assessment generally involves the following three steps:

1. Determine the impact of various outcomes associated with each risk. The following tips may prove helpful when performing this step:

   - Recall that, by definition, risk represents uncertainty; therefore, there may be several possible risk outcomes. The internal auditor must try not to focus only on one possible risk outcome and ignore outcomes that are more likely or carry more impact.

   - Risk is typically measured in terms of the financial impact, which is the most common and easily measured impact. However, there may be other risk outcomes that either cannot be measured in financial terms or may be considered more severe than the financial impact. For example, harm to an employee's health and safety, or impairment of an organization's reputation due to negative publicity may be considered a more severe outcome than the direct financial impact of such risks.

   - Impact should focus on the potential exposure over a specific period of time, typically one year. Because risks may occur more than once during the period, it is important to avoid concentrating on a single-event impact. Estimating the impact over a period of time ensures that the potential worst-case exposure is considered.

   - It is not necessary to obtain a high degree of precision when estimating the impact of a risk. Using a generic scale (for example, high/medium/low) will typically suffice. However, it is still important to define the levels of the scale. For example, high impact may be defined as a financial impact greater than $1 million, medium impact from $250,000 through $1 million, and low impact less than $250,000.

2. The second step is to estimate the likelihood that each risk impact will occur. The following tips may be helpful when performing this step:

   - As discussed above, risks have a range of possible outcomes, each of which will have a different likelihood of occurring. It is important to focus on the risk outcome determined in the previous step.

- Since there are many risk outcomes, there also may be many root causes for why a risk occurs. Each root cause may have a different likelihood. Therefore, it is important to consider the underlying root cause(s) of the chosen outcome when evaluating the likelihood of a risk occurrence.
- As is the case when determining risk impact, it is not necessary to obtain a high degree of precision when estimating the likelihood of a risk. Using a generic scale (for example, high/medium/low) will typically suffice. For example, high likelihood may indicate that the risk impact is more likely than not to occur (that is, greater than 50 percent), medium likelihood may indicate that the risk impact is possible (for example, from 10 percent through 50 percent), and low likelihood may indicate that the risk impact is remote (for example, less than 10 percent).
- When evaluating likelihood, it is important to focus on the inherent likelihood—that is, assessing likelihood without consideration of the controls management may have in place. Since the internal auditor already has some understanding of the process, it may be tempting to estimate likelihood based on the effect of these controls. However, internal auditors should not assume that those controls operate effectively when planning the engagement, otherwise, they may under-assess the related risks and fail to test such controls.

3. The final step is to combine the assessment of impact and likelihood into a single risk assessment. The best way to accomplish this is to create a risk matrix that shows the interrelationship between the impact and likelihood of each risk. For example, the risk matrix shown in exhibit 13-8 depicts the use of a high/medium/low scale for both the impact and likelihood assessments. When reviewing this risk matrix, note that a number is assigned to each box to signify the overall level of risk. Once each risk is placed in one of the boxes, they can be classified as follows:
   - Risks in boxes 8 or 9 (red shading) are considered high risk.
   - Risks in boxes 5, 6, or 7 (yellow shading) are considered medium risk.
   - Risks in boxes 1, 2, 3, or 4 (no shading) are considered low risk.

Typically, high and medium risks should be included in every internal audit assurance engagement. Low risks may or may not be included, depending on the internal audit function's charter, objectives of the engagement, and resource considerations. Refer to exhibit 13-9 for an example of a cash disbursements risk matrix that may be a relevant example for **BOOKS 2 BUY**.

Using a matrix or some other means to visually depict the results of the risk assessment will facilitate an overall review of the judgments made in the risk assessment process by internal audit management and the process owners. Such reviews, particularly by the process owner, will help validate the judgments made by the internal auditor.

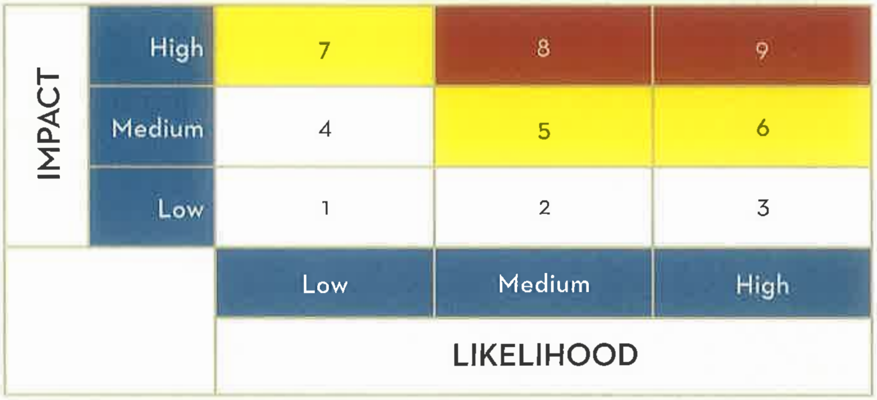
Impact

The severity of outcomes caused by risk events. Can be measured in financial, reputation, legal, or other types of outcomes.

Likelihood

The probability that a risk event will occur.

EXHIBIT 13-8
EXAMPLE OF A RISK MATRIX



IMPACT	High	7	8	9
	Medium	4	5	6
	Low	1	2	3
		Low	Medium	High
		LIKELIHOOD		

Understanding Management's Risk Tolerance

Traditionally, judgments of the internal audit team have been the sole source for evaluating risks. This reflects the internal auditor's governance role in the organization. However, an underlying premise in enterprise risk management (ERM) is that management must establish tolerances to business risks consistent with the organization's overall risk appetite. This premise applies at the process level as well.

Risk Tolerance

The acceptable levels of risk size and variation relative to the achievement of objectives, which must align with the organization's risk appetite.

Therefore, it is important for the internal auditor to validate the reasonableness of the high, medium, and low impact thresholds that were employed. It is possible that management may have a different level of tolerance for the process. Recall from chapter 4 that risk appetite is described as the types and amount of risk, on a broad level, an organization is willing to accept in pursuit of value, while tolerance represents the organization's acceptable levels of variation in performance relative to the achievement of objectives, and must align with the risk appetite. To gain an understanding of management's risk tolerance levels, the following three steps should be conducted:

1. **Identify possible risk outcomes.** As previously discussed, by definition, risks represent a range of possible outcomes. While such outcomes typically are measured in financial terms, there may be other risk outcomes that either do not lend themselves to financial measurement or are more severe than the financial impact. For example, the safety of employees may be more severe than potential fines or penalties due to safety violations. Similarly, the impact of failure to protect the privacy of customer data may be more severe than the cost to recover or protect such data.

Risk Appetite

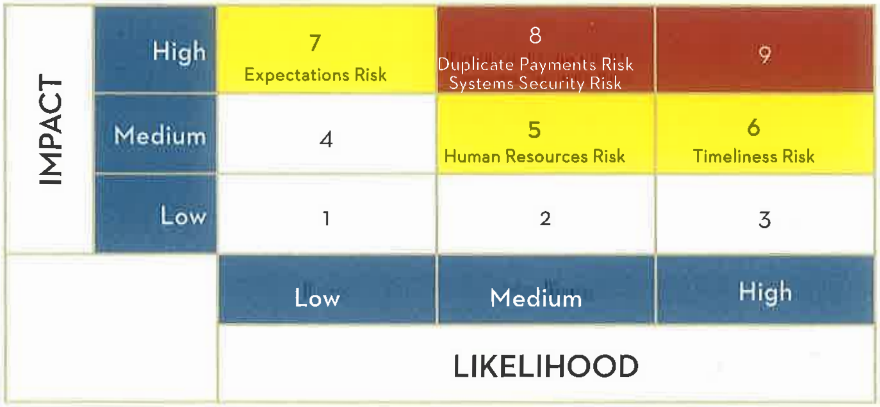
The amount of risk, on a broad level, an organization is willing to accept in pursuit of its business objectives.

2. **Understand established tolerance levels.** Once the different risk outcomes are determined, discussions can be held with process management to identify tolerance levels that they have already established. Such levels may be reflected in documentation of key performance measures, individual performance goals, or in other communications.

3. **Assess tolerance levels for outcomes that have not been established.** To the extent that established tolerance levels do not comprehensively address all possible risk outcomes, discussions should be held with process management to determine appropriate tolerance levels. Questions to facilitate this discussion include:

- How much variability can you or senior management tolerate relative to the achievement of process objectives?
- What types of outcomes would you consider to be unacceptable?
- What types of risk scenarios would you be uncomfortable dealing with?

EXHIBIT 13-9 EXAMPLE OF A CASH DISBURSEMENTS RISK MATRIX



IMPACT	High	7 Expectations Risk	8 Duplicate Payments Risk Systems Security Risk	9
	Medium	4	5 Human Resources Risk	6 Timeliness Risk
	Low	1	2	3
		Low	Medium	High
		LIKELIHOOD		

Expectations Risk is considered *high impact* as lack of sufficient direction and oversight from senior management could result in material disbursements being made in an inappropriate or fraudulent manner. This risk is considered *low likelihood* as there are many examples of good policies and procedures governing disbursement activities, and senior management is not likely to ignore such an important area.

Timeliness Risk is considered *medium impact* as the penalties and interest for being late would not be material, although bad vendor relations would still be of concern. This risk is considered *high likelihood* as there is heavy reliance on others to begin the cash disbursements process and, with generally tight payment terms, there are a variety of delays that could occur in the process, causing a payment to be late.

Human Resources Risk is considered *medium impact* as failure to recruit, develop, and maintain competent people in the accounts payable department could result in a higher-than-desirable number of inaccurate or late payments. This risk is considered *medium likelihood* as the necessary skill sets are not that difficult to find in the market.

Systems Access Risk is considered *high impact* as unauthorized access could result in changes that might conceal material misdirected disbursements. This risk is considered *medium likelihood* as such misdirected disbursements may be detected through other means.

Duplicate Payments Risk is considered *high impact* as a single duplicate disbursement could be material and would represent lost funds if undetected. This risk is considered *medium likelihood* as it is fairly common for duplicate invoices to be presented to a company, however, most vendors are generally honest so it is less likely that a material duplicate payment would go undetected over time.

Understanding management's tolerance levels is important, but does not necessarily supersede the internal auditor's judgment. Remember, the internal audit function has many stakeholders. Its fiduciary responsibility to other stakeholders should not be subordinated if the internal auditor believes process-level management has a higher level of risk tolerance than other stakeholders. However, having a good understanding of process management's tolerance levels will help the internal auditor finalize the risk assessment judgments, as well as gain an understanding that may prove helpful when evaluating the significance of audit findings later in the engagement.

IDENTIFY KEY CONTROLS

Key Control

An activity designed to reduce risk associated with a critical business objective.

A variety of actions make up a process. All may have a role in achieving the final result, but only a few are truly critical to the outcome, that is, their absence would make it difficult to achieve the desired result. These critical actions are referred to as *key controls*. Chapter 6 provides a definition of internal control and a detailed discussion of the system of internal controls. Recall also, from earlier in this chapter, that entity-level controls may have an impact on the operation of controls at the process level. Therefore, the internal auditor must consider the impact of entity-level controls on the process under review before proceeding with the identification of key process-level controls.

To execute this task in engagement planning, it is important to understand the different types of controls that may be considered key controls at the process level. Although the following is not an exhaustive list, it represents examples of common control types:

- **Approving** involves obtaining an authorization to execute a transaction by someone empowered to do so (for example, approval of a write-off).
- **Calculating** entails computing or re-computing an amount that results from other data obtained in the process (for example, using historical write-off data to compute a bad debt reserve, or checking a depreciation calculation to ensure the systematically computed amount is reasonable).
- **Documenting** relates to preserving source information or documenting the rationale behind judgments made for future reference (for example, scanning receiving documentation, invoices, and checks to support a payment, or writing a memorandum to the files that outlines the judgments used in determining an accrual).
- **Examining** involves verifying an attribute, that is, a data element, event, or documentary evidence supporting existence or occurrence (for example, evidence that goods paid for were received).
- **Matching** entails making comparisons between two different attributes to verify that they agree (for example, a payment amount agrees with the invoice amount).
- **Monitoring** represents checking to ensure an action is occurring (for example, monitoring that an invoice approver does not exceed his or her limits).
- **Restricting** involves not allowing an unacceptable action (for example, prohibiting speculation on interest rate fluctuations, or not allowing unauthorized individuals to access certain data within key systems).
- **Segregating** focuses on separating incompatible duties that would create the potential for an undesirable action (for example, separating check signing and invoice approval authority).

- **Supervising** involves providing direction and oversight to ensure actions and tasks are carried out as designed (for example, a supervisor approving a batch before computer processing).

As previously discussed, the identification of process-level controls typically begins in the prior two planning steps: Understand the Auditee and Identify and Assess Risks. The current task involves ensuring that any additional process-level controls have been identified before an assessment is made as to which controls mitigate the key risks.

There are no checklists or formulas that provide the internal auditor with absolute information on which controls are key and which are not. Rather, determining key controls is a judgmental process that can be best accomplished by the internal auditor answering the following question: If not performed as designed, which of these controls would likely result in the inability to achieve the process-level objectives? Those controls that mitigate high or medium risks, as depicted in exhibit 13-8, are probably key controls. The following are important when determining key controls:

- The internal auditor must have a clear understanding of the process-level objectives.
- The consequences of inadequate control execution must be evaluated to determine whether a control deficiency would significantly impair achievement of the objectives.
- Other compensating controls should be considered as they may indicate that the operation of a given key control is not as critical as first presumed.
- The effect of one control on other controls also must be considered. For example, the execution of a control may not appear to significantly impair the achievement of an objective, but it could impact the execution of other controls, which could impair the achievement of an objective.
- The impact of entity-level controls also should be considered. That is, deficiencies in entity-level controls may diminish the effectiveness of process-level controls. By understanding the effectiveness of entity-level controls, the internal auditor can better assess the impact that key controls at the process level will have on the achievement of objectives.
- Redundant controls, or those that are not cost effective, may need to be changed or eliminated. Such controls are probably not key controls.

The final task in this step of engagement planning is to link the process-level controls to the process-level risks. The achievement of objectives is subject to different risk scenarios, and certain controls may only mitigate certain risks. Ultimately, if a control is determined to be ineffective, it may impact a single risk or multiple risks. The documentation of this linkage can be accomplished in a simple matrix, referred to as a Risk and Control Matrix, an example of which is shown in exhibit 13-10. Later in this chapter, you will see how this matrix can be used as the beginning for an audit program.

EXHIBIT 13-10
EXAMPLE RISK AND CONTROL MATRIX

Process-Level Risk	Key Control	Design Adequacy
Risk A – Definition (associated process-level objectives)	• Control A • Control B • Control C	The indicated key controls are adequate to manage this risk to an acceptable level.
Risk B – Definition (associated process-level objectives)	• Control A • Control D	The indicated key controls are **not** adequate to manage this risk to an acceptable level (describe design gap).
Rick C – Definition (associated process-level objectives)	• Control C • Control E • Control F	The indicated key controls are adequate to manage this risk to an acceptable level.

EVALUATE THE ADEQUACY OF CONTROL DESIGN

The next step in the engagement planning process is to evaluate the adequacy of process design. The key to this step is determining whether the key controls are designed adequately to reduce the individual process risks to an acceptable level. The following questions should be considered when evaluating the adequacy of process design:

- Does the internal auditor understand what an "acceptable level" of risk is, based on management's risk tolerance levels for the process?
- Do the key controls, taken individually or in the aggregate, reduce the corresponding process-level risks to acceptable levels?
- Are there additional compensating controls from other processes that further reduce risks to acceptably low levels?
- Does it appear that the key controls, if operating effectively, will support the achievement of process-level objectives?
- To the extent appropriate, does the process design address effectiveness and efficiency of operations, reliability of reporting, compliance with applicable laws and regulations, and achievement of strategic objectives?
- What gaps, if any, exist that impede the process?
  - What specific gaps exist in the design of the process?
  - What are the possible outcomes or effects of those gaps?
  - Why do these gaps exist—that is, what are the root causes (for example, inadequate procedures, unclear policies, noninterfacing systems, or lack of segregation of duties)?

Once the internal auditor has completed the design adequacy evaluation, any gaps that were identified should be discussed with management and documented as preliminary audit observations (depending on the length of time to complete this evaluation, individual gaps may be discussed with management as identified instead of waiting until the design adequacy evaluation is complete). Note that the matrix in exhibit 13-10 contains a column titled Design Adequacy where the internal auditor's judgments can be documented. As indicated in that exhibit, the internal auditor's judgment typically is one of the following:

- The indicated key controls are designed adequately to manage this risk to an acceptable level.
- The indicated key controls are not designed adequately to manage this risk to an acceptable level (describe design gap).

Once the internal auditor has formed judgments on design adequacy for each individual risk, an evaluation can be made regarding the design of the process taken as a whole. Examples of such conclusions include:

- Design is adequate; no significant gaps. Overall, the process and information systems appear to be designed adequately to manage the risks to an acceptable level.
- Design is adequate; however, gaps exist. Overall, the process and information systems appear to be designed adequately to manage the risks to an acceptable level. However, the existence of one or more gaps may result in some exposure that the process owner may find unacceptable.
- Design is inadequate; significant gaps exist. Overall, the process design does not appear to be adequate to manage the risks to an acceptable level. Significant gaps create an intolerable level of exposure that process-level objectives will not be achieved.

These individual observations and the overall evaluation will influence the nature, extent, and timing of tests to be performed.

Design Adequacy

Assessment of whether management has planned and organized (designed) the controls in a manner that provides reasonable assurance that the related risks can be managed to an acceptable level.

CREATE A TEST PLAN

Now that the internal auditor fully understands how the process operates and has evaluated the adequacy of process design, the next step is to develop a test plan. A test plan should be designed to gather sufficient appropriate evidence to support an evaluation of how effectively the key controls are operating. This evaluation and the evaluation of the process design adequacy, taken together, provide reasonable assurance that the process-level objectives will be achieved.

Based on the understanding gained from the previous engagement planning steps, the internal auditor is now prepared to: 1) determine which controls are important enough to test, 2) develop an approach for testing those controls, and 3) document judgments supporting the chosen audit tests. Each of these tasks is discussed in more detail in the following sections.

Reasonable Assurance

A level of assurance that is supported by generally accepted auditing procedures and judgments. Reasonable assurance can apply to judgments surrounding the effectiveness of internal controls, the mitigation of risks, the achievement of objectives, or other engagement-related conclusions.

Determining Which Controls to Test

As indicated above, the primary focus of testing is to determine whether the key controls are operating effectively enough to ensure process-level risks are managed sufficiently. While this may be accomplished by simply testing all of the identified key controls, there are other factors the internal auditor must consider when determining which controls to test:

- Are there higher-level controls that might, by themselves, provide reasonable assurance that the relevant risks are managed sufficiently? Higher-level controls may be reconciliation, monitoring, or supervisory controls performed by individuals independent of the detailed control owners, for example, their supervisors or managers. As part of a top-down risk-based controls assessment, the internal auditor should give consideration to these higher-level controls, just as the impact of entity-level controls should be considered (as discussed earlier in this chapter).

- Are there other compensating controls that address multiple risks? If so, it may be more efficient to test these controls rather than focusing on testing each of the detailed key controls.
- Was the design of controls assessed as being adequate? If not, it may not be necessary to test the controls because, even with effective operation, the risks may not be mitigated due to the inadequate design.
    - However, the internal auditor may decide to perform tests to determine the extent of errors resulting from inadequate control design. The types of tests to quantify the errors (for example, data extraction and analysis) likely will be different than direct tests performed to evaluate the effectiveness of controls.
- When do the key controls operate, and, based on the period within scope for the engagement, is it practical to test certain key controls? For example, certain controls may operate only at year-end. If the engagement is being conducted during the year, it may not be practical to test some of those controls.
- Have there been changes in the process during the period that result in certain key controls operating for only a portion of the period within scope? If so, consideration must be given to how these changes might impact the testing of key controls.

Once these factors have been considered, the internal auditor is ready to develop a specific testing approach. As indicated above, the approach typically focuses on evaluating the effectiveness of controls that are designed adequately, but some testing may be needed to quantify the impact of controls that are not designed adequately.

Developing a Testing Approach

A testing approach involves determining the nature, extent, and timing of tests to perform. The primary objective of testing is to determine whether the controls are operating as designed to reduce the corresponding risks to an acceptable level. The different types of audit tests are described in greater detail in chapter 10. However, the following outlines the decisions that must be made when developing a testing approach.

- **Nature of tests.** Different types of tests provide different levels of assurance and will take different amounts of time to conduct.
- **Extent of tests.** Controls can be tested on a partial or complete basis, that is, a sample of transactions or 100 percent of the transactions. Obviously, testing larger samples provides greater assurance but requires more time. Sampling techniques are discussed in much greater detail in chapter 11, "Audit Sampling."
- **Timing of tests.** Tests can be performed at different frequencies or intervals, depending on the period covered in the engagement's scope, the nature of the control, and the type of test being performed.

There may be other factors influencing the nature, extent, and timing of tests. The key is to ensure that the testing approach provides sufficient evidence regarding the management of all key process-level risks.

Documenting the Testing approach

The example Risk and Control Matrix shown in exhibit 13-10 can be expanded by adding a column to include the Testing Approach for each risk. Exhibit 13-11 provides an example of what this matrix might look like (note that the Design Adequacy column from exhibit 13-10 has been removed to illustrate the thought link between the Key Control and Testing Approach columns).

Note that some of the individual tests may apply to multiple controls, that is, they are multipurpose tests.

BOOKS 2 BUY Example: Exhibit 13-12 shows a partially completed Risk and Control Matrix for the cash disbursements function.

EXHIBIT 13-11
EXAMPLE RISK AND CONTROL MATRIX WITH TESTING APPROACH

Process-Level Risk	Key Control	Testing Approach
Risk A – Definition (associated process-level objectives)	• Control A • Control B • Control C	• Test A • Test B • Test C
Risk B – Definition (associated process-level objectives)	• Control A • Control D • Control E	• Test A • Test D • Test E

DEVELOP A WORK PROGRAM

The next step in engagement planning is to document all of the judgments and conclusions made during the planning phase. [Note that many internal audit activities have standard work program templates that may be used from the start of planning.] As can be seen by the breadth of activities covered in this chapter, there are many different but important tasks that were completed, as well as many more yet to be performed (for example, testing and reporting). To ensure all engagement team members understand what has been completed and what remains to be performed, it is common to prepare an engagement work program. This work program may take different forms, such as:

- A standard template or checklist that the lead internal auditor prepares to document the completion of the planning steps. Standard templates are frequently used to ensure each engagement covers all of the necessary tasks.
- A memorandum summarizing the tasks completed. In situations in which the planning is dynamic and not consistent from engagement to engagement, this free-form approach may be more appropriate.

EXHIBIT 13-12
EXAMPLE RISK AND CONTROL MATRIX FOR CASH DISBURSEMENTS

Process-Level Risk	Key Control	Testing Approach
Expectations Risk – Lack of well-developed and well-articulated policies, procedures, and other forms of communications from management may result in employees carrying out their responsibilities in a manner that is inconsistent with management's expectations and desires (accuracy, timeliness, recording, compliance, and approval objectives).	• Delegation of authority policy establishes approval levels for procurement and disbursement decisions. • Accounts payable has developed detailed procedures covering all key disbursement tasks.	1. Review delegation of authority policy and evaluate whether it appears to be current and appropriate given the present responsibilities of individuals. 2. Select a sample of 80 disbursements (10% risk, 5% tolerable deviation rate, and 1% expected deviation rate) and test for approvals in accordance with the policy. 3. Review and discuss procedures with accounts payable personnel to determine whether the procedures accurately reflect the required tasks and could be followed by others.
Duplicate Payments Risk – Failure to identify multiple inputs of invoices may result in duplicate payments to vendors that could go undetected or prove difficult to collect (accuracy and recording objectives).	• The purchasing system alerts the AP clerk if the vendor number, invoice number, and invoice amount match an invoice previously entered. • The cash disbursements run will flag any payments of identical amounts to the same vendor for review prior to disbursement.	1. Test the system's duplicate invoice functionality by attempting to enter duplicate invoice numbers. Also, test what happens if a digit or symbol is added to the end of a duplicate invoice number. 2. Since the system only alerts the user to the possibility of a duplicate payment, extract 100% of the payments for the last year and test for possible duplicate payments. 3. Test to ensure the cash disbursements flag operates as designed.
Timeliness Risk – Inability to process payments on a timely basis may result in fines or penalties (for late payments) or missed discounts (timeliness and cash flow objectives).	• The system requires that a payment date be input during invoice data entry. • An edit report is generated whenever a payment date is more than 30 days after the invoice date. • The invoice input screen has a field that can be checked if the invoice is eligible for an early-pay discount.	1. Test the system functionality for the three key controls. 2. Using data analysis software, compute the difference between the payment date and invoice date for 100% of payments made during the last year. Follow up on any late payments or missed discounts.
Systems Access Risk – Lack of effective logical security practices may create opportunities for unauthorized individuals to access, manipulate, or delete key disbursements data (accuracy, recording, and cash flow objectives).	• Logical security is administered by IT in the same manner as for all applications. • The accounts payable manager must review and confirm access rights to the cash disbursements system twice per year.	1. IT logical security is tested in a separate audit by the IT audit specialists. Check the results of that audit to ensure there were no design deficiencies relating to the cash disbursements security. 2. Discuss with the accounts payable manager the process for confirming access rights. Examine documentation supporting this procedure.

- Additional columns in the Risk and Control Matrix if the internal auditor desires to have everything captured in one document.
- A combination of the three.

The format will vary from internal audit function to internal audit function. The key point is that there must be some means of:

- Ensuring all engagement team members understand what has been done and what still needs to be done.
- Communicating who is responsible for performing each engagement task.
- Providing a record of which tasks are completed.
- Facilitating review by an engagement manager or director who provides oversight and direction during the engagement planning process.

Work Program

A document that lists the procedures to be followed during an engagement, designed to achieve the engagement plan.

Regardless of the format, the following are covered in a typical work program:

- Key administrative tasks, such as preparation of a planning memorandum, scheduling resources, establishing milestone dates, etc.
- Key meetings, such as conducting a kickoff meeting with process-level management to discuss the objectives and scope of the engagement, process-level risks, timing of the engagement, information needed from process-level employees, reports or other deliverables, and any expectations management has of the engagement.
- Planning tasks, which list each of the tasks discussed in this chapter (for example, understanding the process, assessing process-level risks, and identifying key controls).
- Fieldwork tasks, which list the specific tests that will be conducted (this may be documented in the Risk and Control Matrix discussed previously).
- Wrap-up steps, such as clearing open review notes, conducting a closing meeting with process-level management, finalizing the working papers, etc.
- Reporting tasks, such as preparing a draft engagement communication, soliciting feedback from process-level management, and issuing a final engagement communication (covered more fully in chapter 14).

Even though the discussion of developing a work program is covered in the latter part of this chapter, its preparation typically is done throughout the engagement planning process. As indicated, the format of the work program is not what is important. The key is to communicate the primary tasks, judgments, and conclusions that were made during this process and help complete the rest of the engagement.

ALLOCATE RESOURCES TO THE ENGAGEMENT

The final step in planning the engagement is to determine the necessary resources needed to carry out the planned tasks. This step involves: 1) estimating, or budgeting, the resources that are needed, 2) allocating the appropriate human resources to the engagement, and 3) scheduling those resources to ensure the engagement is completed on time.

Engagement Resources:

- Internal auditors
- Other people (internal/external)
- Travel
- Technology
- Other

Budgeting

The first task is to estimate the resources that are needed to conduct the engagement. A budget should be prepared that considers the number of hours needed to complete the engagement, as well as other costs that may be required:

- **Hours needed to complete the engagement.** An experienced internal auditor is in a position to develop a reasonable estimate of the number of hours it will take to complete the planning, performing, and communicating phases of an engagement. The estimate should be realistic, but it cannot always be precise as there may be unexpected events that can delay an engagement (for example, unavailability of key process-level employees, delays in obtaining requested information, or illness of internal auditors). It may be appropriate to allow for a variance from the estimate (for example, +/- 10%).
    - If outside services are needed to supplement the skills from the audit team, these must also be considered; this is discussed further under Scheduling.
- **Other costs.** In addition to the human resource costs, some engagements may require additional expenditures. Common examples include:
    - Travel and related costs, when the engagement must be performed, all or in part, away from the internal auditors' location.
    - Technology costs, when access to unique or nonroutine technology is needed to complete the engagement (for example, software licenses for data analysis and network security analysis).
    - Supplies, when nonroutine items are needed (for example, steel-toe shoes or hardhats for inventory count observations, or special paper or ink for deliverables that include many pictures or colored charts and graphs).

Typically, the lead internal auditor on the engagement has the experience to prepare these budgets and will be held accountable for managing the engagement according to budget parameters. The chief audit executive (CAE) relies on the effectiveness of engagement budgeting when determining the overall department budget. Refer to chapter 9, "Managing the Internal Audit Function," for more details.

Strategic Sourcing

Supplements the in-house internal audit function through the use of third-party vendor services for the purposes of gaining subject matter expertise for a specific engagement or filling a gap in needed resources to complete the internal audit plan.

Allocating Human Resources

Once the engagement budget has been determined, it is time to identify and allocate the resources needed to complete the engagement. The allocation of human resources is the most important and challenging task. This involves answering the following questions:

- What types of skills are needed on this engagement (for example, financial reporting or IT)?
- What previous experience will be required on the engagement (for example, knowledge about the area or previous experience with similar engagements)?
- Who in the department has the skills and experience to meet these needs?
- Is there a need for any specialty skills that do not exist within the internal audit function (for example, derivatives expertise and environmental expertise)? If so, where can these skills be obtained at a reasonable cost?
- Are there professional development considerations that might impact the allocation of resources to this engagement? For example, do certain internal auditors need a particular type of experience to help them learn and grow professionally?

- Are there any other unique departmental considerations that may impact which internal auditors should be assigned to the engagement?

Scheduling

After determining the appropriate human resources, the next task is to formally schedule those resources to the engagement. Resource scheduling can be a very dynamic process, and the following items need to be considered:

- **Availability of key process personnel**. Although it may be convenient for the internal audit function to start an engagement on a certain date, the timing may not work for process personnel. There may be certain times of the month or quarter that are inconvenient (for example, the period when accounting personnel are focused on closing the books). Additionally, the timing of the engagement may need to be changed due to absences of key personnel (travel, vacation, training, etc.), or department initiatives that will divert the attention of key personnel to other matters.

- **Availability of engagement resources**. Similar to key process personnel, internal audit employees may have other commitments (for example, vacations, training, department initiatives, etc.) that could impact the scheduling of an engagement.

- **Availability of outside resources**. If specialty skills or additional manpower are needed to complete an engagement, the availability of those resources also must be considered. Sometimes, the service firms providing such resources have schedules that differ from the organization's (for example, different holidays, block training weeks, or internal initiatives).

- **Availability of key reviewers**. Even if the key engagement resources are available to complete the fieldwork, the internal audit manager or director also must be available to perform the level of review required on an engagement, otherwise its completion may be delayed.

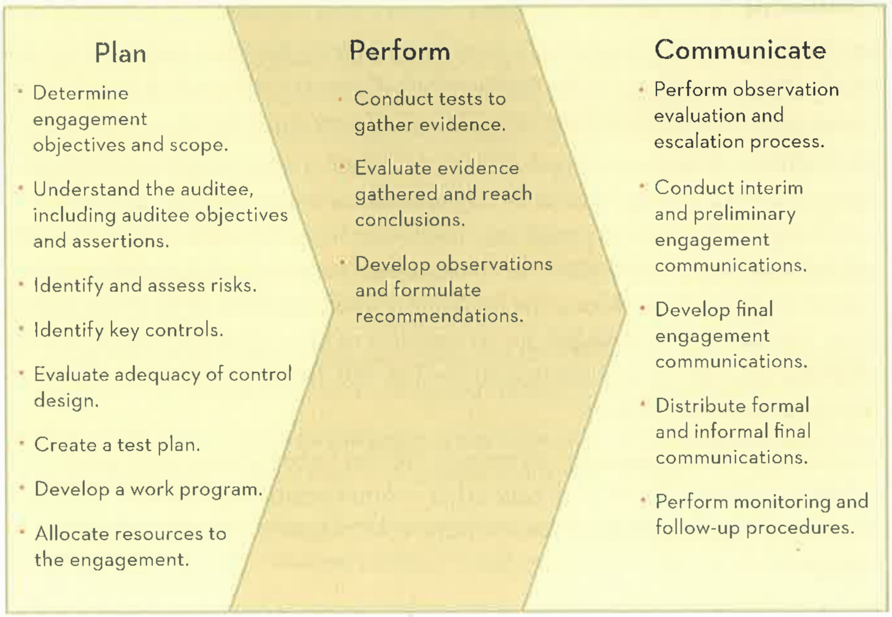
Once the allocation and scheduling of resources is completed, the fieldwork is ready to commence. Exhibit 13-13 highlights the next fundamental phase in the assurance engagement process: performing the engagement. The essential steps involved in the performance phase are also listed in this exhibit.

CONDUCT TESTS TO GATHER EVIDENCE

At this point, the assurance engagement transitions from the planning phase to the performing phase. The testing approach developed in the planning phase and outlined in the Risk and Control Matrix (refer to exhibit 13-11) must now be executed to determine whether the controls are operating as designed. As each test is conducted, evidence will be gathered to support the internal auditor's conclusions regarding how effectively the controls are operating.

The results of testing can be documented in the Risk and Control Matrix. The example Risk and Control Matrix shown in exhibit 13-11 can be expanded by adding a column to include the Results of Testing. Exhibit 13-14 provides an example of what this matrix might look like. Note that the Key Control column from exhibit 13-11 has been removed for this illustration. This was done to simplify this example as the Key Control column is not critical to the thought pro - cess at this point.

EXHIBIT 13-13
THE ASSURANCE ENGAGEMENT PROCESS



Plan

- Determine engagement objectives and scope.
- Understand the auditee, including auditee objectives and assertions.
- Identify and assess risks.
- Identify key controls.
- Evaluate adequacy of control design.
- Create a test plan.
- Develop a work program.
- Allocate resources to the engagement.

Perform

- Conduct tests to gather evidence.
- Evaluate evidence gathered and reach conclusions.
- Develop observations and formulate recommendations.

Communicate

- Perform observation evaluation and escalation process.
- Conduct interim and preliminary engagement communications.
- Develop final engagement communications.
- Distribute formal and informal final communications.
- Perform monitoring and follow-up procedures.

EXHIBIT 13-14
EXAMPLE RISK AND CONTROL MATRIX WITH RESULTS OF TESTING

Process-Level Risk	Testing Approach	Results of Testing
Risk A – Definition (associated process-level objectives)	• Test A • Test B • Test C	• Result A • Result B • Result C
Risk B – Definition (associated process-level objectives)	• Test A • Test D • Test E	• Result A • Result D • Result E

BOOKS 2 BUY **Example**: Exhibit 13-15 shows a partially completed Risk and Control Matrix for the cash disbursements function. At the end of each Results of Testing entry is a cross-reference to the audit working papers where the test was documented (X-#). Examples of two tests are included in exhibits 13-16 and 13-17. If an exception or deficiency was found during testing, reference is also made to the working paper documenting the engagement observation (Z-#). Examples of select working papers supporting this testing are shown in exhibits 13-16 and 13-17.

In some circumstances, the results of testing may indicate a potential gap or issue, but the results may be inconclusive. In such instances the internal auditor may need to do additional testing or revise the testing approach to be able to reach the necessary conclusions that are discussed in the following section.

EVALUATE EVIDENCE GATHERED AND REACH CONCLUSIONS

Conducting audit tests allows the internal auditor to gather the evidence needed to evaluate the design adequacy and operating effectiveness of key controls and reach conclusions about the effectiveness of the process or area under review. The following are questions that the internal auditor may need to answer, depending on the charter of the internal audit function, the objectives of the engagement, and the expectations of the auditee and other internal audit stakeholders:

- Are the key controls designed adequately?
- Are the key controls operating effectively, that is, as they are designed to operate?
- Are the underlying risks being mitigated to an acceptable level?
- Overall, do the design and operation of the key controls support achievement of the objectives for the process or area under review?

EXHIBIT 13-15 EXAMPLE RISK AND CONTROL MATRIX FOR CASH DISBURSEMENTS

Process-Level Risk	Testing Approach	Results of Testing
Expectations Risk – Lack of well-developed and well-articulated policies, procedures, and other forms of communications from management may result in employees carrying out their responsibilities in a manner that is inconsistent with management's expectations and desires (accuracy, timeliness, recording, compliance, and approval objectives).	1. Review delegation of authority policy and evaluate whether it appears to be current and appropriate given the present responsibilities of individuals. 2. Select a sample of 80 disbursements (10% risk, 5% tolerable deviation rate, and 1% expected deviation rate) and test for approvals in accordance with the policy. 3. Review and discuss procedures with accounts payable personnel to determine whether the procedures accurately reflect the required tasks and could be followed by others.	1. The delegation of authority policy lists seven individuals who are no longer with the company. Additionally, nine individuals who are new in their positions or new to the company should be on the list but are not (Z-3). All other responsibilities appeared to be appropriate (WP X-1). 2. No observations were identified in this test; all approvals were in accordance with the delegation of authority policy, after taking into consideration necessary changes to the policy as described on working paper X-1 (WP X-2). 3. Based on discussions and observations, it appears that the documented procedures continue to be appropriate, current, and well-understood (WP X-3).
Duplicate Payments Risk –Failure to identify multiple inputs of invoices may result in duplicate payments to vendors that could go undetected or prove difficult to collect (accuracy and recording objectives).	1. Test the system's duplicate invoice functionality by attempting to enter duplicate invoice numbers. Also, test what happens if a digit or symbol is added to the end of a duplicate invoice number. 2. Since the system only alerts the user to the possibility of a duplicate payment, extract 100% of the payments for the last year and test for possible duplicate payments. 3. Test to ensure the cash disbursements flag operates as designed.	1. The system rejected all duplicate invoice entries. However, it accepted invoices where a digit or symbol was added to the end of the invoice number, creating the opportunity for a duplicate payment (Z-4) (WP X-4). 2. Fourteen (14) potentially duplicate payments were identified, totaling $357,782. A/P management is following up on all items, which appear to be due to the deficiency noted on working paper X-4 (X-5). 3. The test transactions for this control were all flagged in the cash disbursements run. The 14 transactions identified in the duplicate payments test were from different disbursement batches and, thus, were not flagged by this control (WP X-6).

(continued next page)

EXHIBIT 13-15
EXAMPLE RISK AND CONTROL MATRIX FOR CASH DISBURSEMENTS, *(cont.)*

Process-Level Risk	Testing Approach	Results of Testing
Timeliness Risk - Inability to process payments on a timely basis may result in fines or penalties (for late payments) or missed discounts (timeliness and cash flow objectives).	**1.** Test the system functionality for the three key controls. **2.** Using data analysis software, compute the difference between the payment date and invoice date for 100% of payments made during the last year. Follow up on any late payments or missed discounts.	**1.** The benchmark testing of all three controls indicated that they operated as designed (WPs X-7, X-8, and X-9). **2.** There were 172 payments (1.1% of total disbursements) made late. Late payment fees were charged on 21 of the payments. Follow-up by A/P management resulted in such fees being waived for nine of the 21 late payments. Fees paid totaled $24,489 (Z-5). There were no missed discounts identified (WPs X-10 and X-11).
Systems Access Risk - Lack of effective logical security practices may create opportunities for unauthorized individuals to access, manipulate, or delete key disbursements data (accuracy, recording, and cash flow objectives).	**1.** IT logical security is tested in a separate audit by the IT audit specialists. Check the results of that audit to ensure there were no design deficiencies relating to the cash disbursements security. **2.** Discuss with the accounts payable manager the process for confirming access rights. Examine documentation supporting this procedure.	**1.** No design deficiencies were noted in the IT logical security testing (WP X-12). **2.** Based on the discussion and observations of appropriate documentation, access rights appear to be reviewed appropriately and timely (WP X-13).

The answers to these questions require the internal auditor to reach conclusions based on the information gathered during the planning phase of the audit and the execution of audit tests. While the conclusions typically require a great deal of judgment, there is a logical thought process that flows from the steps described throughout this chapter. These conclusions can be documented in the Risk and Control Matrix. Similar to past tasks, the example Risk and Control Matrix shown in exhibit 13-14 can be expanded by adding a column to include the Testing Conclusions. Exhibit 13-18 provides an example of what this matrix might look like. Note that the Testing Approach column from exhibit 13-14 has been removed for this illustration. This was done to simplify this example as the Testing Approach column is not critical to the thought process in this example. However, as previously stated, all of the columns are necessary to evaluate the design adequacy and operating effectiveness of key controls when conducting an assurance engagement. Note that instead of documenting identified gaps in this conclusion column, some internal audit functions may create a separate log for gathering preliminary audit observations.

Operating Effectiveness

Assessment of whether management has executed (operated) the controls in a manner that provides reasonable assurance that risks have been managed effectively and that the goals and objectives will be achieved efficiently and economically

BOOKS 2 BUY **Example:** Exhibit 13-19 shows a partially completed Risk and Control Matrix for the cash disbursements function.

EXHIBIT 13-16
EXAMPLE OF EXPECTATIONS RISK TEST #1

X-1

Prepared by: Steve Braveheart
Reviewed by: David Richardson

Purpose of Test: To test whether the delegation of authority policy is complete, appropriate, and current relative to establishing the authority for approving procurement and disbursement transactions.

Testing Approach: Review delegation of authority policy and evaluate whether it appears to be current and appropriate given the present responsibilities of individuals.

Sampling Considerations: There are 147 individuals included in this policy. Given the small population and the nature of the assertion (that all and only appropriate individuals are delegated authority to approve procurement and disbursement transactions), a non-statistical sample was chosen. Beginning with the first person on the list, every third person was evaluated as to the appropriateness of their inclusion on the delegation of authority policy.

Results of Testing: Following are the results of the test:

- After completing the initial sample, three individuals were identified who where no longer employees of the company.
- Because of this observation, the test was extended to include all 147 individuals, which indicated that seven individuals on the list were no longer employees, one of whom had left the company 15 months ago.
- Recognizing that the list was not being updated timely, the auditor also tested new employees and promotions during the preceding 18 months and found that five of the new employees and four promoted employees should have been on the list based on their assigned responsibilities.

Conclusion: Based on the results of testing, the control relating to reliance on the delegation of authority policy is **not** operating effectively on a consistent basis due to failure to update the list timely for changes in employee status (see engagement observation in working paper Z-3).

DEVELOP OBSERVATIONS AND FORMULATE RECOMMENDATIONS

After completing the testing, gathering and evaluating the evidence needed, and reaching conclusions, the internal auditor must develop the observations and formulate the recommendations that should be communicated to the auditee and other internal audit stakeholders. The key elements of a well-written observation are discussed briefly in chapter 12, and further elaboration of these elements can be found in chapter 14.

> BOOKS 2 BUY **Example**: Five potential audit observations were identified. The four key elements of audit observations are documented in exhibit 13-20 for each of these five audit observations.

The examples referred to above reflect the documentation that the internal auditor can complete while conducting the fieldwork. However, there is additional information that may be necessary before including such observations in an engagement communication. Refer to chapter 14, where the resolution and reporting of observations are discussed in further detail.

OPPORTUNITIES TO PROVIDE INSIGHT

There are many opportunities for the internal audit function to add value by providing insight during assurance engagements. Exhibit 13-21 describes 10 opportunities for the internal audit function to provide insight through performance of assurance engagements.

EXHIBIT 13-17
EXAMPLE OF DUPLICATE PAYMENTS RISK TEST #2

X-5
Prepared by: Jerry Coxswain
Reviewed by: David Richardson

Purpose of Test: To test whether any potentially duplicate payments were made during the last year.

Testing Approach: Since the system only alerts the user to the possibility of a duplicate payment, extract 100% of the payments for the last year and test for possible duplicate payments.

Sampling Considerations: It is possible to extract all of the disbursements made during the last 12 months. Therefore, all disbursements made during that time frame were extracted from the cash disbursements system. Using the generalized audit software licensed by the department, we selected all payments of equal amounts for a given vendor, regardless of invoice number or payment date. We also reviewed payments of the same amount regardless of vendor to determine if there were payments to a vendor that may have been using different names.

Results of Testing: After analyzing all of the disbursements that met one of our criteria, we determined that the following represent potential duplicate payments:

Vendor Amount	Invoice #	Payment Date	Vendor Amount	Invoice #	Payment Date
ABC Office Supplies $2,316.50	8651032	February 21, 20xx	Newtown Catering $685.73	NC1568	February 14, 20xx
ABC Office Supplies $2,316.50	8641032A	February 28, 20xx	Newtown Catering $443.65	NC1598	March 17, 20xx
Alpha Printing and Binding $125,414.22	48637899	March 15, 20xx	Newtown Catering $443.65	NC1598A	March 31, 20xx
Alpha Printing and Binding $125,414.22	48637899-1	March 15, 20xx	Newtown Catering $772.43	NC1677	July 4, 20xx
Alpha Printing and Binding $86,213.47	48637977	May 15, 20xx	Newtown Catering $772.43	NC1677A	July 31, 20xx
Alpha Printing and Binding $86,213.47	48637977-1	May 31, 20xx	Newtown Catering $875.00	NC1751	October 31, 20xx
Alpha Printing and Binding $91,236.17	48638102	August 15, 20xx	Newtown Catering $875.00	NC1751-1	November 30, 20xx
Alpha Printing and Binding $91,236.17	48638102*	August 31, 20xx	Newtown Catering $966.47	NC1803	December 12, 20xx
Daily Shipping Services $487.95	12587	April 22, 20xx	Newtown Catering $966.47	NC1804	December 31, 20xx
Daily Shipping Services $487.95	12587X	April 22, 20xx	Spellmen Training $7,500.00	667305832	June 18, 20xx
Dewey Cheatem Tax Services $19,495.00	489752	April 30, 20xx	Spellmen Training $7,500.00	667305833	June 18, 20xx
Dewey Cheatem Tax Services $19,495.00	489753	April 30, 20xx	Thompson Florists $125.82	1567	August 22, 20xx
Dewey Cheatem Tax Services $21,250.00	489960	September 30, 20xx	Thompson Florists $125.82	156X	August 31, 20xx
Dewey Cheatem Tax Services $21,250.00	489961	September 30, 20xx			
TOTAL DUPLICATE AMOUNTS					**$357,782.41**

Conclusion: It appears that duplicate payments are being made in instances when invoices are presented twice, either with slightly different invoice numbers or with the same invoice number and the individual entering the invoice has added a digit to the end to prevent the system from rejecting the transaction. Therefore, the controls are **not** operating effectively on a consistent basis (see engagement observation in working paper Z-4).

EXHIBIT 13-18
EXAMPLE RISK AND CONTROL MATRIX WITH TESTING CONCLUSIONS

Process-Level Risk	Results of Testing	Testing Conclusions
Risk A – Definition (associated process-level objectives)	• Result A • Result B • Result C	Conclusion covering Risk A
Risk B – Definition (associated process-level objectives)	• Result A • Result D • Result E	Conclusion covering Risk B

EXHIBIT 13-19
EXAMPLE RISK AND CONTROL MATRIX FOR CASH DISBURSEMENTS

Process-Level Risk	Results of Testing	Testing Conclusions
Expectations Risk – Lack of well-developed and well-articulated policies, procedures, and other forms of communications from management may result in employees carrying out their responsibilities in a manner that is inconsistent with management's expectations and desires (accuracy, timeliness, recording, compliance, and approval objectives).	**1.** The delegation of authority policy lists seven individuals who are no longer with the company. Additionally, nine individuals who are new in their positions or new to the company should be on the list but are not (Z-3). All other responsibilities appeared to be appropriate (WP X-1). **2.** No observations were identified in this test; all approvals were in accordance with the delegation of authority policy, after taking into consideration necessary changes to the policy as described on working paper X-1 (WP X-2). **3.** Based on discussions and observations, it appears that the documented procedures continue to be appropriate, current, and well-understood (WP X-3).	Based on the results of the sample chosen, we can conclude with 90% confidence that the rate of deviations from management's approval policy did not exceed 2.9%, which is less than the tolerable deviation rate of 5%. However, expectations regarding approval authority are not being met due to the fact that the delegation of authority list is not updated consistently to reflect changes in employment status (see working paper Z-3). Therefore, this risk is only partially mitigated.
Duplicate Payments Risk – Failure to identify multiple inputs of invoices may result in duplicate payments to vendors that could go undetected or prove difficult to collect (accuracy and recording objectives).	**1.** The system rejected all duplicate invoice entries. However, it accepted invoices where a digit or symbol was added to the end of the invoice number, creating the opportunity for a duplicate payment (Z-4) (WP X-4). **2.** Fourteen (14) potentially duplicate payments were identified, totaling $357,782. A/P management is following up on all items, which appear to be due to the deficiency noted on working paper X-4 (X-5). **3.** The test transactions for this control were all flagged in the cash disbursements run. The 14 transactions identified in the duplicate payments test were from different disbursement batches and, thus, were not flagged by this control (WP X-6).	While the systematic controls appear to be operating effectively, it is possible to circumvent these controls through submission and input of a different invoice number or adding a digit at the end of the existing invoice number (see working paper Z-4). This represents a deficiency in the design of controls relating to this risk, which, along with the design deficiency noted in working paper Z-2, indicates that this risk is **not** adequately mitigated.

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EXHIBIT 13-19
EXAMPLE RISK AND CONTROL MATRIX FOR CASH DISBURSEMENTS, *(cont.)*

Process-Level Risk	Results of Testing	Testing Conclusions
Timeliness Risk – Inability to process payments on a timely basis may result in fines or penalties (for late payments) or missed discounts (timeliness and cash flow objectives).	1. The benchmark testing of all three controls indicated that they operated as designed (WPs X-7, X-8, and X-9). 2. There were 172 payments (1.1% of total disbursements) made late. Late payment fees were charged on 21 of the payments. Follow-up by A/P management resulted in such fees being waived for nine of the 21 late payments. Fees paid totaled $24,489 (Z-5). There were no missed discounts identified (WPs X-10 and X-11).	All of the systematic controls are operating effectively. However, delays earlier in the process (for example, getting invoices approved and processed by initiators of the purchase) result in a relatively small number of payments being delayed. These delays have resulted in an insignificant financial impact (late-payment fees). Therefore, this risk appears to be only partially mitigated.
Systems Access Risk – Lack of effective logical security practices may create opportunities for unauthorized individuals to access, manipulate, or delete key disbursements data (accuracy, recording, and cash flow objectives).	1. No design deficiencies were noted in the IT logical security testing (WP X-12). 2. Based on the discussion and observations of appropriate documentation, access rights appear to be reviewed appropriately and timely (WP X-13).	The controls appear to be designed adequately and are operating effectively to mitigate this risk.

EXHIBIT 13-20
BOOKS 2 BUY AUDIT OBSERVATIONS FOR CASH DISBURSEMENTS

Z-1

Criteria: All goods received for which title has passed to the company, or services which have been rendered, should be recorded in the financial statements.

Condition: There is no check with users to determine whether any goods or services have been received but not invoiced yet.

Cause: Accounts payable management had not previously considered or recognized the value of performing such a check.

Effect: Unrecorded liabilities, along with the corresponding unrecorded assets or expenses, may result when the books are closed at month-end, quarter-end, or year-end.

Z-2

Criteria: The receipt of goods or services should be recorded and processed only once.

Condition: While the system does alert the A/P clerk to potential duplicate invoices, it does not prevent the A/P clerk from continuing to process such an invoice.

Cause: The system was coded to remind the user, but not to prohibit the user from entering an invoice again if circumstances warranted.

Effect: Liabilities, and the corresponding assets or expenses, may be overstated and funds disbursed inappropriately.

Z-3

Criteria: Authority over the disbursing of funds should only be delegated to individuals whose responsibilities justify such authority.

Condition: The delegation of authority policy lists seven individuals who are no longer with the company. Additionally, nine individuals who are new in their positions or new to the company that should be on the list, are not.

Cause: The delegation of authority policy is updated semi-annually, rather than each time there is a change in personnel or responsibilities of authorized individuals.

Effect: Disbursements may be made that are not in accordance with management's direction.

Z-4

Criteria: The receipt of goods or services should be recorded and processed only once.

Condition: The system rejected all duplicate invoice entries. However, it accepted invoices where a digit or symbol was added to the end of the invoice number, creating the opportunity for a duplicate payment.

Cause: In some instances, the A/P clerks appear to be entering certain invoices a second time when sent by the vendor. The clerks are not recognizing that these invoices may have been received before, and, given the control design deficiency as described in Z-2, are adding a digit to the end to facilitate processing. In other instances, the vendor is issuing a duplicate invoice with a different invoice number (typically one higher than the last one) and the A/P clerks did not detect the potential that these were duplicate invoices.

Effect: Liabilities, and the corresponding assets or expenses, were overstated by $357,782.41 and the same amount of funds were disbursed inappropriately.

Z-5

Criteria: Payments should be made in a timely manner, consistent with management's expectations regarding avoidance of late payment fees.

Condition: There were 172 payments (1.1% of total disbursements) made late resulting in late-payment fees being charged on 21 of the payments. Follow-up by A/P management resulted in such fees being waived for nine of the 21 late payments. Fees paid totaled $24,489.

Cause: For a variety of reasons, invoice approvals were not timely in 19 of the 21 instances; thus, the payments missed the company's disbursement processing deadlines. In the remaining two instances, the delays were a result of management's decisions to withhold payment until a disagreement with the vendor could be resolved.

Effect: The company incurred late payment fees totaling $24,489.

EXHIBIT 13-21
10 OPPORTUNITIES FOR INTERNAL AUDIT TO PROVIDE INSIGHT WHILE CONDUCTING AN AUDIT ENGAGEMENT

1. Facilitate a discussion of key auditee objectives to ensure a consistent understanding among all employees in that area.
2. Share process documentation (flowcharts, etc.) developed during the audit that the auditee can use as a training tool.
3. Share results of data analysis, including any spreadsheets or tools developed that can be used by the auditee in the future.
4. Advise on the sufficiency and comprehensiveness of key performance indicators to help auditee management better monitor performance.
5. Share thoughts on process-level fraud risks and advise on ways to best prevent, deter, or detect potential fraud incidents.
6. Discuss process-level risks identified to ensure auditee has considered such risks in its design of controls and procedures.
7. Share the internal audit team's assessment of such risks to ensure alignment on the inherent level of each risk.
8. Discuss management's tolerance levels related to process-level risks and advise, as appropriate, on areas where potentially too much or too little risk is accepted.
9. Share the internal audit team's assessment of the design of controls and reach agreement on the acceptability of design adequacy.
10. Share the internal audit team's assessment of the operation of controls and reach agreement on the acceptability of operational effectiveness.

SUMMARY

Chapter 12 introduced an expression known as the six Ps: Proper Prior Planning Prevents Poor Performance. This expression means that it is critical to effectively plan engagements to ensure success. Time spent in the planning phase of an engagement likely will pay great dividends later, helping to ensure that the overall audit is conducted effectively, efficiently, and comprehensively.

The first phase of an assurance engagement is the planning phase. The key steps in planning an engagement are:

- **Determine engagement objectives and scope.** Each assurance engagement will be a little different, depending on the reason for performing the engagement and the desired end results. The first step is to establish the objectives of the engagement and outline the scope to articulate the time, geographical, and procedural boundaries.
- **Understand the auditee (including auditee objectives).** To conduct an engagement effectively, the auditor must first understand the auditee's objectives, the tasks undertaken within the area under review to achieve those objectives, and the ways in which performance is monitored and success is measured.
- **Identify and assess risks.** The specific events or scenarios that could prevent the achievement of the auditee's objectives must be identified and assessed. This

assessment typically involves an evaluation of the impact and likelihood of the risk scenarios.

- **Identify key controls.** Key controls are those that, individually or when aggregated with other controls, mitigate the auditee's risk to an acceptable level. While the auditee may have implemented many different controls to achieve a variety of purposes, the key controls are the ones that are truly integral to achievement of objectives.
- **Evaluate the adequacy of control design.** The first key evaluation is the adequacy of control design. This step requires the internal auditor to evaluate whether the controls, if they operate effectively, will mitigate the risks that could prevent the achievement of objectives.
- **Create a test plan.** The test plan outlines how each of the key controls will be tested to help the internal auditor evaluate how effectively those controls are operating. The tests also must be linked to the underlying risks so that any deficiencies identified during testing can be evaluated relative to the impact on risk mitigation.
- **Develop a work program.** A formal work program outlines the key tasks in the engagement process and any judgments made regarding the objectives and scope of the engagement.
- **Allocate resources to the engagement.** Based on the tasks to be performed during an engagement, personnel with the appropriate level of experience and skills must be identified and assigned to ensure the engagement is completed timely and effectively.

Planning an engagement requires more than just carrying out the steps above. It also requires effective documentation of the information gained and judgments made. While the format of such documentation created during the planning phase may take various forms, typically it includes:

- A planning memorandum or checklist to document the audit approach and judgments made.
- Flowcharts or narrative write-ups describing key process flows.
- A risk map that depicts the judgments made regarding process-level risks.
- A Risk and Control Matrix that documents the link between risks, controls, testing approach, results of testing, and testing conclusions.

The second phase of an assurance engagement involves performing the tests that were outlined in the planning phase and evaluating the results. Specifically, the internal auditor conducts the following steps:

- **Conduct tests to gather evidence.** This involves completing each of the tests identified during the planning stage. During this step the internal auditor gathers and documents sufficient appropriate evidence to support the conclusions regarding how effectively the controls are operating.
- **Evaluate evidence gathered and reach conclusions.** This step requires the internal auditor to consider the initial evaluation of control design as well as the results of testing, and form a conclusion as to whether the underlying risks are being mitigated to an acceptable level.

EXHIBIT 13-22
RISK AND CONTROL MATRIX

Process-Level Risk	Key Control	Design Adequacy	Testing Approach	Results of Testing	Testing Conclusions
Risk A – Definition (associated process-level objectives)	• Control A • Control B • Control C	The indicated key controls are adequate to manage this risk to an acceptable level.	• Test A • Test B • Test C	• Result A • Result B • Result C	Conclusion covering Risk A
Risk B – Definition (associated process-level objectives)	• Control A • Control D	The indicated key controls are not adequate to manage this risk to an acceptable level (describe design gap).	• Test A • Test D • Test E	• Result A • Result D • Result E	Conclusion covering Risk B
Rick C – Definition (associated process-level objectives)	• Control C • Control E • Control F	The indicated key controls are adequate to manage this risk to an acceptable level.	• Test F • Test G • Test H	• Result F • Result G • Result H	Conclusion covering Risk C

- **Develop observations and formulate recommendations.** Finally, any control deficiencies identified during the engagement should be documented to facilitate discussion with appropriate management and, ultimately, communication to appropriate stakeholders.

A Risk and Control Matrix is an effective way of documenting the many judgments made and results of testing during the assurance engagement. A complete matrix template is shown in exhibit 13-22.

REVIEW QUESTIONS

1. What are the four reasons for conducting an assurance engagement?
2. Why is establishing engagement objectives important?
3. What are five types of scope statements?
4. What are the five typical exceptions that may be identified during testing in an engagement?
5. Which type of process objective is the most common and why?
6. What types of information may process owners have available that will help an internal auditor understand the process?
7. Why might an internal auditor perform analytical procedures during the engagement planning process?
8. Why might an internal auditor perform CAATs during the engagement planning process?
9. Why must an internal auditor understand how entity-level controls may influence the performance of a process before auditing that process?
10. What are the three most common ways of documenting a process flow?
11. How does a detailed flowchart differ from a high-level flowchart?
12. What six categories of information should narrative memoranda generally include?
13. Why is it important for internal auditors to identify and understand key performance indicators for a process?
14. Why might the inherent likelihood of a risk increase if there is the potential for fraud?
15. What is the difference between a process-level risk scenario and a process-level risk?
16. What three steps are generally involved in conducting a process-level risk assessment?
17. What three key steps should an internal auditor follow when gaining an understanding of management's risk tolerance levels?
18. Which of the nine examples of common control types typically occur before a transaction is completed?
19. What are the key questions that must be answered when evaluating the design adequacy of controls?
20. What factors should an internal auditor consider when determining which controls to test?
21. When developing a testing approach, what decisions must be made about the tests to be performed?
22. What are the key tasks covered in the typical work program?
23. What information should an internal audit engagement budget include?
24. What questions need to be answered when allocating human resources to an engagement?
25. What four items should be considered when scheduling an engagement?
26. What four questions must be answered to evaluate the evidence gathered from audit testing?
27. What four elements are included in a well-written audit observation?
28. What are the six columns included in a completed Risk and Control Matrix?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. Which of the following is not likely to be an assurance engagement objective?

   a. Evaluate the design adequacy of the payroll input process.

   b. Guarantee the accuracy of recorded inventory balances.

   c. Assess compliance with health and safety laws and regulations.

   d. Determine the operating effectiveness of fixed asset controls.

2. A process objective stating "All contracts must be approved by an officer of the company before being consummated" is an example of what type of objective?

   a. Strategic.

   b. Operations.

   c. Reporting.

   d. Compliance.

3. Analytical procedures can be applied during which phase(s) of an assurance engagement?

   a. Plan phase.

   b. Perform phase.

   c. Communicate phase.

   d. Plan and perform phases.

4. Which of the following auditee-prepared documents will likely be of greatest assistance to the internal auditors in their assessment of process design adequacy?

   a. Policies and procedures manual.

   b. Organization charts and job descriptions.

   c. Detailed flowcharts depicting the flow of the process.

   d. Narrative memoranda listing key tasks for portions of the process.

5. Which of the following controls is not likely to be an entity-level control?

   a. All employees must receive ongoing training to ensure they maintain their competence.

   b. All cash disbursement transactions must be approved before they are paid.

   c. All employees must comply with the Code of Ethics and Business Conduct.

   d. An organizationwide risk assessment is conducted annually.

6. Which of the following is not typically a key element of flowcharts or narrative memoranda?

   a. Overall process objectives.

   b. Key inputs to the process.

   c. Key outputs from the process.

   d. Key risks and controls.

7. Which of the following external risks is least likely to impact the accuracy of financial reporting?

   a. The standard-setting body in the organization's country issues a new financial accounting standard.

   b. A recent judicial court case increases the likelihood that pending litigation will result in an unfavorable outcome.

   c. Changes in standard industry contracts now allow for netting of payables and receivables.

   d. Competitor pressures cause the organization to pursue new sales channels.

8. Which of the following groups' risk tolerance levels are least relevant when conducting an assurance engagement?

   a. Senior management.

   b. Process-level management.

   c. The internal audit function.

   d. Vendors and customers.

MULTIPLE-CHOICE QUESTIONS

9. Which of the following controls is likely to be least relevant when evaluating the design adequacy of a cash collections process?

   a. Calculating the amount of cash received.

   b. Documenting the rationale for selecting the bank account into which the deposit will be made.

   c. Matching the total deposits to the amounts credited to customers' accounts receivable balances.

   d. Segregating the preparation of deposit slips from the adjustment of customer account balances.

10. An internal auditor determines that the process is not designed adequately to reduce the underlying risks to an acceptable level. Which of the following should the internal auditor do next?

    a. Write the audit report. There's no reason to test the operating effectiveness of controls that are not designed adequately.

    b. Test compensating controls in other (adjacent) processes to see if the impact of the design inadequacy is reduced to an acceptable level.

    c. Test the existing key controls anyway to prove that, despite the design inadequacy, the process is still meeting the process objectives.

    d. Postpone the engagement until the design inadequacy has been rectified.

11. If an internal auditor identifies an exception while testing, which of the following may be appropriate?

    a. Test additional items to determine whether the exception is an isolated occurrence or indicative of a control deficiency.

    b. Gain an understanding of the root cause, that is, the reason the exception occurred.

    c. Draft an observation for the audit report.

    d. All of the above.

12. Which of the following is an appropriate conclusion that can be drawn when the internal auditor identifies an observation from testing controls?

    a. The process objectives cannot be achieved.

    b. The area may be vulnerable to fraud.

    c. Certain risks are not effectively mitigated.

    d. Overall, the process is not operating effectively.

13. Once an observation is identified by the internal auditor, it should be:

    a. Documented in the working papers.

    b. Discussed with the audit committee.

    c. Included in the final audit report.

    d. Scheduled for follow-up.

14. A specific objective of an audit of an organization's expenditure cycle is to determine if all goods paid for have been received and charged to the correct account. This objective would address which of the following primary objectives identified in The IIA's *International Standards for the Professional Practice of Internal Auditing*?

    I. Reliability and integrity of financial and operational information.

    II. Compliance with laws, regulations, and contracts.

    III. Effectiveness and efficiency of operations.

    IV. Safeguarding of assets.

    a. I and II only.

    b. I and IV only.

    c. I, II, and IV only.

    d. II, III, and IV only.

15. In an assurance engagement of treasury operations, an internal auditor is required to consider all of the following issues except:

    a. The audit committee has requested assurance on the treasury department's compliance with a new policy on use of financial instruments.

    b. Treasury management has not instituted any risk management policies.

    c. Due to the recent sale of a division, the amount of cash and marketable securities managed by the treasury department has increased by 350 percent.

    d. The external auditors have indicated some difficulties in obtaining account confirmations.

DISCUSSION QUESTIONS

1. Why is it so important to "begin with the end in mind" when planning an assurance engagement?

2. COSO defines business objectives as "those measurable steps the organization takes to achieve its strategy." With this definition in mind, how can an administrative, task-oriented process have strategic objectives?

3. Management tends to focus on residual risk instead of inherent risk. Why do you think this is so? Why should internal auditors consider both inherent risk and residual risk when planning an assurance engagement?

4. If the internal auditor fails to identify all key process-level risks, what impact might that have on the overall assurance engagement? If the internal auditor determines that certain process-level risks are key when in fact they are not, what impact might that have on the overall assurance engagement?

5. Besides financial reporting impact, what other types of risk outcomes should be considered when assessing the impact of risks?

6. In anticipation of an upcoming engagement, an internal audit team recently toured the company's receiving, warehousing, and production facilities to obtain a better understanding of day-to-day operations. Listed below are selected items noted by the internal audit team during the tour:

   - A large quantity of materials was sitting in a corner near the unloading docks. The receiving manager informed the audit team that the delivery trucks had already left. The materials had not yet been counted or inspected.
   - One section of the warehouse contained large quantities of items with inventory tags from several physical inventory counts. The warehouse manager told the audit team that this was the company's inventory of spare parts that it was required by law to keep on hand for specified time periods.
   - Hazardous chemicals are used in the inventory finishing process. Waste chemicals are stored in large plastic barrels in a designated area of the factory before being shipped for disposal.

   For each item noted by the internal audit team:

   a. Describe the potential business risk(s) associated with the item.
   b. Discuss how the internal auditors' knowledge of the risks identified might affect a subsequent audit of the materials acquisition and production processes.[2]

7. AVF Inc. manufactures several lines of packaging equipment. The company considers product reliability and outstanding customer service to be critical to its success. The customer service department is responsible for:

   - Providing prospective customers with product information.
   - Monitoring spare parts availability.
   - Providing equipment operating and maintenance information to customers.
   - Developing and delivering customer training courses.
   - Responding to customer complaints and making service calls
   - Handling customer warranty claims.
   - Maintaining good customer relations.

   The company recently made a sizeable investment to upgrade its customer service department computer system. The upgrade is expected to improve operational efficiency and customer satisfaction. The outputs of the new system include management reports used to monitor performance in the areas listed above. The audit committee has asked the internal audit function to audit the operational effectiveness and efficiency of the customer service department. This engagement covers the following areas:

   - Security of assets, including information.
   - Compliance with applicable laws and company policies.
   - Reliability of financial records.
   - Effectiveness of performing assigned responsibilities.
   - Valuation of the spare parts inventory.

   a. Discuss why each of the five areas specified by the audit committee may or may not be appropriate for this assurance engagement.

DISCUSSION QUESTIONS

b. Identify three other areas of the customer service department that may warrant the internal auditor's attention.

c. What are the primary audit tasks the internal auditors should perform to evaluate the operational effectiveness and efficiency of the customer service department in meeting the following responsibilities?

- Developing and delivering customer training courses.
- Responding to customer complaints and making service calls.
- Handling customer warranty claims.[3]

8. A staff internal auditor found the following possible deviations from prescribed controls and documented them in her working papers.

Invoice Number	Prescribed Control	Possible Deviation
248	Written authorizations of sales by sales order department.	Verbal authorization by phone by sales order department.
333	Verification of sales order quantities and prices.	No evidence of verification; quantities and prices are incorrect.
377	Verification of sales order quantities and prices.	No evidence of verification, but quantities and prices are correct.
617	Billing department verification of unit prices.	Price verification indicated on invoice; the prices do not agree with the price list in effect at the time of sale.

For each of the items listed above, indicate whether there is or is not a deviation from a prescribed control. Briefly explain your answer.[4]

9. Assuming certain strategic objectives are critical to the success of an organization, what should an internal audit function consider when deciding whether to conduct internal audits that address such objectives? Identify assurance engagement objectives that would and would not be appropriate.

CASES

CASE 1

You are the internal audit senior responsible for conducting an assurance engagement of the XYZ Company payroll process. This process has not been audited for three years and, as such, is due in the normal audit cycle. There have been no significant changes since the previous audit, that is, there were no system changes, no reorganization of personnel, and no substantive procedural changes. However, during the last assurance engagement, the internal audit function identified several observations, some of which were considered significant. The significant observations related to:

- Information pertaining to employees leaving the company was not communicated to the IT department, resulting in extended delays before those employees' systems rights were terminated.
- Hours paid to nonexempt employees were not supported by approved timesheets.
- Amounts withheld for employees were not consistent with elections made by employees.
- The possibility existed that phantom (ghost) employees could be included in the payroll without detection.

Payroll management implemented actions to address all significant observations and the internal audit function conducted limited follow-up procedures to validate that the planned actions were completed. This is the first audit since the follow-up procedures were completed.

The following is pertinent information to the payroll assurance engagement:

- XYZ employs approximately 4,400 employees. Approximately 2,700 of those employees are salaried, the rest are hourly.
- Employees are paid biweekly.
- Hourly employees earn pay at straight time for the first 80 hours in a biweekly pay period, time and a half for the next 20 hours in a pay period, and double time for any hours exceeding 100 hours in a pay period.
- The company utilizes a widely used and market tested payroll package (PayRight) for processing of all payroll transactions.
- The payroll system interfaces with the general ledger system.
- XYZ has established a separate payroll imprest account for the processing of payroll checks. Amounts are deposited in this account from the company's general account to cover any checks presented against the imprest account each day.
- Certain non-payroll items are deducted from the payroll checks, including:
    - Employee loans to cover the cost of extra benefits or computer purchases.
    - Contributions to long-term retirement plans.
    - Contributions to charitable organizations, such as the United Way.
    - Contributions to political action committees (PACs).
- Payroll expenses and the related payroll accruals are considered material to the company.

Based on the above information, perform the following steps to conduct a payroll assurance engagement.

A. Determine at least four payroll department objectives that would be relevant to this engagement.

B. Create a list of potential risk scenarios for each objective.

C. Based on the identified risk scenarios, define and assess the key payroll risks.

   1. You will need to make assumptions regarding impact and likelihood for this assessment. Document the assumptions made.
   2. Also, make assumptions about and document process-level management's risk tolerance levels.

D. Document a potential process flow in a detailed flowchart. Make sure that this flowchart identifies key risks and controls and has at least one potential design inadequacy.

E. Develop potential key performance indicators for the process you documented in step D.

F. Identify which controls are considered key controls. As part of this analysis, document your assumptions regarding the effectiveness of entity-level controls and how such controls affect the payroll process-level controls, if at all.

G. Link the key controls to the identified risks.

H. Prepare a Risk and Control Matrix to cover the appropriate information from steps C through G. Conclude on the overall design adequacy of the payroll process.

I. Create a test plan for gathering evidence regarding the operating effectiveness of all key controls.

J. Develop potential test results of testing for all tests conducted. Make sure to identify at least two observations related to the operating effectiveness of key controls.

K. Add the results of steps I and J above to the Risk and Control Matrix. Document your conclusions on the effectiveness of control operation.

L. Develop observations based on the engagement results that outline the criteria, condition, cause, and effect for each observation.

CASE 2

KnowledgeLeader Practice Case: Performing Effective Analytical Procedures

Background Information

Understanding the detailed tasks in a process is an important step in planning an assurance engagement. However, these tasks describe the way a process is designed to perform, but they provide little indication regarding how effectively they are carried out. Performing analytical procedures is one way internal auditors conduct high-level assessments that may reveal process activities that warrant closer attention and, accordingly, more detailed testing during an assurance engagement. Analytical procedures involve reviewing and evaluating existing information, which may be financial or nonfinancial, to determine whether it is consistent with predetermined expectations.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and identify the characteristic of effective analytical procedures used during the planning phase of an assurance engagement.

C. Submit a brief write-up indicating the results of your research to your instructor.

Sophus
Eric

CHAPTER 14

Communicating Assurance Engagement Outcomes and Performing Follow-Up Procedures

LEARNING OBJECTIVES

- Understand why it is appropriate and necessary to communicate assurance engagement outcomes.
- Identify the different forms of assurance engagement communications.
- Identify the steps involved in creating an effective assurance engagement communication.
- Understand the distribution process for effectively communicating assurance engagement outcomes.
- Understand what is involved in effective monitoring of, and follow-up on, assurance engagement outcomes.

Chapter 12, "Introduction to the Engagement Process," provides an overview of the assurance engagement process that depicts three fundamental phases: planning, performing, and communicating. Chapter 13, "Conducting the Assurance Engagement," discusses the first two phases (planning and performing) in detail. Exhibit 14-2 reviews the components of each of these phases. In this chapter, we focus on the communicating phase.

EXHIBIT 14-1
IPPF GUIDANCE RELEVANT TO CHAPTER 14

- **Standard 2330** – Documenting Information
- **Standard 2400** – Communicating Results
- **Standard 2410** – Criteria for Communicating
- **Standard 2420** – Quality of Communications
- **Standard 2421** – Errors and Omissions
- **Standard 2430** – Use of "Conducted in Conformance with the *International Standards for the Professional Practice of Internal Auditing*"
- **Standard 2440** – Disseminating Results
- **Standard 2500** – Monitoring Progress
- **Standard 2600** – Communicating the Acceptance of Risk

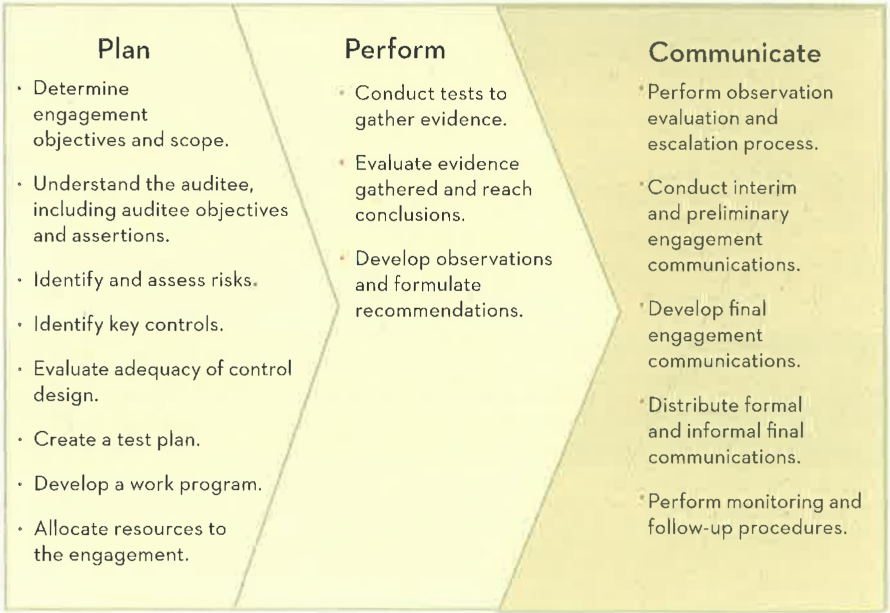
We begin by outlining why it is appropriate and necessary to communicate engagement outcomes. We identify and explain the different forms of communication used to disseminate assurance engagement results and delineate the appropriate use for each one. We also outline the steps involved in creating the appropriate communication for the engagement performed and the distribution process to communicate assurance engagement outcomes effectively. Finally, we identify the necessary steps to monitor and perform follow-up procedures on engagement outcomes that have been communicated.

Because so many engagement communications involve reporting on the design adequacy and operating effectiveness of controls, here, as in chapter 6, "Internal Control," we use the Committee of Sponsoring Organizations of the Treadway Commission's (COSO's) *Internal Control – Integrated Framework* to study the engagement communication process. It is important to note, however, that many assurance engagements are performed with a scope intended to assess or evaluate controls related to matters more narrowly focused than an overall assessment of controls of a business process or area, such as accuracy of account balances, compliance with certain regulations or operating policies and procedures, or the achievement of specific business objectives. In those cases, the corresponding engagement communications will focus on, and provide management with, independent feedback on the internal audit function's results of assessing such matters. The content of such communications will vary somewhat from the control illustrations provided throughout this chapter, but the concepts, methodologies, and approaches described are still applicable.

ENGAGEMENT COMMUNICATION OBLIGATIONS

As discussed in detail in chapter 9, "Managing the Internal Audit Function," the chief audit executive (CAE) has the responsibility to "report periodically to senior management and the board on the internal audit activity's purpose, authority, responsibility, and performance relative to its plan, and on its conformance with the *Standards*. Reporting must also include significant risk and control issues, including fraud risks, governance issues, and other matters that require the attention of senior management and/or the board" (IIA Standard 2060: Reporting to Senior Management and the Board). The CAE evidences the completion of these professional responsibilities by periodically reporting, among other things, the results of assurance engagements to senior management and the audit committee during routinely scheduled meetings throughout the year.

EXHIBIT 14-2
THE ASSURANCE ENGAGEMENT PROCESS



Plan

- Determine engagement objectives and scope.
- Understand the auditee, including auditee objectives and assertions.
- Identify and assess risks.
- Identify key controls.
- Evaluate adequacy of control design.
- Create a test plan.
- Develop a work program.
- Allocate resources to the engagement.

Perform

- Conduct tests to gather evidence.
- Evaluate evidence gathered and reach conclusions.
- Develop observations and formulate recommendations.

Communicate

- Perform observation evaluation and escalation process.
- Conduct interim and preliminary engagement communications.
- Develop final engagement communications.
- Distribute formal and informal final communications.
- Perform monitoring and follow-up procedures.

Assurance engagements, in part, provide evidence of the internal audit function's independent assessments of how effectively the organization's risks are mitigated. These individual assessments, when taken in the aggregate, help corroborate and support senior management's assertions regarding the design adequacy and operating effectiveness of the organization's overall system of internal controls. This is an example of how the internal audit function serves as a layer of assurance in the Three Lines of Defense model discussed in chapter 9.

Communication is an integral part of any assurance engagement and occurs throughout the engagement process. Results are communicated in various ways, including memoranda, outlines, discussions, and draft working papers. In conjunction with concluding an engagement, final results are communicated to affected parties. This final engagement communication is often referred to as an "audit report" and is the formal way an internal audit function communicates the results of an engagement to management and other appropriate parties relying on the engagement outcomes.

As explained in chapter 13, individual assurance engagements are designed to meet specific audit objectives. These audit objectives are directly tied to the annual risk assessment and internal audit plan. This chapter focuses on reporting on assurance engagements and the follow-up procedures related to observations identified during individual assurance engagements.

Chapter 13 also outlines the steps of conducting an assurance engagement. During an assurance engagement, the internal audit function tests controls to ensure that they are designed adequately and are operating effectively to meet specific control assertions (objectives). Exhibit 14-3 describes some of these fundamental control assertions, as well as the more traditional financial statement assertions. An observation is indicated if, during testing, the internal audit function concludes that any of the controls identified in the engagement are not designed adequately or operating effectively (as intended). Once an observation is identified, however, there are several steps the internal audit function must go through to determine what impact, if any, the observation has on the internal audit function's evaluation of whether the related controls are designed adequately and operating effectively. Additionally, the internal audit function must consider the impact indicated observations have on communication obligations under The IIA's *International Standards for the Professional Practice of Internal Auditing*, as described later in this chapter. Of course, an engagement will occasionally result in no observations. Even if no observations are identified in an engagement, a formal, final communication is still necessary to indicate this fact and to fully discharge the internal audit function's obligations under the *Standards*.

EXHIBIT 14-3 CRITERIA FOR ASSESSING MANAGEMENT'S ASSERTIONS

Criteria for Assessing Management's Control Assertions	
Authorization	Did an approved party authorize the transaction?
Validity	Did the transaction or underlying event actually occur?
Accuracy	Were the terms, amounts, etc. correct?
Timeliness	Was everything recorded in the proper period?
Confidentiality	Was the information kept private?
Integrity	Was the information free from corruption and alteration?
Availability	Was the information stored and readily available?

Criteria for Assessing Management's Financial Statement Assertions	
Existence or occurrence	Is everything that is there supposed to be there? Did reported events actually occur?
Completeness	Is everything that is supposed to be there really there?
Rights and obligations	Are the items real, and are they authorized and approved?
Valuation or obligation	Are the items accurately calculated and recorded?
Presentation and disclosure	Are items properly classified?

To determine the communication obligations, the internal audit function will progress through a series of steps that allows them to evaluate factors affecting each individual observation relative to its impact, likelihood, classification, and the way it affects the mitigation of risk. The internal audit function also must determine the cause of the observation, specifically whether the control in question is designed inadequately or operating ineffectively. After those factors have been identified for each observation detected during an engagement, the internal audit function must use judgment to determine the aggregate impact of all observations taken together. For example, an engagement might result in three observations, none of which individually constitutes a "significant" observation. However, the internal audit function might determine that the three observations, when taken together, do constitute a "significant" observation. While the process of evaluating observations applies to all controls whether they are related to operations, compliance, or reporting, as discussed in chapter 6, the assessment of internal control over financial reporting and disclosure controls and procedures requires additional consideration of specific communication obligations dictated by the specific financial reporting regulations of the countries in which a given organization operates. Consequently, when communicating an observation regarding a control that pertains to financial reporting, the internal audit function has less discretion when deciding how and to whom that communication should be made.

Exhibit 14-4 illustrates this complex process of determining the appropriate escalation and form of assurance engagement communication. It shows the various combinations of judgments that the internal audit function will encounter when determining the appropriate escalation and form of assurance engagement communication. This final communication has particular significance because it includes the internal audit function's independent assessment of the design adequacy and operating effectiveness of the controls covered within the scope of the assurance engagement in question, as well as an independent assessment of management's opinion relative to the controls covered by the assurance engagement. Taken collectively, the final communications from all of the engagements included in the annual internal audit plan form the basis on which the internal audit function may provide support for management's assertions on the organization's system of internal controls.

Although determining how and to whom to communicate observations requires the internal audit function to make judgments throughout the process, exhibit 14-4 illustrates how this process can be broken down into manageable steps. The process begins with determining whether any observations were identified during execution of the assurance engagement and concludes with direction on how and to whom to communicate observations identified during the assurance engagement.

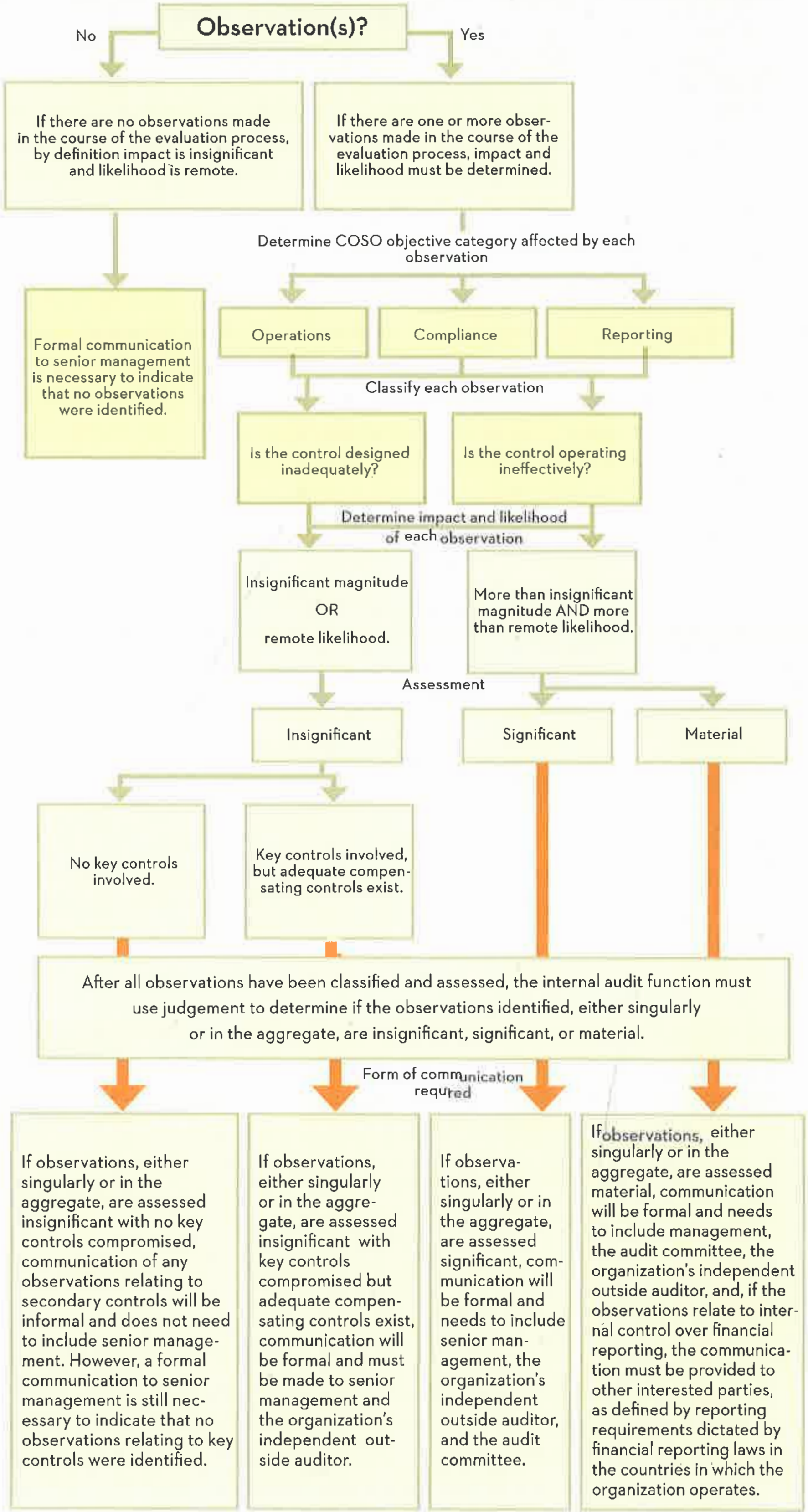
PERFORM OBSERVATION EVALUATION AND ESCALATION PROCESS

As indicated earlier, most observations stem from evidence that a control is not operating effectively. However, an observation also can result from improper design when evaluating the control against fundamental control assertions, such as those listed in exhibit 14-3. Regardless of how an observation is identified, once one or more observations are identified, the internal audit function must assess

Observation

A finding, determination, or judgment derived from the internal auditor's test results from an assurance or consulting engagement.

EXHIBIT 14-4 OBSERVATION EVALUATION AND ESCALATION PROCESS


Observation(s)?
No
Yes
Determine COSO objective category affected by each observation
Operations
Compliance
Reporting
Classify each observation
Is the control designed inadequately?
Is the control operating ineffectively?
Determine impact and likelihood of each observation
Insignificant magnitude OR remote likelihood.
More than insignificant magnitude AND more than remote likelihood.
Assessment
Insignificant
Significant
Material
No key controls involved.
Key controls involved, but adequate compensating controls exist.
Form of communication requred

If there are no observations made in the course of the evaluation process, by definition impact is insignificant and likelihood is remote.

If there are one or more observations made in the course of the evaluation process, impact and likelihood must be determined.

Formal communication to senior management is necessary to indicate that no observations were identified.

After all observations have been classified and assessed, the internal audit function must use judgement to determine if the observations identified, either singularly or in the aggregate, are insignificant, significant, or material.

If observations, either singularly or in the aggregate, are assessed insignificant with no key controls compromised, communication of any observations relating to secondary controls will be informal and does not need to include senior management. However, a formal communication to senior management is still necessary to indicate that no observations relating to key controls were identified.

If observations, either singularly or in the aggregate, are assessed insignificant with key controls compromised but adequate compensating controls exist, communication will be formal and must be made to senior management and the organization's independent outside auditor.

If observations, either singularly or in the aggregate, are assessed significant, communication will be formal and needs to include senior management, the organization's independent outside auditor, and the audit committee.

If observations, either singularly or in the aggregate, are assessed material, communication will be formal and needs to include management, the audit committee, the organization's independent outside auditor, and, if the observations relate to internal control over financial reporting, the communication must be provided to other interested parties, as defined by reporting requirements dictated by financial reporting laws in the countries in which the organization operates.

each observation using an evaluation and escalation process, similar to the one depicted in exhibit 14-4, and determine the implications those observations have on the resulting communications for the area (process) under review. The internal auditors make this determination by progressing through a series of steps that allow them to evaluate factors affecting the observation relative to its impact, likelihood, classification, and the way in which it affects the mitigation of risk. They also must determine the cause of the observation, specifically, whether the control in question is designed inadequately or operating ineffectively. As indicated in exhibit 14-4, each time a decision is made in each step of the process, it is carried through to the next step.

COSO Category

As indicated in chapter 6, many organizations are subject to laws and regulations regarding assessment of their internal controls over financial reporting using an approved internal control framework (e.g., COSO's *Internal Control – Integrated Framework* in the U.S.) or have voluntarily adopted COSO's internal control framework to assess their internal controls. For those organizations, once one or more observations have been identified, the next step is to determine which COSO category the compromised control most directly affects, recognizing that an observation may impact more than one category. Controls mitigate risks that threaten the achievement of objectives in three COSO-defined categories (these categories are similar across the three common frameworks):

- **Operations objectives.** These pertain to effectiveness and efficiency of the entity's operations, including operational and financial performance goals, and safeguarding assets against loss.
- **Reporting objectives.** These pertain to internal and external financial and nonfinancial reporting and may encompass reliability, timeliness, transparency, or other terms as set forth by regulators, standard setters, or the entity's policies.
- **Compliance objectives.** These pertain to adherence to laws and regulations to which the entity is subject.[1]

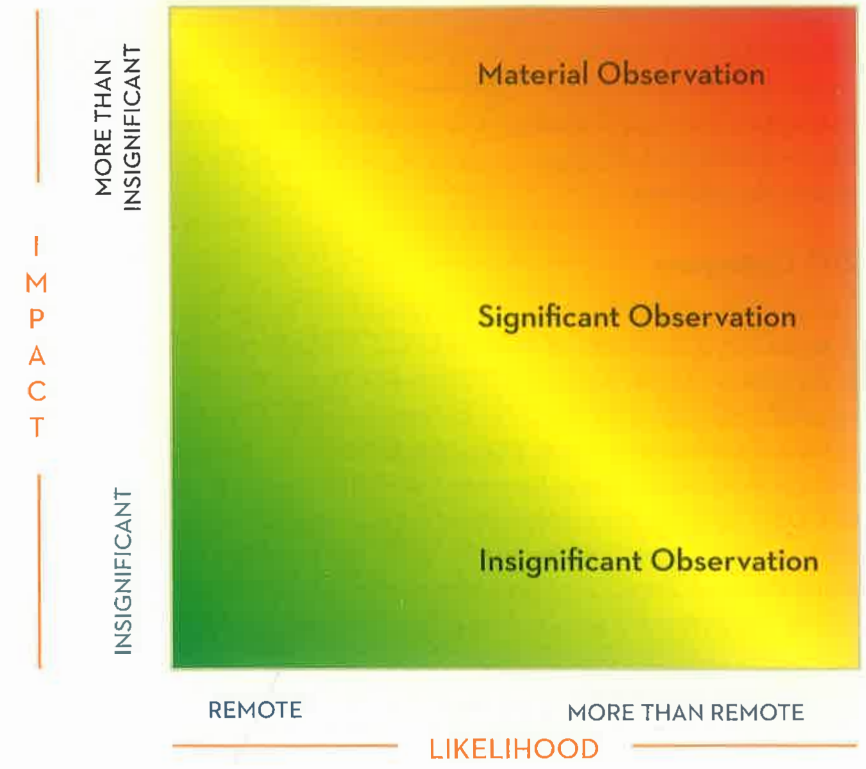
Classification

After the COSO category has been determined for the observation, the next step is to classify the observation in terms of how the control is compromised. The shortcoming will be in one of two areas: either the control is designed inadequately or operating ineffectively.

Impact and Likelihood of the Observations

In the next step the internal audit function determines the impact and likelihood of each observation. This requires that a judgment be made regarding the importance of each observation. In particular, it must be determined whether each observation represents an insignificant, a significant, or a material breach in the ability of the control to mitigate a specific risk or group of risks. After each observation has been labeled as insignificant, significant, or material, the observations will be aggregated and assessed for impact and likelihood. Refer to exhibit 14-5 for a visual depiction of the relationship and interdependency of impact and likelihood.

EXHIBIT 14-5
OBSERVATION EVALUATION MAP



As noted above, there are three different degrees of importance: insignificant, significant, and material. Although the specific terms "significant" and "material" come from the financial reporting regulations that have been instituted in many countries and have particular relevance to internal control over financial reporting and disclosure controls and procedures, they are used here to apply to controls in the areas of operations, compliance, and nonfinancial reporting, as well as financial reporting. The definitions for each of the three terms will be given shortly, but it is important to keep in mind that they are primarily conceptual. When applying them practically, internal audit functions do well to leverage the organization's existing parameters around the acceptable variation in performance that are developed and maintained by its risk management function(s). In many organizations, the acceptable variation in performance levels set by management and the board of directors and used by the internal audit function to evaluate observations take into consideration the planning materiality of the independent outside auditor, which simplifies the observation assessment process and allows the relevant terms and definitions to be consistently applied to controls related to operations, compliance, and nonfinancial reporting in addition to internal control over financial reporting and disclosure controls and procedures. Exhibit 14-6 provides an example of risk prioritization metrics, while exhibit 14-7 illustrates the observation evaluation criteria, including an example of acceptable variation in performance and independent outside auditor planning materiality calculations.

EXHIBIT 14-6
RISK PRIORITIZATION METRICS

Impact (Severity)				
Metric	Score	Description	Range (Pre-Tax Income Basis)	EPS
Impact	1	Small Loss (De Minimis)	< $ Million	< $.$$$
	2	Medium Loss (Insignificant)	≥ $ Million < $$Million	< $.$$$
	3	Large Loss (Significant)	≥ $$ Million < $$$ Million	≥ $.$$$ < $.$$$
	4	Major Impact on Operations (Material)	≥ $$$ Million < $$$$ Million	≥ $.$$$ < $.$$$
	5	Impact Requiring Board Action	≥ $$$$ Million < $$$$$ Million	≥ $.$$$ < $.$$$
	6	Potential of Imperil to Survival	≥ $$$$$ Million	≥ $.$$$

Likelihood (Probability) = Frequency + Warning			
Metric	Score	Description	Range
Frequency	1	Extremely Rare	Once every 5 years or greater
	2	Seldom Occurs	Once every 1-4 years
	3	Periodically Occurs	Once to 11 times a year
	4	Occurs Often	12 or more times a year
Metric	Score	Description	Example
Warning	1	Months or years of warning	Legislative or regulatory change
	2	Hours or days of warning	Windstorm or flood
	3	No warning	Fire or hacker attack

Insignificant

An individual observation, or a group of observations, is considered *insignificant* if the control in question has a remote likelihood (slight chance)[2] of failing or the impact of its failure is trivial. If the observation, or a group of observations, is assessed to be insignificant, the internal audit function must further evaluate whether key controls are involved. This is an important consideration when determining how and to whom the observation will ultimately be reported. If the observation(s) is (are) insignificant with no key controls involved, communication will typically be informal and will not need to include management outside of the area(s) subject to the audit. However, a formal communication to senior management is still necessary to indicate that no observations relating to key controls were identified. Remember that chapter 6 defined key (primary) controls as those that are designed to mitigate significant risks associated with an organization's critical business objectives. If key controls were involved and adequate

Insignificant

Indicates that a control has a remote likelihood of failing or that the impact of its failure is trivial.

compensating controls exist to mitigate the negative impact of the compromised key control, the observation is still considered insignificant. However, communication will be formal, escalated to management external to the area subjected to the audit (that is, those management representatives with oversight responsibility of the area audited), and made available to the organization's independent outside auditor, if requested.

Significant

The term *significant deficiency* is taken from the financial reporting regulations that exist in many countries and refers specifically to observations related to internal control over financial reporting and disclosure controls and procedures. However, as indicated earlier, some organizations choose, for the sake of conformity, to apply the same definitional criteria to observations related to operations, compliance, and nonfinancial reporting. The term *significant observation* is applied in this way here. An individual observation, or a group of observations, is considered significant if the control in question has a more than remote likelihood of failing and the impact of its failure is more than insignificant (that is, significant). If the observation, or a group of observations, is assessed to be significant, communication must be formal and include senior management, the organization's independent outside auditor, and the audit committee.

Significant

Indicates that a control has a more than remote likelihood of failing and that the impact of its failure is more than trivial.

Material

Like significant deficiency, the term *material weakness* is taken from financial reporting regulations and specifically applies to observations related to internal control over financial reporting and disclosure controls and procedures. Again, some organizations apply the same definitional criteria of a material weakness to observations related to compliance, operations, and nonfinancial reporting. The term *material observation* is applied in that manner here. An individual observation, or a group of observations, is considered material if the control in question has a more than remote likelihood of failing and the impact of its failure is not only more than insignificant, but also exceeds the financial statement materiality threshold (or other established thresholds for materiality). Refer to exhibit 14-7 for example observation evaluation criteria. If the observation, or a group of observations, is assessed to be material, communication must be formal and include senior management, the organization's independent outside auditor, and the audit committee. Additionally, if the observation concerns internal control over financial reporting and disclosure controls and procedures, the U.S. Sarbanes-Oxley Act of 2002 and financial reporting regulations in other countries require management to qualify their opinion on internal control over financial reporting (and disclosure controls and procedures) and formulate a remediation plan to correct the weakness identified in the controls in question. Management must continue to qualify its opinion on internal control over financial reporting (and disclosure controls and procedures) until the material weakness (observation) is remediated and management has verified through control retesting that the control in question is designed adequately and operating effectively. If management determines it is necessary to qualify its opinion on internal control over financial reporting (and disclosure controls and procedures), this fact must be reported to its stakeholders according to the laws of the country in which it operates.

Material

Indicates that a control has a more than remote likelihood of failing and that the impact of its failure exceeds the materiality threshold.

EXHIBIT 14-7 OBSERVATION EVALUATION CRITERIA IMPACT (SEVERITY)

Planning Materiality and Acceptable Variation in Performance	
Description	**Range**
Planning Materiality	5% of Pre-Tax Income
Acceptable Variation in Performance	50% of Planning Materiality
Observation Evaluation Criteria	
Observation Classification	**Range**
Insignificant	<20% of Planning Materiality
Significant	20%-50% of Planning Materiality
Material	>50% of Planning Materiality

Documentation of the conclusions reached as a result of performing the observation evaluation and escalation process is essential to evidencing that the internal audit function has appropriately determined how and to whom to communicate observations indicated by the test results of the assurance engagement. As previously discussed, the process begins with determining whether any observations were identified during execution of the assurance engagement and concludes with direction on how and to whom to communicate observations identified during the assurance engagement. Many internal audit functions will use working paper templates or checklists to assist in documenting these results. Exhibit 14-8 is an example of such a template. Additionally, this template helps fulfill the documentation obligations as indicated in the *Standards* and discussed in chapter 13. Specifically, the *Standards* state, "Internal auditors must document relevant information to support the conclusions and engagement results" (IIA Standard 2330: Documenting Information). The International Professional Practices Framework (IPPF) also indicates that information obtained, analyses performed, and support for engagement conclusions and engagement results are to be documented in supporting engagement working papers.

Elements of an Observation:

- Criteria
- Condition
- Cause
- Effects

Chapter 13 includes examples of the various steps involved in performing assurance engagements using the fictitious organization **BOOKS 2 BUY**. Exhibits 14-9 and 14-10 are observation assessment templates that have been completed using the information obtained during the assurance engagement process for **BOOKS 2 BUY** in chapter 13. Exhibit 14-9 documents an observation regarding delegation of authority, which is determined to be insignificant with no key controls affected. Consequently, it will be communicated informally only to management of the cash disbursements process. Exhibit 14-10 documents an observation regarding the potential for duplicate payments. Although this observation is determined to be insignificant, since key controls are affected, this observation would still be

EXHIBIT 14-8
OBSERVATION ASSESSMENT TEMPLATE

Assurance Engagement Audit Observation Description
Engagement Performed: as of date

1.	**Observation Summary:**	
2.	**Criteria** – Standards, measures, expectations, policy, or procedures used in making the evaluation (what should exist).	
3.	**Condition (Facts)** – Factual evidence and description of controls as they exist (what is). What was found through testing.	
4.	**Cause** – What allowed or caused the condition to exist (the why).	
5.	**Effect** – Risk or exposure encountered because the condition is not consistent with the criteria (what could go wrong, both past and possible future impact). Considers both the impact (financial, reputational, safety, etc.) and the likelihood.	
6.	**Compensating Controls** – Other controls in place to mitigate the observation. Includes monitoring.	
7.	**Conclusion** – Detailed analysis, assessment, and justification for evaluation classifications and final conclusions.	
8.	**Detailed Recommendation** – What the internal audit function recommends. This recommendation must reconcile with management's solution as discussed during the preliminary communication process.	
9.	**Management Solution** – What management will do to fix the existing condition or prevent the problem from happening again.	
10.	**Observation Evaluation:** • COSO Category • Classification • Assessment **Evaluation performed by:** • Internal Audit Function • Business Unit Management • Independent Outside Auditor	Reporting ___ Material (Weakness) ___ Operations ___ Significant (Deficiency) _ Compliance ___ Insignificant ___ Inadequate Design ___ Key (Primary) Control___ Ineffective Operation ___ Secondary Control___ Name Date
11.	**Working Paper Reference**	

EXHIBIT 14-9
OBSERVATION ASSESSMENT TEMPLATE: OUTDATED DELEGATION OF DISBURSEMENTS AUTHORITY

Books 2 Buy Holding Corporation
Cash Disbursements Process
Engagement Performed: As of February 10, 20XX

1.	**Observation Summary:**	Outdated Delegation of Disbursements Authority Policy
2.	**Criteria** – Standards, measures, expectations, policy, or procedures used in making the evaluation (what should exist).	Authority over the disbursement of funds should only be delegated to individuals whose responsibilities justify such authority.
3.	**Condition (Facts)** – Factual evidence and description of controls as they exist (what is). What was found through testing.	The delegation of disbursements authority policy lists seven individuals who are no longer with the company. Additionally, nine individuals were identified who are new in their positions or new to the company that should have disbursement authority but are not listed in the policy.
4.	**Cause** – What allowed or caused the condition to exist (the why).	The delegation of disbursements authority policy is updated semiannually and not as changes in personnel or responsibilities of authorized individuals occur.
5.	**Effect** – Risk or exposure encountered because the condition is not consistent with the criteria (what could go wrong, both past and possible future impact). Considers both the impact (financial, reputational, safety, etc.) and the likelihood.	Disbursements may be made that are not in accordance with management's or the board's direction.
6.	**Compensating Controls** – Other controls in place to mitigate the observation. Includes monitoring.	• Once an employee leaves the company, all access rights to the system are eliminated. Therefore, even though seven individuals who have left the company remain in the policy as authorized signers, they could not get online to approve transactions. • A budget-to-actual analysis is performed monthly by all department heads and cost center owners.
7.	**Conclusion** – Detailed analysis, assessment, and justification for evaluation classifications and final conclusions.	Based on the compensating control activities, the risk of an inappropriately authorized disbursement is minimal. While management may make efforts to update the policy more frequently, they are relying on other key controls to mitigate the risk and are willing to accept the current level of risk. *Therefore, this audit observation will not be included in the final report.*

(continued next page)

EXHIBIT 14-9 OBSERVATION ASSESSMENT TEMPLATE: OUTDATED DELEGATION OF DISBURSEMENTS AUTHORITY. (cont.)

8.	**Detailed Recommendation** – What the internal audit function recommends. This recommendation must reconcile with management's solution as discussed during the preliminary communication process.	Management should implement procedures to update named individuals and corresponding disbursement limits listed in the delegation policy.
9.	**Management Solution** – What management will do to fix the existing condition or prevent the problem from happening again.	Management believes the risk is minimal relative to this observation and, therefore, is willing to live with the weakness as identified between policy updates. **Responsibility:** N/A **Target Date:** N/A
10.	**Observation Evaluation:** • COSO Category • Classification • Assessment **Evaluation performed by:** • Internal Audit Function • Business Unit Management • Independent Outside Auditor	Reporting _X_ Material (Weakness) ___ Operations _X_ Significant (Deficiency) ___ Compliance ___ Insignificant _X_ Inadequate Design _X_ Key (Primary) Control ___ Ineffective Operation ___ Secondary Control _X_ Name Date Robert Cratchert mm/dd/yy
11.	**Working Paper Reference**	Z-3, X-1

formally communicated to senior management and the audit committee (and the independent outside auditor, if applicable) in addition to management of the cash disbursements process.

Engagement Observations and Recommendations

All observations are written to include specific information that must be communicated about the observation regardless of what form of communication is indicated as a result of performing the observation evaluation and escalation process described above. In particular, the criteria, condition, cause, and effect all must be included for each observation. As indicated earlier, engagement observations are items that have come to the attention of the internal audit function that can influence management's assertions on the design adequacy and/or operating effectiveness of the controls. As such, they must be handled in a way consistent with, and as indicated by, the evaluation and escalation process. In those cases when formal communication is indicated, in addition to the items listed above (criteria, condition, cause, and effect), the internal audit function makes recommendations to provide the auditee with guidance on appropriate ways to resolve the observation and enhance either the design or operation of the controls.

EXHIBIT 14-10
OBSERVATION ASSESSMENT TEMPLATE: POTENTIAL DUPLICATE PAYMENTS

Books 2 Buy Holding Corporation
Cash Disbursements Process
Engagement Performed: As of February 10, 200X

1.	**Observation Summary:**	Potential Duplicate Payments
2.	**Criteria** – Standards, measures, expectations, policy, or procedures used in making the evaluation (what should exist).	The receipt of goods or services should be recorded and processed only once.
3.	**Condition (Facts)** – Factual evidence and description of controls as they exist (what is). What was found through testing.	The system rejected all duplicate invoice entries. However, it accepted invoices when a digit or symbol was added to the end of the invoice number, creating the opportunity for a duplicate payment.
4.	**Cause** – What allowed or caused the condition to exist (the why).	In some instances, the A/P clerks are possibly entering certain invoices a second time when a duplicate invoice is submitted by the vendor. The clerks are not recognizing that these invoices may have been received before and, given the control design weakness as described in Z-2, are adding a digit to the end to facilitate processing. In other instances, the vendor is issuing a duplicate invoice with a different invoice number (typically one higher than the last one) and the A/P clerks did not detect the potential that these were duplicate invoices.
5.	**Effect** – Risk or exposure encountered because the condition is not consistent with the criteria (what could go wrong, both past and possible future impact). Considers both the impact (financial, reputational, safety, etc.) and the likelihood.	Liabilities and the corresponding assets or expenses were overstated by $357,782.41 and the same amount of funds was disbursed inappropriately.
6.	**Compensating Controls** – Other controls in place to mitigate the observation. Includes monitoring.	A budget-to-actual analysis is performed monthly by all department heads and cost center owners.
7.	**Conclusion** – Detailed analysis, assessment, and justification for evaluation classifications and final conclusions.	While the compensating controls may detect very large duplicate payments, there is still the challenge of collecting the duplicate payment from the vendor. Also, smaller, insignificant payments may not be detected (as proven in the audit test). Management agrees with the observation and has proposed a plan to address the weakness. *Therefore, this audit observation will be included in the final report.*

(continued next page)

EXHIBIT 14-10
OBSERVATION ASSESSMENT TEMPLATE: POTENTIAL DUPLICATE PAYMENTS, *(cont.)*

8.	**Detailed Recommendation** – What the internal audit function recommends. This recommendation must reconcile with management's solution as discussed during the preliminary communication process.	It is recommended that A/P create a query routine that mirrors the tests run by the internal audit function and perform it prior to processing each batch. The results of this query then need to be reviewed by the A/P supervisor and, if any payments are identified as potentially duplicative, those transactions should be removed from the batch and researched before payment.
9.	**Management Solution** – What management will do to fix the existing condition or prevent the problem from happening again.	A query routine will be written that operates similarly to the test performed by the internal audit function. This routine will be run before a batch is processed and reviewed by the A/P supervisor. If there are any potentially duplicate payments identified, these transactions will be removed from the batch and researched before payment. **Responsibility:** A/P Supervisor **Target Date:** mm/dd/yy
10.	**Observation Evaluation:** • COSO Category • Classification • Assessment **Evaluation performed by:** • Internal Audit Function • Business Unit Management • Independent Outside Auditor	Reporting _X_ Material (Weakness) ___ Operations ___ Significant (Deficiency) ___ Compliance ___ Insignificant _X_ Inadequate Design _X_ Key (Primary) Control _X_ Ineffective Operation ___ Secondary Control ___ Name: Elliott Nest Date: mm/dd/yy
11.	**Working Paper Reference**	Z-4, X-5

The IIA Practice Guide "Audit Reports: Communicating Assurance Engagement Results" provides details relative to the elements that must be communicated about each engagement observation. Engagement observations and recommendations emerge from a process of comparing the correct state with the current state and identifying differences, if any, to form the foundation for the internal audit function on which to build the formal engagement communication. Observations and recommendations are based on the following attributes:

Criteria

Criteria

What should exist.

The criteria (correct state) states what should exist. This component of an observation identifies the standard of performance that should be accomplished. The criteria may already be outlined in a policy, procedure, law, regulation, etc., or it may need to be determined by the internal auditor based on reasonable standards for achievement of the organization's objectives.

Condition (Facts)

The condition (current state) describes controls as they exist and are functioning at the time of the audit or evaluation. It states what was found through testing. This is the heart of the engagement observation and must be supported by sufficient appropriate (relevant and reliable) evidence and information.

Condition

What does exist.

Cause

The cause explains what factors allowed the condition to exist. The cause describes the elements of management's processes that either did not exist or that failed, thus allowing the condition to occur. This is an essential component because unless it is known, recommendations or corrective action may not be possible, thus allowing recurrence of the condition.

Cause

Why there is a difference between what should exist and what does exist.

Effect

The effect outlines the consequence (both past and possible future) of the observation. It describes what did or could happen as a result of conditions not meeting the criteria (in other words, adverse consequences). This component is necessary to convince management that corrective action is necessary. Whenever possible, this component should be quantified by indicating the dollar amount of exposure, number of occurrences, etc.

Effect

The consequence of the difference between what should exist and what does exist.

Detailed Recommendation

The recommendation offers suggestions regarding how to correct the condition. It describes the course of action management should consider to correct the condition and eliminate its adverse effect. The recommended action should address the condition's cause and should include measures to prevent its recurrence.

Recommendation

Suggested corrective actions to correct the condition.

The IIA Practice Guide "Audit Reports: Communicating Assurance Engagement Results" suggests that the internal audit function communicate recommendations for improvements, acknowledgments of satisfactory performance, and suggestions for corrective actions. Recommendations are based on the internal audit engagement team's observations and conclusion. Recommendations require management to take action to correct conditions or improve operational inadequacies identified during the assurance engagement. Recommendations can be general or specific.

CONDUCT INTERIM AND PRELIMINARY ENGAGEMENT COMMUNICATIONS

As previously discussed, communication is an integral part of any assurance engagement and occurs throughout the engagement process. During the course of performing an assurance engagement, the internal audit function communicates routinely and regularly with the key individuals in the area subject to audit. Much of this communication is done via email and in face-to-face meetings or on conference calls. The purpose of these communications is to discuss observations as they are identified during the engagement. This allows the internal audit function to make sure the facts are accurate and also initiates dialogue regarding the best method of remediation for identified observations. When an observation calls for immediate attention, interim communication allows it to be brought to the attention of the appropriate individuals in a timely manner and increases the likelihood of prompt resolution. The internal audit function will use the information gathered during these interim communications to finalize the observations that will ultimately go into the final communication and to formalize management's action plan for inclusion in the final communication.

Although the observation evaluation and escalation process takes the engagement observations through a step-by-step process to determine what is required for final communication, the internal audit function must confirm preliminary facts and conclusions with appropriate management representatives of the area that was covered by the engagement before it is distributed in its final form. This can be accomplished in many ways, but it is most commonly done through a formal meeting with management, typically referred to as an exit interview or closing conference, followed by a draft of the final communication in whatever form it will take. As part of this process, the internal audit function meets with appropriate management representatives from the area covered by the engagement and confirms agreement with preliminary observations and conclusions discussed throughout the engagement. This allows all parties to review what is anticipated to be contained in the formal engagement communication and provides a final opportunity for resolving any potential misunderstandings. Additionally, it provides the management of the area that was the target of the assurance engagement with a way to present their thoughts and planned actions regarding the items to be covered in the final engagement communication and give feedback regarding how well the engagement team executed the assurance engagement. Management's action plan to address and resolve control deficiencies identified during the assurance engagement is commonly referred to as management's response. These corrective actions are formulated with input from the internal audit function, but they are ultimately the responsibility of management to implement. Many internal audit functions include management's response in the final engagement communication.

The IIA Practice Guide "Audit Reports: Communicating Assurance Engagement Results" provides additional insight regarding the inclusion of management's response in engagement communications. During ongoing discussions with management, the internal audit engagement team will obtain agreement on engagement observations and on any necessary action plans to improve operations. If disagreements arise, the engagement communications must state both positions and the reasons for the disagreement.

Furthermore, The IIA Practice Guide "Audit Reports: Communicating Assurance Engagement Results" also indicates that interim communications are necessary to communicate information requiring management's immediate attention, engagement scope adjustments, or status updates over the course of an extended engagement. Interim communications do not diminish or eliminate the need for a final engagement communication.

In conjunction with concluding an engagement, final results must be communicated to the appropriate and affected parties. This final engagement communication can take on different forms and is the formal way an internal audit function discharges its professional communication obligation under the *Standards*. It is discussed in detail in the sections that follow.

DEVELOP FINAL ENGAGEMENT COMMUNICATIONS

The final assurance engagement communication is important for a number of reasons. As discussed in both chapter 1, "Introduction to Internal Auditing," and chapter 2, "The International Professional Practices Framework: Authoritative Guidance for the Internal Audit Profession," a primary difference between an assurance engagement and a consulting engagement is that in an assurance engagement, three parties are involved: 1) the person or group directly involved with the process, system, or other subject matter—the auditee, 2) the person or group making the independent assessment—the internal audit function, and 3) the person or group relying on the independent assessment—the user. A consulting engagement, on the other hand, typically involves only two parties: 1) the person or group seeking and receiving the advice—the customer, and 2) the person or group offering the advice—the internal audit function. Because the results contained in the final assurance engagement communication will be used by someone other than the auditee (for example, the audit committee), it is imperative that the communication be concise, comprehensive, and accurate. In addition, the final communication evidences the internal audit function's independent assessment of the area's controls and serves as the permanent record of the work performed on the assurance engagement and its results.

Final Communication

The vehicle through which the internal audit function informs interested parties of engagement outcomes.

Final assurance engagement communications ensure the internal audit function fulfills the following obligations:

- Communicate timely, pertinent information to management concerning deficiencies in controls (lack of design adequacy or operating effectiveness), strengths in controls, opportunities to maximize resource utilization or reduce costs, and areas for increased productivity or efficiency.
- Document the scope, conclusion, observations, recommendations, and resulting management action plans of an engagement.
- Keep a permanent record of the work performed during an engagement and the results of that engagement.

Like all engagement communications, the final communication should be professional, concise, accurate, comprehensive, and distributed in a timely manner. Accomplishing all of these objectives is often a balancing act because a quality engagement communication must offer the assurance that an appropriate amount of time has been allocated to complete the work correctly and thoroughly and still be disseminated timely to meet management's need for current information. The time required to prepare an engagement communication will vary depending on the amount of time spent on the engagement and the number and complexity of any observations contained in the communication. Validation of audit results with management throughout the engagement and in conjunction with preliminary engagement communications (exit conference or closing conference) will help ensure final engagement communications are provided to management on a timely basis. However, a leading practice is to provide final engagement communications to management within 10 business days after completing the preliminary engagement communication (exit conference or closing conference).

A well-designed final communication should include:

- **Purpose and scope of engagement.** The objectives (that is, what the engagement was intended to achieve) and scope of the engagement. The IIA Practice Guide "Audit Reports: Communicating Assurance Engagement Results" specifies that scope statements identify the activities that are subject to audit and may also include other relevant information such as time period subject to review and activities not subject to review, which helps the internal audit engagement team define the boundaries of the engagement. The scope statement also describes the nature and extent of engagement work to be performed.

Scope

What is or is not included within an engagement.

- **Time frame covered by the engagement.** The period of operations covered by the engagement scope typically either as of a certain time or for a period of time.
- **Observations as required by the evaluation and escalation process (see exhibit 14-4) and recommendations.** Details regarding the communication of observations and recommendations are discussed later in the chapter.
- **Engagement conclusions and rating (if applicable).** The internal audit function's assessment of the design adequacy and operating effectiveness of the area's controls subject to audit, in addition to the internal audit function's rating of the area if a rating system is used. Ratings are discussed in more detail below. The IIA Practice Guide "Audit Reports: Communicating Assurance Engagement Results" provides additional insight regarding the internal audit team's engagement conclusions. In general, conclusions and opinions reflect the internal audit function's evaluations of the effects of the observations and recommendations on the controls of the activities reviewed. Observations and recommendations are to be put in perspective based upon their overall implications. Conclusions may cover the entire scope of an engagement or just specific aspects. Conclusions may cover whether operating objectives and/or goals conform to those of the organization, whether the organization's objectives and goals are met, and whether the activity under review is functioning as intended. An opinion may include an overall assessment of controls or may be limited to specific controls or aspects of the engagement.

Conclusion

The internal audit function's assessment of the design adequacy and operating effectiveness of the controls subject to audit.

- **Management's action plan to appropriately address reported observations (if applicable).** Summarized response of management to the audit observations contained in the final communication, including the agreed-upon action plan for remediation with a projected timeline for completion that will be used as a basis for the internal audit function's follow-up work. The action plan should include the name(s) of the specific individual(s) responsible for carrying it out.

In addition, The IIA Practice Guide "Audit Reports: Communicating Assurance Engagement Results" suggests that final engagement communications include background information and engagement summaries. Background information can include the organizational units and activities reviewed and provide explanatory information. The status of observations, conclusions, and recommendations from prior engagement communications is usually included in the background information and summaries. The background information will also indicate whether the engagement communication covers a scheduled engagement or is responding to a management request. The IIA Practice Guide "Audit Reports: Communicating Assurance Engagement Results" also indicates that the internal audit function can communicate auditee accomplishments in terms of improvements since the last audit. This information helps ensure the engagement communication fairly presents existing conditions and provides perspective and balance to the engagement communications.

Rating Systems

There is no single prescribed way for expressing engagement outcomes (observations, recommendations, and effects these observations and recommendations have on management's assessment of the activities reviewed). Options range from listing observations indicated from the assurance engagement to expressing an overall conclusion on the effectiveness and efficiency of controls reviewed. As indicated in chapter 12, the internal audit function's assessment of controls that is included in the final engagement communication can be stated either positively or negatively. If the internal auditors choose to state that the controls are designed adequately and operating effectively, they have given positive assurance. If, on the other hand, they choose to communicate that nothing has come to their attention that leads them to believe that the controls are not designed adequately and operating effectively, they have given negative assurance. Either expression of assurance is acceptable and constitutes compliance with the *Standards*. However, many CAEs consider positive assurance to be a best practice. The IIA supports this position, stating that "Positive assurance (reasonable assurance) provides the highest level of assurance and one of the strongest types of audit opinions."[3] When the internal audit function provides negative assurance (limited assurance), they take "...no responsibility for the sufficiency of the audit scope and procedures to find all significant concerns or issues."[4]

Rating System

The assignation of a numeric or descriptive appraisal of engagement results for the purpose of comparing or trending them with other engagement results.

Many internal audit functions and audit committees have chosen to use a formal rating system in conjunction with their conclusions. Such a system provides a way for management and the audit committee to compare the results of assurance engagements across functional areas within an organization, as well as a means to trend audit results for a specific area over time. There are many types of rating systems, ranging from numerical (for example, one through five) to those that are more descriptive in nature (for example, a descriptive rating system may include ratings such as satisfactory versus unsatisfactory). If an internal audit function chooses to employ a rating system, there must be congruence between the rating assigned and the internal audit function's conclusion regarding management's assertion that the controls subject to the assurance engagement are designed adequately and operating effectively. When the internal audit function's conclusion and/or rating is inconsistent with management's initial assertion, management would be compelled to reevaluate that assertion to reconcile it with the internal audit function's conclusion (rating). For example, an unsatisfactory rating typically indicates that the internal audit function has identified one or more risks that have not been mitigated to a tolerable level. In this instance, management needs to reassess its evaluation of the design adequacy and operating effectiveness of existing controls. In addition, it should seek to understand why its own self-assessment did not identify the deficiency(ies). No matter how the internal audit function chooses to provide engagement conclusions, ultimately the intent is to provide the auditee and other users of the communication with sufficient information to understand the effects of the internal audit function's observations and how the recommendations will address the root causes of those observations.

Positive Assurance

A rating or conclusion by the internal auditor that provides specific assurances about an engagement.

Negative Assurance

A rating or conclusion indicating that nothing negative has come to the internal auditor's attention

Some internal audit functions make a conscious choice not to include ratings in engagement reports because of the perception that if they distribute communications that rate areas or processes as less than satisfactory, it will result in antagonistic relationships between the internal audit function and the rest of the organization. Moody's Investor Services disagrees with this perspective, however, and argues that providing ratings is a best practice. "...audit professionals [should] adopt a simple, yet sensible, grading or rating [in] their reports, to help users distinguish problematic reports from other audit reports. The audit committee should be able to distinguish the various kinds of reports generated from the audit team:

- Highly critical reports where significant remedial actions are recommended.
- Reports that cite deficiencies that need to be corrected but where the lapses are not significant.
- Reports that are, effectively, a clean bill of health, even though some improvement opportunities are identified."[5]

Some internal audit functions not only include an overall rating in engagement reports, they also individually rate each issue in the report. This allows for the differentiation of issues so that the appropriate amount of attention and urgency is given accordingly.

DISTRIBUTE FORMAL AND INFORMAL FINAL COMMUNICATIONS

Once all observations have been identified and assessed using the observation evaluation and escalation process individually and in the aggregate, they must be communicated according to the results of that process. Before communications can be distributed, they must be reviewed and approved by the CAE or designee. The CAE is responsible for distributing the final engagement communication to all appropriate parties, including the management of the audited activity, and members of the organization who are in a position to ensure appropriate action is taken relative to engagement results. Circumstances may also warrant sending a summary communication to executive management within the organization. Additionally, the internal audit charter or other internal policy may require the CAE to communicate to other interested or affected parties, for example, independent outside auditors and the board.

Additionally, The IIA Practice Guide "Audit Reports: Communicating Assurance Engagement Results" indicates that certain information is not appropriate for disclosure to all engagement communication recipients because it is privileged, proprietary, or related to improper or illegal acts. The CAE should disclose such information in a separate communication to recipients on an "as needed" basis only. At minimum, the communication should be provided to the board if the circumstances identified involve senior management.

Assurance engagement communications are formal or informal depending on the outcome as determined by the observation evaluation and escalation process. For every assurance engagement, however, there will always be a final, formal communication, even if there are no observations to report to management.

Formal

Typically, the recipients of formal assurance engagement communications are senior management, the audit committee, the organization's independent outside auditor, and/or auditee management. Formal communications are indicated when the controls evaluated during an assurance engagement are assessed to be:

- Insignificantly compromised, but key controls are affected.
- Significantly compromised.
- Materially compromised.

Historically, formal audit communications have been in traditional written reports or, if distributed electronically, in a Word or PDF format. As technology has become more pervasive, however, internal audit functions are beginning to migrate to other formats such as analytic dashboards, heat maps, summary charts, and tables. The format used to communicate is less important (as long as it is appropriate to the information presented and the audience receiving it) than covering all of the elements of a formal communication.

As indicated earlier in the chapter, formal communications are the final, permanent record of the results of an assurance engagement. As such, they need to contain the information necessary to reflect accurately the work performed and conclusions drawn. Remember, as stated earlier, all formal communications should include:

- The purpose and scope of the audit.
- The time frame of the audit.
- The observations and recommendations (results) of the audit, if any.
- The conclusion (opinion and/or rating) of the internal audit function.
- Management's response (action plan) to the recommendations.

The information listed above should be organized clearly and incorporated into the communication using concise, specific language that leaves no room for ambiguity. An example of a final, formal communication is included as exhibit 14-11.

Informal

When observations are determined to be insignificant through application of the evaluation and escalation process and represent control environment enhancement opportunities, the internal audit function may opt to communicate these observations to management of the area subject to the audit informally via memoranda, email, in face-to-face meetings, or on conference calls. No matter the form or medium chosen, informal assurance engagement communications of insignificant observations are still considered final communications and serve to fulfill the internal audit function's reporting obligations under the *Standards*. The audience for informal, final communications is limited to management of the area that was the target of the audit. Informal communication is considered appropriate only when, during the observation evaluation and escalation process, all observations were assessed to be insignificant with no key controls compromised. The informal communication will cover insignificant observations related to secondary controls that might be compromised and, again, will only be distributed to management of the area that was the target of the engagement. An example of a final, informal communication is included as exhibit 14-12. Even when an informal communication is indicated, to fully discharge the obligations outlined in the *Standards* relative to communicating assurance engagement outcomes, it is still necessary to communicate to senior management, the audit committee, and the independent outside auditor that no observations were identified related to key controls.

Informal Communication

Communication regarding insignificant observations related to secondary controls that might be compromised.

EXHIBIT 14-11 FINAL, FORMAL COMMUNICATION EXAMPLE (AUDIT REPORT)

TO: Chief Accounting Officer, Books 2 Buy Holding Corp.

FROM: Audit Director/Manager, Books 2 Buy Holding Corp.

SUBJECT: Books 2 Buy Holding Corp. Cash Disbursements Audit Report
SATISFACTORY RATING

DATE: April 27, 20XX

The Books 2 Buy internal audit function completed an internal control review of the cash disbursements function on March 24, 20XX. The scope of the review, performed as of Feb. 10, 20XX, was to evaluate the design adequacy and operating effectiveness of the system of internal controls within the cash disbursements process. The review included verification procedures to ensure proper authorization, validity, accuracy, timeliness, completeness, existence, classification, confidentiality, integrity, and availability of books, records, and other relevant documentation supporting cash disbursements processed during the fiscal year ended Dec. 31, 20XX.

The scope of the review included, but was not limited to, documenting, evaluating, and testing:

- Procedures for receiving and validating requests for disbursements.
- Procedures for approving and processing disbursements (wires or checks).
- Procedures for validating disbursements for distribution.
- Procedures for recording and balancing cash disbursements.
- Procedures for reconciling detailed records to general ledger cash disbursements control accounts.

CONCLUSION

In our opinion, the cash disbursements process is reasonable and the system of internal controls is acceptable, resulting in a SATISFACTORY audit rating. This rating indicates that overall internal controls are acceptable to safeguard assets and minimize exposure to loss. This rating also indicates that there are relatively few deficiencies and that an appropriate level of management attention exists. The internal control environment rating definitions are included as Attachment A.

MANAGEMENT'S ACTION PLAN

Management has established a satisfactory action plan to resolve the observation presented in this report. A detailed explanation of our findings and recommendations, together with management's response, is provided in the attached report.

Copies to:

Chairman of the Board
CEO
CFO
Audit Committee
Independent Outside Auditor
Controller
General Counsel
Chief Administrative Officer
Chief Compliance Officer

(continued next page)

EXHIBIT 14-11
FINAL, FORMAL COMMUNICATION EXAMPLE, *(cont.)*

Page 2

1. Enhance cash disbursement review and approval procedures.

Our testing of the cash disbursements system confirmed that the system appropriately rejects all duplicate invoice entries based on invoice number. However, the system edit is not comparing other invoice information for potential duplicates. Our testing indicated the system accepts invoices when a digit or symbol is added to the end of the invoice number, creating the opportunity for a duplicate payment. The receipt of goods or services should be recorded and processed only once.

As a result, we expanded our testing to include all invoices processed for payment from Jan. 1, 20XX through Dec. 31, 20XX for possible duplicate payments. Using generalized audit software, we selected all cash disbursement payments of equal amounts for a given vendor, regardless of the invoice number or payment date. Our query revealed several instances (14 invoices totaling $357,782) in which the A/P clerks possibly entered certain invoices a second time when a duplicate invoice was submitted by the vendor. Follow up with the clerks indicated they are not recognizing that these invoices may have been received before and were adding a digit to the end to facilitate processing. In other instances, the vendor issued a duplicate invoice with a different invoice number (typically one higher than the last one) and the A/P clerks did not detect that these were potentially duplicate invoices. As a result, liabilities, and the corresponding assets or expenses, were overstated by $357,782 and the same amount of funds were disbursed inappropriately. A budget-to-actual analysis is performed monthly by all department heads and cost center owners, but is not designed to detect insignificant errors such as these.

We recommend that a query routine be developed that matches the vendor name, invoice amount, invoice date, and any other key invoice characteristics considered appropriate by A/P and compares these characteristics to previously processed invoices before processing each cash disbursements batch. The results of this query should be reviewed by the A/P supervisor for potentially duplicative invoices. Any suspect transactions should be removed from the batch and investigated before processed for payment.

Management Response:

A query routine will be written that compares "key" invoice characteristics (invoice dollar amount, vendor description, invoice number, and invoice date) to previously processed invoices flagging the invoice as a potential duplicate if any characteristics are a match. This routine will be run before a batch is processed and reviewed by the A/P supervisor. If there are any potentially duplicate invoices identified, these transactions will be removed from the batch and researched before processed for payment.

Accountability: Chief Accounting Officer
Responsibility: Accounts Payable Supervisor
Implementation Date: June 30, 20XX

(continued next page)

EXHIBIT 14-11
FINAL, FORMAL COMMUNICATION EXAMPLE, *(cont.)*

Attachment A

Books 2 Buy audit reports include an overall rating of controls based on the objectives, scope, and conclusions of detailed work performed. The control ratings are defined as follows:

SATISFACTORY

Overall, controls are designed adequately and operating effectively to mitigate the underlying risk to an acceptable level. This rating indicates that there are relatively few minor deficiencies and that an appropriate level of management attention exists.

NEEDS IMPROVEMENT

Overall, controls need improvement to consistently mitigate the underlying risk to an acceptable level. This rating indicates that the number and nature of deficiencies require prompt management attention to reduce exposure to a more acceptable level.

UNSATISFACTORY

Overall, controls are not designed adequately and/or operating effectively to mitigate the underlying risk to an acceptable level. This rating indicates that the number and nature of deficiencies are of critical importance and require substantial management attention. Immediate corrective action is essential to prevent further deterioration.

Additional Assurance Engagement Communication Standards

The *Standards* offers guidance regarding the quality of assurance engagement communications as well as what is required in the event of an error or omission. The relevant standards supplemental guidance are included here.

Quality of Communications

Standard 2420: Quality of Communications states "communications must be accurate, objective, clear, concise, constructive, complete, and timely." The interpretation to Standard 2420 defines these terms.

- **Accurate** communications are free from errors and distortions and are faithful to the underlying facts.
- **Objective** communications are fair, impartial, and unbiased and are the result of a fair-minded and balanced assessment of all relevant facts and circumstances.
- **Clear** communications are easily understood and logical, avoiding unnecessary technical language and providing all significant and relevant information.
- **Concise** communications are to the point and avoid unnecessary elaboration, superfluous detail, redundancy, and wordiness.
- **Constructive** communications are helpful to the engagement client and the organization and lead to improvements where needed.
- **Complete** communications lack nothing that is essential to the target audience and include all significant and relevant information and observations to support recommendations and conclusions.

Rating Definitions

It is important to ensure readers of an audit communication understand what the ratings used by the internal audit function mean.

Quality Communications

must be:
– Accurate
– Objective
– Clear
– Concise
– Constructive
– Complete
– Timely

EXHIBIT 14-12
FINAL, INFORMAL COMMUNICATION EXAMPLE (MANAGEMENT DISCUSSION MEMORANDUM)

TO: Chief Accounting Officer, Books 2 Buy Holding Corporation
FROM: Audit Director/Manager, Books 2 Buy Holding Corporation
SUBJECT: Management Discussion Findings – Cash Disbursements Process
DATE: April 27, 20XX

The internal audit function performed a review of the cash disbursements process to evaluate the design adequacy and operating effectiveness of the system of internal controls within the cash disbursements process. During the course of the review, the following observation came to our attention that affects the operational efficiency of your area. In our opinion, this observation does not constitute a reportable control deficiency and, as a result, is not included in the formal audit report.

We recommend management evaluate the impact the observation has on operational efficiency and the cost/benefit of implementing corrective action, if any.

Enhance the process for updating and maintaining the delegation of authority policy.

Our review of the delegation of authority policy indicated there were seven individuals listed with disbursement authority in the policy who are no longer employed by the company and nine individuals acting with disbursement authority that are not identified in the policy as having such authority. Authority over the disbursing of funds should be limited to individuals currently employed by the company, individuals authorized to perform cash disbursements under the policy, and individuals whose job responsibilities justify such authority. The absence of such limits creates the risk disbursements might be made by individuals not authorized by the policy.

Upon further investigation, we determined the delegation of authority policy is only updated semiannually. Currently, no updates are made when there is a change in personnel or a change in responsibilities affected by the policy. For individuals acting with disbursement authority, but not listed in the policy, all were appropriately approved to perform disbursements and required such to perform assigned job responsibilities. Additionally, our testing revealed that access rights to the cash disbursements system are eliminated upon an individual leaving the company. Therefore, even though individuals who have left the company remain in the policy as authorized signers, they could not access the system to approve disbursement transactions. In all seven cases noted during our review, system access had been disabled at termination of the individuals. Finally, we noted that a budget-to-actual analysis is performed monthly by all department heads and cost center owners. Any unauthorized disbursements of consequence would be identified and investigated immediately.

We recommend management consider enhancing procedures for updating the delegation of authority policy. Individuals named with disbursement authority should be incorporated into the policy via an exhibit that would list individuals with disbursement authority. The exhibit could be updated and maintained as part of the new employee on-boarding and terminated employee exit processes in a similar manner as system access rights are added or deleted, allowing for the policy to be updated as changes occur.

Management's Response:

Management believes the risk of an inappropriately authorized disbursement is minimal and, therefore, is willing to live with the current level of risk as identified between policy updates. However, management does see value in separating the list of individuals with disbursement authority from the policy itself, as well as incorporating the maintenance of this list as part of the processing of new and terminated employees. Management will evaluate the cost/benefit of making these changes to the process for updating and maintaining the delegation of authority policy.

Accountability: Chief Financial Officer
Responsibility: Chief Accounting Officer
Implementation Date: Not Applicable

- **Timely** communications are opportune and expedient, depending on the significance of the issue, allowing management to take appropriate corrective action.

The following steps outline how internal auditors can ensure communications meet the criteria of Standard 2420:

1. Gather, evaluate, and summarize data and evidence with care and precision.
2. Derive and express observations, conclusions, and recommendations without prejudice, partisanship, personal interests, and the undue influence of others.
3. Improve clarity by avoiding unnecessary technical language and providing all significant and relevant information in context.
4. Develop communications with the objective of making each element meaningful but succinct.
5. Adopt useful, positive, and well-meaning content and tone that focuses on the organization's objectives.
6. Ensure communication is consistent with the organization's style and culture.
7. Plan the timing of the presentation of engagement results to avoid undue delay.

Errors and Omissions

Although a lot of attention is spent on accuracy and completeness in an engagement communication, there will be times when an error or omission will occur. The *Standards* has accounted for that with Standard 2421: Errors and Omissions: "If a final communication contains a significant error or omission, the chief audit executive must communicate corrected information to all parties who received the original communication." An error is defined as an unintentional misstatement or omission of significant information in the final engagement communication.

Final Communication Error

An unintentional misstatement or omission by the internal audit function of significant information in the final engagement communication.

PERFORM MONITORING AND FOLLOW-UP

The internal audit function's responsibilities do not end when engagement results are distributed. Remember that during the course of the engagement, as observations were identified, management of the area that was the target of the assurance engagement either committed to take corrective action to remediate the observations or they chose not to take action. The collaborative process that took place during the engagement ensured the internal audit function was in agreement with the proposed action plan as documented in the final engagement communication. As a result, monitoring and follow-up procedures are designed to ensure observations have been addressed and resolved in a manner consistent with management's response included in the final engagement communication. The CAE is required by the *Standards* to "establish a follow-up process to monitor and ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action" (Standard 2500.A1). In other words, management must make one of two choices: either implement changes to remediate the observation or accept the risk associated with making no changes to the control or process. If changes are implemented, the internal audit function must have a process in place to monitor and follow up on agreed-upon actions to ensure management has done what it intended and that those actions resulted in the desired reduction in risk.

The timing of follow-up on observations is dependent on the importance (insignificant, significant, or material) of the observation as determined during the observation evaluation and escalation process depicted in exhibit 14-4. Typically, the greater the importance of the observation, the sooner and more frequent the follow up by the internal audit function. Following up on an observation includes both confirming with the client that the corrective action has been implemented and performing appropriate retesting procedures to ensure the applicable risk is mitigated. Depending on the policies of the internal audit function, timing of reperformance will depend on various factors such as age, importance, and type of observation. An observation is not considered remediated until retesting by the internal audit function confirms that the failed or missing control is designed adequately and operating effectively and that the associated risk is mitigated to within the organization's established acceptable variation in performance parameters. To ensure appropriate attention and timely remediation, open observations are reported periodically to management of the area that was the target of the assurance engagement. Additionally, if the importance of an observation is insignificant but involves key controls, significant, or material, the open observation must also be reported to senior management. If an open observation relates to internal control over financial reporting and the importance of the observation is significant or material, it must also be reported to the audit committee and the independent outside auditor. Typically, this reporting is done at least quarterly.

If management chooses to accept the risk, the *Standards* indicates that the CAE must make a judgment regarding the prudence of that decision. Furthermore, "when the chief audit executive concludes that management has accepted a level of risk that may be unacceptable to the organization, the chief audit executive must discuss the matter with senior management. If the chief audit executive determines that the matter has not been resolved, the chief audit executive must communicate the matter to the board" (Standard 2600: Communicating the Acceptance of Risks).

The interpretation of this standard makes it clear that this is the responsibility of the CAE regardless of the nature of the situation, stating that "the identification of risk accepted by management may be observed through an assurance or consulting engagement, monitoring progress on actions taken by management as a result of prior engagements, or other means." Furthermore, the standard concludes that "it is not the responsibility of the chief audit executive to resolve the risk."

If, on the other hand, management accepts responsibility for implementing changes to remediate the observations, the internal audit function must monitor the progress management makes relative to the remediation of the observations. Regular follow-up procedures should ensure that enhancements are made on schedule with the time frame outlined in the final engagement communication. Ultimately, it is the CAE's responsibility to "establish and maintain a system to monitor the disposition of results communicated to management" (Standard 2500: Monitoring Progress). This process should be delineated in the internal audit function's audit manual. At minimum, follow-up actions should be documented and retained in the internal audit function's working papers of the next assurance engagement relating to the area that was subject to audit originally. Additionally, in the case in which engagement observations were evaluated as significant or material, a follow-up engagement is typically scheduled with a targeted scope to evaluate and test whether the controls of the area have been improved and the risks have been reduced to an acceptable level. This engagement should be planned, executed, and reported on in a manner consistent with any other assurance engagement.

In 2009, COSO issued *Guidance on Monitoring Internal Control Systems*, which is covered in more detail in chapter 6. While this guidance is focused on management activities within an organization, aspects of the guidance are relevant to internal audit functions as well.

For example, when conducting a targeted review of control enhancements, COSO indicates that the internal audit function is responsible for communicating the outcome of that review to the same audience that received the communication from the original assurance engagement. Additionally, when the controls that were assessed to be significantly or materially compromised in the original assurance engagement communication pertain to financial reporting, the financial reporting regulations relative to the countries in which the organization operates must be followed in terms of communication requirements. Furthermore, the remediation of the significant deficiency or material weakness, as well as the outcome of the targeted review, should be reported to senior management, the audit committee, and the independent outside auditor. In the case of a material weakness, the remediation and corresponding control enhancements also must be disclosed to the organization's stakeholders according to the laws of the country in which it operates.

OTHER TYPES OF ENGAGEMENTS

This chapter addresses reporting on assurance engagement outcomes only. Consulting engagements, including investigations, projects, due diligence efforts, etc., have different communication requirements. Refer to chapter 12 and chapter 15, "The Consulting Engagement," for examples of consulting engagements and details on the requirements pertinent to consulting engagement communication.

SUMMARY

Communication is an integral part of any assurance engagement and occurs throughout both interim and final communications. Because of their immediacy, interim communications tend to happen through face-to-face meetings, conference calls, and email messages, while final engagement communications tend to be documented more formally with reports and memoranda.

Final communications disseminate the results of an assurance engagement and should include:

- Scope and purpose of the engagement.
- Time frame covered by the engagement.
- Any observations as required after performing the evaluation and escalation process, as well as the related recommendations.
- Engagement conclusions and the overall rating (if applicable).
- Management's action plan to appropriately address reported observations.

Each observation that is reported should include: criteria, condition, cause, and effect. There should be a recommendation for remediating each observation. The significance of the observations, both individually and in the aggregate, as well as whether key controls are compromised, will dictate whether communication should be formal or informal, or if both types of communication are appropriate. Formal communications typically are distributed to senior management, the audit committee, the organization's independent outside auditor, and/or auditee management and are appropriate when controls are assessed to be insignificantly compromised, although key controls are affected, significantly compromised, or materially compromised.

Informal communications are typically distributed only to management of the area that was subject to the engagement and are only appropriate when the observations being reported are assessed as insignificant with no key controls compromised.

All communication, whether formal or informal, interim or final, must be "accurate, objective, clear, concise, constructive, complete, and timely" according to Standard 2420: Quality of Communications. Additionally, any errors or omissions that are identified in a final communication, if significant, must be corrected and communicated "to all parties who received the original communication" (Standard 2421: Errors and Omissions).

Distribution of final communications for an engagement does not complete the internal audit function's role. It is still necessary to follow up and monitor to ensure that management has implemented the action plan that was agreed upon to remediate any observations in the final communication. This includes following up with management to determine whether progress is consistent with agreed-upon time frames and can be expanded to include a follow-up engagement to assess whether controls have been enhanced to a sufficient degree to reduce risks to an acceptable level.

If auditee management chooses not to take action to remediate communicated observations, the CAE must assess the situation. If the risk exceeds the level at which it will impact established acceptable variation in performance parameters, this must be communicated to senior management and, if necessary, the board.

REVIEW QUESTIONS

1. How are internal audit assurance engagements related to senior management's assertions regarding the organization's system of internal controls?

2. When and in what ways do assurance engagement communications occur?

3. How are assurance engagement observations identified?

4. What are the steps an internal auditor takes to assess the observations identified during an assurance engagement?

5. What distinguishes a significant observation from an insignificant observation? What distinguishes a material observation from a significant deficiency?

6. What information should be included in an assurance engagement audit observation description? Hint: refer to exhibit 14-8.

7. Why is interim and preliminary communication important in an assurance engagement?

8. What is the purpose of a closing conference?

9. What information should be included in a well-designed final assurance engagement communication?

10. What is the difference between providing positive assurance versus negative assurance in an audit report?

11. What is the difference between final formal communications and final informal communications and when is each appropriate?

12. What quality characteristics should assurance engagement communications possess? What steps should internal auditors take to ensure that the communications are of high quality?

13. What actions regarding assurance engagement observations must the internal audit function take after the final engagement communication is disseminated?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. Recommendations should be included in final audit communications to:

   a. Provide management with options for addressing audit observations.

   b. Ensure that problems are resolved in the manner suggested by the auditor.

   c. Minimize the amount of time required to correct audit observations.

   d. Guarantee that audit observations are addressed, regardless of cost.

2. Reported internal audit observations emerge as a result of comparing "what should be" with "what is." In determining "what should be" during an internal audit engagement, which of the following would be the least appropriate criterion against which to assess current controls?

   a. Industry best practices.

   b. Control policies and procedures prescribed by senior management.

   c. A standard of control effectiveness determined by the internal audit function.

   d. The controls documented as being in place during the last audit.

3. According to the International Professional Practices Framework (IPPF), an engagement final communication should include, at minimum, which of the following?

   I. Background information.

   II. Purpose of the engagement.

   III. Engagement scope.

   IV. Results of the engagement.

   V. Summaries.

   a. I, II, and III.

   b. I, III, and V.

   c. II, III, and IV.

   d. II, IV, and V.

4. Which of the following would not be considered a primary objective of a closing or exit conference?

   a. To resolve conflicts.

   b. To identify concerns for future audit engagements.

   c. To discuss the engagement observations and recommendations.

   d. To identify management's actions and responses to the engagement observations and recommendations.

5. During a review of purchasing operations, an internal auditor found that procedures in use did not agree with stated company procedures. However, audit tests revealed that the procedures used represented an increase in efficiency and a decrease in processing time, without a discernible decrease in control. The internal auditor should:

   a. Report the lack of adherence to documented procedures as an operational deficiency.

   b. Develop a flowchart of the new procedures and include it in the report to management.

   c. Report the change and suggest that the change in procedures be documented.

   d. Suspend the completion of the engagement until the engagement client documents the new procedures.

6. A formal engagement communication must:

   a. Provide an opportunity for the auditee to respond.

   b. Document the corrective actions required of senior management.

   c. Provide a formal means by which the independent outside auditor assesses potential reliance on the internal audit function.

   d. Report significant observations.

7. Which of the following does the CAE need to consider when determining the extent of follow-up required?

   I. Significance of the reported observation.

   II. Past experience with the manager charged with the corrective action.

   III. Degree of effort and cost needed for the corrective action.

   IV. The experience of the internal audit staff.

a. I and III.
b. I, II, and III.
c. II, III, and IV.
d. I, II, III, and IV.

8. An excerpt from an internal audit observation indicates that travel advances exceeded prescribed maximum amounts. Company policy provides travel funds to authorized employees for travel. Advances are not to exceed 45 days of anticipated expenses. Company procedures do not require justification for large travel advances. Employees can, and do, accumulate large unneeded advances, resulting in unnecessary allocation of capital. In this audit observation, the element of an audit observation known as "effect" is:

   a. Advances are not to exceed estimated expenses for 45 days.
   b. Travel advances exceed prescribed maximum amounts.
   c. Employees accumulate large, unneeded advances, resulting in unnecessary allocation of capital.
   d. Unauthorized employees are given travel advances.

9. Internal audit reports can be structured to motivate management to correct deficiencies. Which of the following report-writing techniques is most likely to be effective?

   a. State the procedural inadequacies and resulting improprieties in specific terms.
   b. Recommend changes and state the punitive measures that will follow if the recommendations are not implemented.
   c. List the deficiencies found so as to provide an easy-to-follow checklist.
   d. Suggest practical improvements to address the identified observations.

10. The primary purpose of issuing an interim report during an internal audit is to:

   a. Provide auditee management the opportunity to act on certain observations immediately.
   b. Set the stage for the final report.
   c. Promptly inform auditee management and their supervisors of audit procedures performed to date.
   d. Describe the scope of the audit.

11. Who has primary responsibility for providing information to the audit committee on the professional and organizational benefits of coordinating internal audit assurance and consulting activities with other assurance and consulting activities?

   a. The external auditor.
   b. The CAE.
   c. The CEO.
   d. Each assurance and consulting function.

12. The primary reason for having written formal audit reports is to:

   a. Provide an opportunity for engagement client response.
   b. Document the corrective actions required of senior management.
   c. Provide a formal means by which the external auditor assesses potential reliance on the internal audit function.
   d. Record observations and recommended courses of action.

13. Which of the following statements best describes the internal audit function's responsibility for follow-up activities related to a previous engagement?

   a. Internal auditors should determine if corrective action has been taken and is achieving the desired results or if management has assumed the risk of not taking the corrective action.
   b. Internal auditors should determine if management has initiated corrective action, but they have no responsibility to determine if the action is achieving the desired results. That determination is management's responsibility.
   c. The CAE is responsible for scheduling follow-up activities only if directed to do so by senior management or the audit committee. Otherwise, follow-up is entirely discretionary.
   d. None of the above.

MULTIPLE-CHOICE QUESTIONS

14. A follow-up review found that a significant internal control weakness had not been corrected. The CAE discussed this matter with senior management and was informed of management's willingness to accept the risk. The CAE should:

    a. Do nothing further because management is responsible for deciding the appropriate action to be taken in response to reported engagement observations and recommendations.

    b. Initiate a fraud investigation to determine if employees had taken advantage of the internal control weakness.

    c. Inform senior management that the weakness must be corrected and schedule another follow-up review.

    d. Assess the reasons that senior management decided to accept the risk and inform the board of senior management's decision.

15. If an auditor's preliminary evaluation of internal controls results in an observation that controls may be inadequate, the next step would be to:

    a. Expand audit work before the preparation of a final engagement communication.

    b. Prepare a flowchart depicting the internal control system.

    c. Note an exception in the engagement final communication if losses have occurred.

    d. Implement the desired controls.

DISCUSSION QUESTIONS

1. The process of evaluating and escalating observations during an assurance engagement can be relatively complex. It involves several steps and requires a number of professional judgments.

   a. What judgments must an internal audit team make during the observation evaluation and escalation process?

   b. What are the three levels of observation importance described in this chapter? Briefly describe each level.

   c. Why is it important to carefully document the conclusions reached as a result of performing the observation and escalation process?

2. Must all observations identified by an internal audit team during an assurance engagement be acted upon by management? Explain. What are the implications for the internal audit function if management fails to respond appropriately to an observation warranting corrective action?

3. Consider the facts presented below. Using the Observation Evaluation and Escalation Process (see exhibit 14-4), assess the facts presented and determine the following:

   a. What observation(s) is (are) indicated?

   b. What COSO objective categories are affected?

   c. Classify the observation(s) as inadequately designed, ineffectively operating, or both.

   d. Determine the impact and likelihood of the observation(s).

   e. Assess whether the observation(s) is (are) insignificant, significant, or material.

   f. Based on your answers, how and to whom would you communicate the observation(s)?

   Facts:

   ABC Company is a major wholesaler of electrical lighting fixtures and ceiling fans.

   The company opened a large store in a growing metropolitan area near the beginning of the company's fiscal year.

   The following facts surfaced during post-year-end audit procedures performed by the company's financial statement auditor (independent outside auditor):

   - The manager of the new store had booked a large year-end adjustment—a debit to sales and a credit to accounts receivable. The journal entry explanation indicated that the entry was made to adjust the general ledger accounts receivable account to the accounts receivable subsidiary ledger.
   - The year-end gross margin percentage at the new store was significantly lower than the average gross margin percentage of the company's other stores.
   - The manager of the new store was stealing payments customers made on account. That is why the general ledger was out of balance with the subsidiary ledger. The store manager made the large year-end adjusting entry to cover up the theft, which is why the store's gross margin was lower than the average of other stores.
   - The year-end adjustment was material to the store but not to the company as a whole.

4. Some internal auditors take the view that the internal audit profession should require that internal audit functions adopt a simple, yet sensible, grading or ranking of their engagement reports to better communicate their overall conclusions expressed in these reports. They propose that an overall rating be included in the audit report for each business unit or function audited. The purpose of the rating is to indicate the design adequacy and operating effectiveness of internal controls. For example, one proposed rating system is:

A. Controls are designed adequately and operating effectively to provide reasonable assurance that risks are being managed to an acceptable level.

B. Some opportunities for improvement were identified; generally, however, controls are designed adequately and operate effectively to provide reasonable assurance that risks are being managed to an acceptable level.

C. Significant opportunities for improvement were identified. Numerous specific control weaknesses were noted, resulting in areas where controls are unlikely to provide reasonable assurance that risks are being managed to an acceptable level.

D. Unsatisfactory. Controls are designed inadequately and/or operating ineffectively; therefore, there is no reasonable assurance that risks are being managed to an acceptable level.

Present arguments for and against the use of internal audit ratings. Do you believe the use of ratings is appropriate or not? Explain your reasons.

5. The audit committee chair has asked your boss, the CAE, to explore the possibility of giving an overall annual opinion each year on the organization's state of internal controls. The CAE has done some preliminary research and designed the following potential form for such an opinion:

To: Chair, Audit Committee

From: Executive VP - Internal Audit

Subject: Internal Audit Opinion of the System of Internal Controls for the Period Ended December 31, 20XX.

We have completed the annual internal audit plan for the company. This plan was designed in such a manner that allows us to assess the adequacy of the company's system of internal controls relating to operational risks, financial reporting risks, and compliance risks.

The plan was prepared considering the results of the risk assessment completed as a part of the company's enterprise risk management process and the risk assessments completed by internal audit and the organization's external auditors. Our work was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing*.

The criteria used to assess the company's system of internal controls are reflected in the company's internal control framework, which is based on the COSO internal control framework. The criteria were discussed and agreed upon with management of each area before the individual engagements included in the annual internal audit plan were conducted.

Our overall opinion is that on December 31, 20XX, internal controls over operations, financial reporting, and compliance are designed adequately and operating effectively. We have conducted sufficient appropriate audit procedures and gathered the necessary evidence to support this conclusion. The evidence gathered meets professional internal audit standards and is sufficient to provide reasonable assurance.

The CAE has asked you to do additional research regarding the appropriateness of internal audit functions giving such opinions and to develop a preliminary list of issues that the department would need to consider if it were to give such an opinion. He suggests that you might begin by reviewing The IIA Practice Guide "Formulating and Expressing Internal Audit Opinions."

a. Is the type of opinion the CAE is considering to the audit committee positive or negative assurance? Explain.

b. What does this opinion imply about the scope of internal audit work performed?

c. In your report to the CAE, what factors would you recommend the internal audit function consider before committing to issuing an overall opinion on the organization's system of internal controls?

CASES

CASE 1

Review the engagement observation that follows and record the specific information that represents the recommendation and each of the following observation attributes: criteria, condition, cause, and effect.

Audit Observation and Recommendation:

Corporation X associates are required to abide by the organization's formal Code of Business Conduct & Ethics (the Code). To ensure all employees are aware of the Code and their obligations under it, Corporation X requires all associates to acknowledge receipt of the Code. A global email was sent to all associates on July 1 informing them of their obligation to read and acknowledge the Code. Associates were instructed to complete and return acknowledgments by December 1. Our audit testing indicated the following relative to the acknowledgment process:

- As of March 1, fewer than 50 percent of associates had completed and returned acknowledgments.
- Follow-up procedures have not been performed by human resources (HR) or department management to date.
- There is not a formal policy indicating actions to be taken if and when associates do not return acknowledgments.
- No disciplinary actions have been taken regarding associates who have not completed acknowledgments of the Code to date.

Improving the acknowledgment process will help Corporation X demonstrate compliance with external regulations requiring a Code of Ethics. It will also help to ensure all associates are aware of their responsibilities and obligations to the organization under the Code.

We recommend management enhance the acknowledgement tracking process to ensure all associates acknowledge receipt of, compliance with, and understanding of the Code. Policy and procedures need to be developed and implemented to take appropriate action when associates do not respond. Disciplinary action should be taken if associates refuse to complete and return acknowledgments, as required by policy.

Management Response:

Associates who have not acknowledged the Code as of March 24 will be sent a reminder notification the week of April 3 informing them of the requirement to acknowledge the Code. A report of all associates who continue to be delinquent in acknowledging the Code will be provided to the applicable HR liaison for review and follow-up the week of April 17. The HR function will partner with the department business heads of delinquent associates to obtain the necessary acknowledgments. A final report will be generated the week of April 24 to determine the remaining associates who have not acknowledged the Code. A verbal warning will be issued to all associates who have not acknowledged the Code by April 24 and a written warning will be provided to associates who have not acknowledged the Code by April 30.

Accountability: Jane Doe
Responsibility: John Smith
Implementation Date: March 24

Does the observation, as presented, adequately address all of the suggested observation attributes? If not, explain why.

CASE 2

Consider the following facts.

During its assessment of the accounts payable department, the internal audit function identified the following observations:

- Inadequate segregation of duties over certain information system access controls. Potential loss exposure of $45 million.
- Several instances of transactions that were not properly recorded in subsidiary ledgers. Transactions were not material, either individually or in the aggregate. Potential loss exposure of $60 million.
- A lack of timely reconciliations of the account balances affected by the improperly recorded transactions. Potential loss exposure of $25 million.

Based on the context in which the observations occur, management and the internal audit function agree on the potential loss exposure represented by these observations individually.

CASES

The organization has a risk management function that, together with the independent outside auditor, has determined that an amount less than $20 million is insignificant in impact and that an amount greater than $80 million is material in impact.

Based only on these facts, determine the COSO objective category affected by each observation, classify each observation in terms of its design adequacy and operating effectiveness, determine the impact and likelihood for each observation, and assess whether each observation is insignificant, significant, or material. After that has been done, outline the next steps an internal audit function should take and the ramifications of the overall conclusion, including how and to whom communication should be made.

CASE 3

TeamMate Practice Case Exercise 4: Audit Report and Implementation Tracking

Audit report generation is a process that can be performed within the engagement project. This allows for all of the pertinent information that should be accumulated for reporting to occur. Once the audit report is generated, an editable deliverable can be managed and provided to the intended audience.

The Issue Tracking Area within TeamMate+ provides a comprehensive view of recommendations that have been identified for tracking. The view within Issue Tracking allows for an evaluation of progress and a medium for collaboration between the audit department as well as remediation owners. Access the Issue Tracking Area in TeamMate+ and review the tracked recommendations that have been released from the previous case exercise. Consider doing the following:

- Ensure that the Project Profile information has been updated and generate an audit report (using standard layout) to communicate audit results.
- Document a status update by accessing the workflow tab of the recommendation and provide comments.
- Consider closing one of the recommendations. Add a workpaper to the recommendation to support the rationale for closing the recommendation.

Critical thinking: After working on outstanding recommendations, answer the following questions:

- For an open recommendation, what state would you use to provide a status update for the item?
- How many perspectives are available within the Issue Tracking Area?
- Within a project, multiple recommendations can be created relating to the same observations. In what instances would this approach be ideal?

CASE 4

KnowledgeLeader Practice Case: Reporting Material Weaknesses

Background Information

As indicated in the chapter, if an observation, or a group of observations, is assessed to be material, communication must be formal and include senior management, the organization's independent outside auditor, and the audit committee. Additionally, for publicly owned companies over a specified size and if the observation concerns internal control over financial reporting and disclosure controls and procedures, the U.S. Sarbanes-Oxley Act of 2002 and financial reporting regulations in other countries require management to qualify their opinion on internal control over financial reporting (and disclosure controls and procedures) and formulate a remediation plan to correct the weakness identified in the controls in question. Management must continue to qualify its opinion on internal control over financial reporting (and disclosure controls and procedures) until the material weakness (observation) is remediated and management has verified through control retesting that the control in question is designed adequately and operating effectively. If management determines it is necessary to qualify its opinion on internal control over financial reporting (and disclosure controls and procedures), this fact must be reported to its stakeholders according to the laws of the country in which it operates.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and determine the reporting requirements for a publicly traded company that has identified a material weakness related to internal control over financial reporting (and disclosure controls and procedures). Identify the various types of control weaknesses as defined by Section 404 of the Sarbanes-Oxley Act. Identify the required disclosures and provide an example of management's report and the independent outside auditor's report provided to the company's shareholders (this will require research outside of KnowledgeLeader).

C. Submit a brief write-up indicating the results of your research to your instructor.

CHAPTER 15

The Consulting Engagement

LEARNING OBJECTIVES

- Articulate the difference between assurance and consulting engagements.
- Understand that engagements may be blended to include both assurance and consulting components.
- Discuss the various types of consulting services provided by internal auditors.
- Understand how internal audit functions select which requested consulting engagements to perform.
- Understand the process for conducting an advisory consulting engagement.
- Describe the benefits of becoming a trusted advisor to an organization when the internal audit function provides consulting services.
- Show how the internal audit function can provide insight to stakeholders through the performance of consulting engagements.
- Understand the importance of determining customer expectations for consulting activities.
- Discuss the *Standards* as they pertain to consulting engagements.
- Understand the need for the internal audit function to set boundaries for consulting activities.

Throughout this chapter, consulting and advisory will be used interchangeably. Many firms refer to the practice of risk management and internal audit services as "Risk Advisory Services."

EXHIBIT 15-1
IPPF GUIDANCE RELEVANT TO CHAPTER 15

- **Standard 1000.C1 -** Purpose, Authority, and Responsibility
- **Standard 1130.C1 -** Impairment to Independence or Objectivity
- **Standard 1130.C2 -** Impairment to Independence or Objectivity
- **Standard 1210.C1 -** Proficiency
- **Standard 1220.C1 -** Due Professional Care
- **Standard 2010.C1 -** Planning
- **Standard 2120.C1 -** Risk Management
- **Standard 2120.C2 -** Risk Management
- **Standard 2120.C3 -** Risk Management
- **Standard 2130.C1 -** Control
- **Standard 2201.C1 -** Planning Considerations
- **Standard 2210.C1 -** Engagement Objectives
- **Standard 2220.C1 -** Engagement Scope
- **Standard 2240.C1 -** Engagement Work Program
- **Standard 2330.C1 -** Documenting Information
- **Standard 2410.C1 -** Criteria for Communicating
- **Standard 2440.C1 -** Disseminating Results
- **Standard 2440.C2 -** Disseminating Results
- **Standard 2500.C1 -** Monitoring Progress

Emerging thought leadership indicates that the internal audit value proposition can best be accomplished through internal audit consulting services. The term "Trusted Advisor" is being used more frequently to describe internal auditors as they strive to add additional value as they gain management's confidence through the impactful consulting services they provide. Although most internal audit functions would like to spend more of the annual budget on consulting engagements, most organizations require a baseline of assurance work to be performed. In a dynamic and changing environment, internal audit functions need to provide forward-looking consulting services to provide education on and facilitate strong governance, risk management, and control processes rather than simply continuing to audit controls that will change with new systems, processes, or organizational restructuring.

Consulting engagements have the greatest potential to provide long-term value to the organization's system of internal controls. They also tend to be more forward-looking rather than assessing what happened in the past. As new policies, procedures, and processes are developed, it is best to embed controls in them from the beginning and make sure that efficiencies to processes are proactively considered. The internal audit function's involvement in major change initiatives of the organization can provide a forward-looking view of the way things should operate with improved controls rather than only providing assurance services relative to controls that will change over time.

Many internal auditors acting in a consulting capacity know the value to the organization of providing insight during the early stages of a project. For example, due diligence performed by the internal audit function provides invaluable insight during the acquisition of a company. This allows any gaps in the target organization's controls to be taken into consideration early in the negotiation process. The internal audit function is uniquely positioned to look at the organization in depth and provide insight into the overall system of internal controls along with other attributes, including the framework on which the organization bases its assessment of the system. For example, if a new compliance function is being established, many of the functions the compliance group would perform are tasks that the internal audit function may have performed in the past. There is an opportunity for the internal audit function to work closely with compliance to establish a clear delineation of testing the compliance group will perform. The internal audit function would then perform audit testing to independently assess and monitor the compliance function.

In many organizations, the internal audit function is part of the internal whistleblower hotline process. This is another opportunity to provide consulting services. For example, a call may come in to the hotline that fraud is suspected in the accounts payable department. The internal audit function can then deploy resources to investigate. In this example, the internal audit function finds that invoices to fictitious vendors have been paid for many months and that the perpetrator was the accounts payable manager who controlled vendor setup and also had control over a number of the cost centers that he could make charges against. The internal audit function's investigation resulted in a number of recommendations that resulted in a change in procedures related to vendor setup and approval along with monitoring of the setup process for new accounts. In this particular organization, the accounts payable department had been rated as a lower risk, so the internal audit function had not audited that department in a number of years. After the investigation was completed, the internal auditors changed the risk ranking for the accounts payable department and now perform more periodic assurance engagements of the accounts payable processes.

The internal audit function has opportunities to assist in strengthening the Three Lines of Defense model as well. As discussed in chapter 3, "Governance," and chapter 9, "Managing the Internal Audit Function," if the monitoring and supervisory controls in the first two lines of defense are working adequately, the internal audit function can focus on periodically validating that those controls are working properly. An example of internal audit consulting would be to provide ways the first line of defense can strengthen management oversight and suggest ways the second line of defense can increase the validation of compliance. Many internal audit functions perform ongoing validation of controls that would best serve the organization by being performed earlier in the three lines of defense model management and other assurance functions.

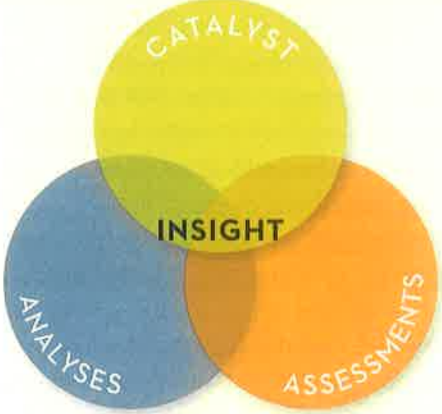
Standard 2010.C1

The chief audit executive should consider accepting proposed consulting engagements based on the engagement's potential to improve management of risks, add value, and improve the organization's operations. Accepted engagements must be included in the plan.

For internal auditors who regularly perform consulting engagements, a very exciting part of their job is coming to work on Monday and not knowing exactly what they may be working on that week. Consulting services such as fraud investigations, special task force assignments, merger and acquisition studies, due diligence reviews, third-party vendor or service provider reviews, executive management special requests, and analyses to identify root causes of operational performance problems can hit the internal auditor's desk on any given day. These projects can cause an unexpected diversion from day-to-day internal audit assurance activities and ultimately cause a diversion of audit resources. Many of these projects require a timely response to management and may have stricter deadlines than already scheduled assurance projects.

All of the projects discussed provide significant insight to the organization and require resources to complete. As stated in Standard 2010.C1, these projects add value by improving risk management and the organization's operations. For the internal audit function to be able to perform these consulting engagements, the annual plan should include time and resources to accommodate them. Several factors should be considered when allocating time and resources to consulting services, such as the degree of change in the organization, significant systems implementations, or significant control issues.

EXHIBIT 15-2
VALUE PROPOSITION OF INTERNAL AUDITING FOR KEY STAKEHOLDERS



Internal auditing is a catalyst for improving an organization's effectiveness and efficiency by providing insight and recommendations based on analyses and assessments of data and business processes.

PROVIDING INSIGHT THROUGH CONSULTING

Consulting services provided by the internal audit function can best be viewed as opportunities to be a catalyst for positive change in the organization's risk management through the use of analysis and assessments. As noted in exhibit 15-2, insight is one of the major components of the internal audit value proposition. Internal auditors are in the best position to provide the organization with input on risk management techniques and help the organization improve controls and processes. They can also provide valuable input on the positioning of controls, supervision, and monitoring within the appropriate line of defense and strengthening overall governance oversight.

As noted in chapter 1, "Introduction to Internal Auditing," the internal audit value proposition portrays insight as one of the significant attributes of internal audit. Although assurance engagements can also provide insight, the greatest opportunities to provide significant insight to the organization is during consulting engagements. Additionally, as discussed later, blended engagements (engagements that include both assurance and consulting components) offer opportunities for significant insight to be gained.

The internal audit function is uniquely positioned to add value and make an impact on the organization when performing consulting engagements. Because internal auditors are often viewed as risk and control experts within an organization, this expertise can be leveraged to assist the organization in keeping abreast of emerging risks. For example, the internal audit function can act in a consulting capacity by initiating discussions that explore the increased risk in areas that are particularly affected by an economic downturn. Additionally, because internal auditors are very familiar with most, if not all, areas of the organization due to the assurance services they perform, they are acutely aware of the changes occurring in these areas. They are in a unique position to advise management about how to deal effectively with these changes. Today's business environment, more than ever, presents many opportunities for internal auditors to provide consulting services that add value at a critical point in the organization's evolution. To be responsive to the organization, it is imperative for the internal audit function to focus more on strategic initiatives while still providing adequate audit coverage of operations, financial, compliance, and IT areas of the organization. Many examples of organizations that have failed due to strategic initiatives have occurred in the past. Boards and audit committees are focused more than ever on which of an organization's strategies can bring the organization down or cause an existential failure if not appropriately managed. Merely performing assurance reviews in traditional areas of the organization is no longer sufficient for internal auditors to be successful.

Insight

An end product or result from the internal audit function's assurance and consulting work designed to provide valued input or information to an auditee or customer.

For these reasons and more (which are discussed in greater depth throughout the chapter), the addition of, or increase in, consulting services provided by the internal audit function can be very valuable to the organization. Additionally, consulting services provide internal auditors with opportunities to diversify their skills and work in a dynamic, interesting work environment. Increasing the focus on consulting services, especially in an uncertain environment, is clearly a win-win situation and provides additional opportunities for internal auditors to become "Trusted Advisors."

THE DIFFERENCE BETWEEN ASSURANCE AND CONSULTING SERVICES

There are several fundamental differences between assurance services and consulting services, which are defined in exhibit 15-3 as the number of parties involved in the engagement, the application of The IIA's *International Standards for the Professional Practice of Internal Auditing* to both types of services, the purpose of the engagement, and communication of engagement results. Moreover, since consulting services are commonly provided in response to requests, the nature and scope of consulting engagements are subject to agreement with the engagement customers.

Customer

The subsidiary, business unit, department, group, individual, or other established subdivision of an organization that is the subject of a consulting engagement

EXHIBIT 15-3 DEFINITIONS OF CONSULTING AND ASSURANCE SERVICES

Consulting Services – Advisory and related client service activities, the nature and scope of which are agreed with the client, are intended to add value and improve an organization's governance, risk management, and control processes without the internal auditor assuming management responsibility. Examples include counsel, advice, facilitation, and training.

Assurance Services – An objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization. Examples may include financial, performance, compliance, system security, and due diligence engagements.

Source: The Institute of Internal Auditors, *International Professional Practices Framework* (Lake Mary, FL: The Institute of Internal Auditors), 40.

Engagement Parties

Consulting services generally involve two parties:

1. The person or group seeking and receiving the advice—the engagement customer.
2. The person or group offering the advice—the internal audit function.

In contrast, assurance services typically involve three parties:

1. The person or group directly involved with the process, system, or other subject matter—the auditee.
2. The person or group making the independent assessment—the internal audit function.
3. The person or group relying on the independent assessment—the user.

Application of Standards

While the Attribute and Performance Standards apply equally to both assurance and consulting services, there is a set of Implementation Standards for each type of service. Because consulting services involve only the two parties previously discussed (the engagement customer and the internal audit function), their structure is less complex than assurance services, which involve three parties (the auditee, the internal audit function, and the third-party user). Based on this structural difference, the Implementation Standards for assurance services are more stringent and numerous than the Implementation Standards for consulting services. As stated in chapter 2, "The International Professional Practices Framework: Authoritative Guidance for the Internal Audit Profession," Implementation Standards specific to assurance engagements are identified with an "A" after the standard number (for example, Standard 1130.A1) and a "C" for consulting engagements (for example, Standard 1130.C1).

Engagement Purpose

Whereas assurance engagements are conducted for the purpose of providing independent assessments, consulting engagements are conducted for the purpose of providing advisory, educational, or facilitation services and provide the greatest opportunity for value to the organization. Like the scope of a consulting engagement, the type of engagement that is most conducive to providing the specific service requested is agreed upon between the internal audit function and the consulting customer based on the customer's needs. As stated in Standard 2010. C1, the chief audit executive (CAE) should consider accepting proposed consulting engagements based on the engagement's potential to add value by improving risk management and the organization's operations. Since specific consulting opportunities may not be known when the internal audit plan is developed, it is important that the internal audit function allocate time for potential consulting engagements that may arise during the year. Chapter 9 discusses inclusion of planned and ad hoc consulting engagements in the audit plan in more detail.

Engagement Communication

There generally is a prescribed audience who receives communication regarding assurance engagement outcomes. Because the purpose of assurance engagements is to provide an independent assessment—and a third party exists that will use the information—communications must include both the auditee and the third party. Additionally, because the type of information communicated is similar for all assurance engagements, the format of the communications is relatively standardized. This makes it easier for the audience to immediately find the information they are looking for within the communication. Communication of engagement outcomes for consulting services, on the other hand, varies based on the scope and purpose of the engagement. It may be formal or informal and can be distributed in a wide variety of formats. Accordingly, the delivery approach is chosen based on what will be most effective and efficient given the specific content of the communication and the audience receiving it. Some recommendations that result from a consulting engagement might be included as part of management's postmortem analysis related to a comprehensive list of specific problems rather than as a communication from the internal audit function. In such cases, the internal audit function may not be specifically identified as the source of the insight, but nevertheless is an important part of the team and should take pride in its contribution to the resulting process improvements.

TYPES OF CONSULTING SERVICES

Consulting services comprise a wide range of activities based on management's needs. These services can be tailored to resolve specific issues that senior management has identified as requiring attention and can be advisory, educational, and/or facilitative in nature. The specific consulting engagements that an internal audit function can perform are limited only by the needs of the organization and the resources of the function so long as they do not impair the independence of the internal audit function or the objectivity of the internal auditors.

Types of Consulting Engagements:

– Advisory
– Training
– Facilitative

Advisory Consulting Engagements

Many consulting engagements are designed to offer advice. As organizations go through changes, such as staff reductions or redesign of business processes, the internal audit function can be called on to provide insight. For example, management may ask the internal audit function to help review and recommend improvements for the effectiveness and efficiency of a particular business process or participate in specific quality assurance initiatives.

Consulting engagements that are advisory in nature include, for example:

- Advising on control design.
- Advising during development of policies and procedures.
- Participating in an advisory role for high-risk projects, such as information systems development.
- Advising on security breaches or business continuity interruptions.
- Advising on certain enterprise risk management activities.

Educational Consulting Engagements

As previously mentioned, the internal audit function has specialized knowledge in many different areas that are important to the organization. Because of the assurance services they provide, internal auditors understand specific industry regulations, risk assessment, risk mitigation, control design, best practices, etc. Often, management asks the internal audit function to serve as educators on this and other topics to appropriate areas of the organization. The internal audit function serves in this capacity by holding special training sessions, presenting on a requested topic to specific groups or individuals, or working one-on-one with high-level individuals as they are hired into the organization.

Consulting engagements that are educational in nature include:

- Training on risk management and internal control.
- Benchmarking internal areas with comparable areas of other, similar organizations to identify best practices.
- Postmortem analysis (that is, determining lessons learned from a project after it has been completed).

Facilitative Consulting Engagements

Sometimes management asks the internal audit function to go a step further than just providing education on a subject. In these cases, the internal audit function takes a facilitative role. Facilitation requires the internal audit function to be more involved with the activity in question rather than just offering the necessary knowledge needed for an individual outside the internal audit function to carry it out. For example, control self-assessment (CSA), which is discussed further in chapter 9, is one activity the internal audit function may facilitate. The knowledge internal auditors have in this area can be used to facilitate discussions regarding business processes and controls. Internal auditors facilitating a CSA discussion go beyond educating management on the process—they actually focus management's attention on the goals of the organization and the business processes needed to support those goals. Internal auditors then guide management through an analysis of the gaps between the existing and desired states of a process, and steps to close those gaps. As stressed throughout this chapter, care must be taken not to go too far and assume management responsibility, which would be a violation of Standard 2120.C3, which states, "When assisting management in establishing or improving risk management processes, internal auditors must refrain from assuming any management responsibility by actually managing risks."

Control Self-Assessment (CSA)

A methodology encompassing facilitated meetings and surveys that enables internal auditors and managers to collaborate in assessing business risks and evaluating internal controls.

Consulting engagements that are facilitative in nature include, for example:

- Facilitating the organization's risk assessment process.
- Facilitating management's control self-assessment.
- Facilitating a task force charged with redesigning controls and procedures for a new or significantly changed area.
- Acting as a liaison between management and the independent outside auditors, government agencies, vendors, and contractors on control issues.
- Facilitating discussion on a postmortem of a major systems or process interruption.

While there is often clear delineation between the types of consulting engagements described above, they are not mutually exclusive. For example, when performing a facilitative consulting engagement, internal auditors also will be serving as educators to some degree even as they facilitate the process or activity. Similarly, there will be crossover between advisory and training consulting engagements and so on with any combination of types of engagements. Typically, however, there will be an overriding intent to the engagement that will be one of the three types mentioned.

Overall, the process for conducting consulting engagements is essentially the same as for assurance engagements. There is a planning stage, a performance stage, and a communication stage. However, depending on the type of consulting engagement, the individual steps within each of these stages may or may not be performed.

Blended Engagements

It is important to point out that consulting and assurance services are not always an either/or proposition. Internal auditors should recognize that assurance and consulting services are sometimes combined in a single engagement, often referred to as a blended engagement. Blended engagements incorporate elements of both consulting and assurance services into one consolidated approach. Any engagement in which there is a component of assurance, such as the independent assessment of a process or controls, as well as a component of consulting, such as advising or facilitation, is a blended engagement. As is true of any consulting or assurance engagement, care must be taken to ensure that neither independence nor objectivity is compromised. Although these engagements have both an assurance and a consulting element, it is often necessary to communicate the outcomes separately because the purpose and scope will differ between the assurance and the consulting component of the engagement.

Blended Engagements

Internal audit engagements that incorporate elements of both consulting and assurance services.

Not all internal audit functions believe that assurance and consulting engagements can or should be combined. Whether or not an internal audit function structures engagements this way is dependent on the organization's philosophy toward internal auditing, as documented in the internal audit function's charter.

As noted in exhibit 15-4, there are many examples of blended engagements. Some begin as consulting engagements and assurance elements are added later, while others begin as assurance engagements that end up requiring some elements of consulting. While on the surface the difference between assurance and consulting seems obvious, integrating the two types of services can quickly become blurred.

EXHIBIT 15-4
ILLUSTRATIVE EXAMPLES OF BLENDED ENGAGEMENTS

Example Engagements	Example Assurance Components	Example Consulting Components
Due Diligence: Internal auditing provides assurance and consulting services in support of management's evaluation of an acquisition candidate.	• Assess the adequacy of key controls in certain areas. • Assess the adequacy of documentation supporting management's control evaluations (e.g., Sarbanes-Oxley Section 404). • Assess the rigor of the risk management program in place. • Determine whether other functions involved in the due diligence process have fulfilled their assigned responsibilities adequately and can support their conclusions.	• Design an evaluation checklist that can be used by other functions involved in evaluating the acquisition candidate. • Facilitate management discussions regarding potential acquisition candidate evaluation criteria.
System Development: Internal auditing provides assurance and consulting services during and after a significant system conversion project.	• Determine whether the organization's prescribed system development process is followed throughout the project. • Assess whether user acceptance testing was sufficient and whether the testing results support management's decision to move forward with the project. • Evaluate whether the new system, as implemented, achieves system objectives and meets users' requirements.	• Facilitate the process of defining system user requirements. • Advise on system development best practices. • Train users on their system development roles and responsibilities.
Process Reengineering: Internal auditing provides assurance and consulting services during and after a process reengineering project.	• Assess whether the process reengineering team adhered to management's prescribed reengineering policies and procedures. • Determine whether controls in the reengineered process are designed adequately.	• Advise on how to conduct an effective and efficient process reengineering project. • Train key individuals involved in the project on steps to perform, analysis techniques, and documentation requirements. • Advise on specific procedures that will enhance the design of the project.
Risk Management: Internal auditing provides assurance and consulting services in support of the organization's risk management program.	• Assess the adequacy of the existing risk management program against best practices. • Evaluate the completeness of the enterprise risk universe and reasonableness of the risk ratings. • Assess whether the information provided by management to the board is accurate, relevant, and comprehensive.	• Facilitate the annual risk assessment process. • Advise on different strategies that may be used to manage key risks. • Train risk owners on their risk management responsibilities. • Advise management on the steps necessary to initiate an enterprise-wide risk management program.

Source: Head, Michael, Reding, Kurt, and Riddle, Cris "Blended Engagements," *Internal Auditor*, October 2010, 40–44

SELECTING CONSULTING ENGAGEMENTS TO PERFORM

Because internal audit functions have finite resources, not all potential consulting engagements can be conducted. Consulting engagements are selected based on the magnitude of the associated risk or opportunity. There are several different ways that potential consulting engagements are identified: 1) engagements are proposed during the annual risk assessment process and, if identified as high priority, included in the annual internal audit plan, 2) specific engagements are requested by management, or 3) new or changing conditions warrant the internal audit function's attention. Regardless of how potential consulting engagements are identified, they should consider the entity's ability to meet its business objective and should be put through the internal audit function's risk assessment process to determine whether the risk or opportunity warrants the expenditure of scarce internal audit resources.

Annual Internal Audit Plan

Typically, the internal audit plan is created annually and includes those areas within the organization that have gone through the risk assessment process and were selected as priorities for the internal audit function. For many internal audit functions, these priorities represent both assurance and consulting engagements. Although assurance engagements typically make up the bulk of the internal audit plan, some consulting engagements, such as systems development projects, due diligence, and large change initiatives, may be known when the internal audit plan is being created and could be included. Additionally, hours may be reserved in the internal audit plan for consulting engagements that may arise during the year. Although consulting engagements are often identified after the internal audit plan has been created, they usually are still subjected to the internal audit function's risk assessment process before being added to the internal audit plan.

Sources of Consulting Engagements:

– Annual internal audit plan
– Requests from management
– New or changing conditions

The consulting hours added or allocated to the annual audit plan should increase in proportion to the degree of organizational change. In most cases, this increase in consulting hours displaces hours allocated in the annual audit plan to assurance engagements. However, if the organization is going through significant change, the internal audit function's time often is best spent in a consultative role on the new processes rather than on providing assurance on current procedures. During times of change, the annual audit plan should reflect this in the hours allocated to providing consulting services to the areas of the organization experiencing the most change.

Requests from Management

In many cases, events arise that are unforeseen at the time the internal audit plan is created, resulting in a request for a consulting engagement by management. Examples of unforeseen events include fraud investigations, due diligence engagements, special projects, ad hoc committees, and reviews of new procedures. These management requests vie for resources out of the planned internal audit budget. Many of these projects are time sensitive and may preempt assurance engagements in the annual internal audit plan. Alternatively, some consulting engagements may not require a full-time effort during the engagement and can be performed simultaneously with assurance engagements without too much disruption. Clearly, the selection of consulting engagements that the internal audit function will perform requires thoughtful consideration. This frequently translates into the performance of the internal audit function's risk assessment process to determine which consulting engagements requested by management are truly critical enough to warrant the expenditure of scarce resources.

New or Changing Conditions

Consulting engagements are often the result of new or changing conditions. This represents the greatest opportunity for the internal audit function to add value by providing insight to the organization in areas experiencing the most significant change. While management may request consulting engagements as a result of such conditions, frequently the internal audit function itself is in the position to identify potential consulting engagements this way. Because the internal audit function has a presence in every area of the organization, it very often receives advance notification of management reorganization, department restructuring, new product offerings, etc., which may warrant internal audit involvement. Additionally, assurance engagement results may indicate a need for the internal audit function to provide consulting services. For example, after conducting an assurance engagement related to business continuity planning, the internal audit function may be asked to conduct a consulting engagement to help the organization develop a plan to address emerging risks. As with other methods of identification, potential consulting engagements identified this way are often subjected to the risk assessment process to determine the true level of risk or opportunity represented by the engagement.

Risk Assessing Potential Consulting Engagements

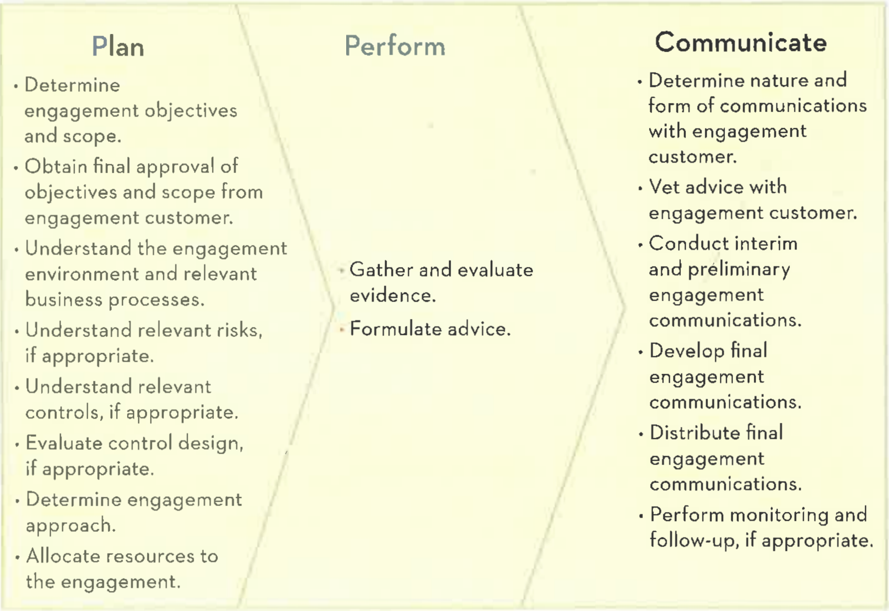
The internal audit function's risk assessment process is similar to management's assessment and prioritization process (as discussed in both chapter 4, "Risk Management," and chapter 9), and more often than not evaluates risks based on many more factors than just impact and likelihood. Those factors are frequently individually weighted as well, and each factor is specifically defined according to a scale. In addition to assigning an overall risk score to each potential consulting engagement, some internal audit functions add a subjective priority rating that is applied to each potential consulting engagement according to the importance the internal audit function places on it. Internal auditors will consider management's assessment and prioritization process results when determining their subjective priority rating. Additionally, they will consider the amount of resources required and the skills necessary to perform the consulting engagement, as well as the customer's needs and expectations. For more detailed information regarding this risk assessment process, including exhibits that illustrate its application, see Case Study 3, "Performing the Consulting Engagement," which accompanies this textbook.

Based on the prioritization process described above, the internal audit function determines the consulting engagements that will be performed. Through these consulting engagements, the internal audit function will attempt to maximize the value provided to management and the audit committee relative to resources committed, perceived risk mitigated or opportunities exploited, and timeliness of services provided. The internal audit function's ultimate goal is to provide management and the audit committee with the information they need to mitigate the risks and maximize the opportunities inherent in the business activities and initiatives intended to carry out the organization's strategic objectives. Once those consulting engagements have been determined, the internal audit function must schedule them and assign resources.

THE CONSULTING ENGAGEMENT PROCESS

Because consulting engagements can differ so greatly in nature and scope, the process for conducting them also varies from engagement to engagement. Among the three types of consulting engagements discussed previously, advisory engagements most closely resemble assurance engagements. In general, the three phases of the advisory consulting engagement process are the same as they are for the assurance engagement process, as shown in exhibit 15-5. There are, however, differences in how the steps within each phase of the advisory consulting engagement process are executed. In fact, some steps may not be required at all.

EXHIBIT 15-5
THE ADVISORY CONSULTING ENGAGEMENT PROCESS



Plan

- Determine engagement objectives and scope.
- Obtain final approval of objectives and scope from engagement customer.
- Understand the engagement environment and relevant business processes.
- Understand relevant risks, if appropriate.
- Understand relevant controls, if appropriate.
- Evaluate control design, if appropriate.
- Determine engagement approach.
- Allocate resources to the engagement.

Perform

- Gather and evaluate evidence.
- Formulate advice.

Communicate

- Determine nature and form of communications with engagement customer.
- Vet advice with engagement customer.
- Conduct interim and preliminary engagement communications.
- Develop final engagement communications.
- Distribute final engagement communications.
- Perform monitoring and follow-up, if appropriate.

Remember that a primary difference between consulting and assurance engagements is that consulting engagements do not require an independent assessment for use by a third party. Instead, they involve only two parties: the internal audit team performing the engagement and the individual or group requesting the independent advisory, educational, or facilitation services (the customer). Because educational and facilitation consulting engagements are very diverse in nature and scope from one engagement to another, these types of engagements do not conform to one general process. The processes for these types of consulting engagements are often customized to the specific engagement. However, advisory consulting engagements generally follow the approach depicted in exhibit 15-5 and, as such, are the focus of the discussion throughout this section.

Planning the Advisory Consulting Engagement

Planning an advisory consulting engagement is very similar to assurance engagement planning with certain exceptions. First, if the advisory consulting engagement is selected after the internal audit plan is finalized, planning is typically more time sensitive and may need to be completed on a stringent timeline. This is why the internal audit function needs to ensure adequate audit hours are placed in reserve for these unplanned consulting engagements. Often the time frame for this type of engagement is inflexible due to circumstances beyond the internal audit function's control or because feedback is time sensitive. Second, as indicated in exhibit 15-5, not all assurance engagement planning steps may be appropriate. The circumstances in which these steps may not be appropriate are discussed in the respective steps below.

Determine engagement objectives and scope. Once the advisory consulting engagement is identified and scheduled, planning begins. Initial scope discussions with the customer to determine the appropriate level of services, along with consulting engagement objectives, should be performed by a member of the internal audit management team. Internal auditors assigned to the engagement must then meet with the customer to gain a detailed understanding of their expectations. IIA Standard 2300: Performing the Engagement states, "Internal auditors must identify, analyze, evaluate, and document sufficient information to achieve the engagement's objectives." The success of the advisory consulting engagement is highly dependent on the internal audit function's ability to understand the customer's expectations for the engagement. The greater the internal auditors' understanding of the customers' needs, the greater the level of trust management has in the internal audit function.

As with an assurance engagement, formalizing objectives at the beginning of an advisory consulting engagement is important. However, in a consulting engagement, the objectives may not be well defined initially and may change during the engagement as more information becomes known. Examples of advisory consulting engagement objectives include:

- Reviewing the design of controls and providing suggestions for improvement.
- Providing input on the design of a new process.
- Reviewing a new computer system prior to implementation.
- Providing advice during a due diligence review for a potential merger or acquisition.

Advisory consulting engagements are most often conducted at the request of management and, because the internal audit function is focused on being responsive to the customer, it is imperative that the scope and time frame be established. During the engagement, the scope may change based on the information that is gathered along with additional input from the customer. However, since internal audit resources are limited, it is important that boundaries are established related to scope and time frame.

Obtain final approval of objectives and scope from the consulting engagement customer. The objectives and scope of an advisory consulting engagement should be approved by the engagement customer before the engagement commences. As stated in IIA Standard 2201.C1, "Internal auditors must establish an understanding with consulting engagement clients about objectives, scope, respective responsibilities, and other client expectations. For significant engagements, this understanding must be documented." In most consulting engagements, internal auditors should document the engagement scope and responsibilities and review them with the engagement customer before performing the work. This helps avoid misunderstandings as the consulting engagement progresses.

Also important to the advisory consulting engagement is discussion with the customer regarding the engagement deliverables. The expectation of what will be delivered at the end of the engagement must be established. This could vary based on the nature and scope of the advisory consulting engagement and may be handled formally or informally.

Understand the engagement environment and relevant business processes. As is the case when beginning an assurance engagement, it is important for the internal auditors assigned to the advisory consulting engagement to gather information about the area of the organization in which consulting services are being performed. The internal audit function brings value to each consulting engagement it undertakes by leveraging the broad perspective it has of the organization as a whole. However, real value can be added only if internal auditors fully understand the area covered by the engagement.

Understand relevant risks, if appropriate. If appropriate, the internal auditors conducting the engagement should understand the nature of risks relevant to the area covered by the engagement. When providing advice regarding risks and risk management, they should have a good understanding of both the organization's and the customer's risk tolerance.

Understand relevant controls, if appropriate. In some, but not all, advisory consulting engagements, it may be necessary to understand certain controls. This step requires internal auditors to use their judgment when deciding which controls are relevant to the objectives of the engagement. Once the relevant controls are understood, they should be linked to the corresponding risks identified in the preceding step.

Evaluate the control design, if appropriate. If relevant to the advisory consulting engagement, the design of controls identified in the previous step may need to be assessed. For example, when evaluating how to make a process more efficient, it may be necessary to evaluate whether the existing controls efficiently reduce the corresponding risks to an acceptable level. If the internal auditor advises the customer that controls should be eliminated, modified, or added, it will be important to ensure that the new, more efficient process continues to mitigate the corresponding risks to an acceptable level.

Determine the engagement approach. An engagement approach must be designed to achieve the advisory consulting engagement objectives. This involves the internal auditors determining the nature, timing, and extent of evidence needed and the procedures required to obtain that evidence. If an understanding of risks and controls is appropriate, the approach may be similar to that of an assurance engagement as described in chapter 13, "Conducting the Assurance Engagement." Such engagements may be blended engagements, that is, designed to achieve both consulting and assurance objectives.

Allocate resources to the engagement. As previously stated, advisory consulting engagements often are time sensitive. Therefore, if the requested engagement is accepted, it is important to ensure that the internal auditors with the right experience and expertise are assigned promptly and the engagement is started timely. Typically, more experienced internal auditors are assigned to lead consulting engagements. These individuals usually have the most functional business experience relative to the area that has requested the consulting services.

Resource Considerations:

– Experience
– Expertise
– External resources
– Staff development

Resources for consulting engagements are allocated in much the same way as for assurance engagements. IIA Standard 2230: Engagement Resource Allocation advises, "Internal auditors must determine appropriate and sufficient resources to achieve engagement objectives based on an evaluation of the nature and complexity of each engagement, time constraints, and available resources." Internal auditors should consider the following when determining the appropriateness and sufficiency of resources:

- The number and experience level of the internal audit staff.
- Knowledge, skills, and other competencies of the internal audit staff when selecting internal auditors for the engagement.
- Availability of external resources where additional knowledge and competencies are required.
- Training needs of internal auditors as each engagement assignment serves as a basis for meeting the internal audit [function's] developmental needs."

Performing the Advisory Consulting Engagement

Execution of an advisory consulting engagement can take on many forms. As indicated earlier in this chapter, the steps involved in performing an advisory consulting engagement are similar to those performed during an assurance engagement. However, much of the work done to create documentation and perform testing of controls may not be performed in an advisory consulting engagement and there may be greater reliance on department documentation provided by the customer of the engagement. Although each advisory consulting engagement may involve different steps, some procedures that may be conducted in such engagements include:

- Understanding management issues related to the area under review.
- Gathering information.
- Performing analytical procedures.
- Reviewing various department documentation, including organization charts, process flows, and departmental procedures.
- Using computer-assisted audit techniques.
- Understanding key risks.
- Understanding controls and determining which controls need to be improved.
- Evaluating the efficiency of existing controls.

Depending on the nature of the advisory consulting engagement, some of these procedures may or may not be applicable. However, both steps depicted in exhibit 15-5 in the Perform Phase are relevant, in some form, to all advisory consulting engagements.

Gather and evaluate evidence. Internal auditors performing advisory consulting engagements must gather sufficient appropriate evidence to support the engagement objectives. Internal auditors then evaluate the evidence gathered and determine the nature of advice to be given. It is important to document the procedures performed, the evidence gathered, and the evaluation of that evidence. Documentation should be done in working papers created for that purpose. These working papers may be similar to the assurance engagement working papers described in chapter 13.

Formulate advice. After gathering and evaluating evidence, internal auditors formulate the advice that will be provided to the engagement customer. It is important to ensure that this advice is pertinent to the objectives, understandable to the customer, and actionable. The advice should clearly indicate to the customer that the improvements they seek are achievable. While the format for delivering the advice will be described in the next section, the advice itself is the ultimate deliverable desired by the engagement customer.

Communication and Follow-Up

Communication is just as important in consulting engagements as it is in assurance engagements. There are many similarities between communicating assurance engagement outcomes and communicating consulting engagement outcomes, but there are some differences as well. The steps for communicating consulting engagement outcomes are outlined below.

Determine the nature and form of communications with the engagement customer. Communication for a consulting engagement can take many forms. Depending on the nature of the engagement and expectations of the customer, a consulting communication format may be less formal than in an assurance engagement, for example, a presentation, memorandum, or email. In other situations, management may ask the internal audit function to provide impromptu advice, for example, about the pros and cons of insourcing versus outsourcing a business function. Conversely, there may be times when a formal report is desired. For example, the internal audit function may be part of a committee or project team that is evaluating a process or product and the advice may be integral to the success of that project. In these instances, a formal deliverable may be desired to ensure the advice is appropriate and addressed timely.

Vet advice with the engagement customer. While the advice may seem appropriate to the internal auditors conducting the consulting engagement, there may be other information or factors that the internal auditors are not aware of that could influence the appropriateness of the advice. The advice must be vetted with the customer to ensure that it 1) is understood by the customer, 2) meets the objectives of the consulting engagement, and 3) is practical and cost effective to implement.

Conduct interim and preliminary engagement communications. Because of the time urgency associated with many advisory consulting engagements, communication to the engagement customer should be frequent during the execution of the engagement. This communication can take many forms, but in the interim stages of the engagement, it is often done orally or through conference calls and email chains. Often, consulting engagement communication is tied to specific dates of importance throughout the engagement (milestones) and key decision points. Additionally, as more details of the project are known, or as factors change, the consulting requirements may change and consequently must be communicated.

Develop final engagement communications. As with interim communications, the final communications will vary in format and formality. As previously stated, the communication of final consulting engagement results may be less formal, such as a presentation, memorandum, or email. However, the format and formality of the final communication also will be driven by what was agreed upon with the engagement customer. For example, the engagement customer may require an oral sign-off before a system conversion or major initiative. The internal audit function might be one of many parties that support this type of go/no-go decision before the organization moves forward. If monitoring or follow-up is required or agreed upon with the engagement customer, the final communication may indicate that such actions will occur. Exhibits 15-6 and 15-7 are examples of interim and final communications for an advisory consulting engagement.

Distribute final engagement communications. Unlike assurance engagements in which the recipients of final communications include a number of individuals that may or may not be directly related to the assessed area, in consulting engagements, final communications are distributed to the customer for whom the internal audit function provided the service. Unless a final communication covers a blended engagement that includes assurance services, typically it is at the discretion of the customer to expand the distribution of the communication to other parties.

Perform monitoring and follow-up, if appropriate. Monitoring and follow-up procedures related to consulting engagements may not be necessary due to the fact that management may be asking for any number of things during a consulting engagement that do not require any kind of follow-up. As part of the completion of the consulting engagement, the internal audit function should communicate with management and come to agreement regarding any ongoing monitoring or follow-up that will be performed related to the engagement area. When applicable, "the internal audit [function] must monitor the disposition of results of consulting engagements to the extent agreed upon with the [customer]" (IIA Standard 2500.C1).

CONSULTING ENGAGEMENT WORKING PAPERS

As in assurance engagements, the work performed in an advisory consulting engagement, regardless of the type, must be documented in working papers. IIA Standard 2330.C1 requires the CAE to "develop policies governing the custody and retention of consulting engagement records, as well as their release to internal and external parties. These policies must be consistent with the organization's guidelines and any pertinent regulatory or other requirements." The level of documentation required for consulting engagements will vary by internal audit function and the nature of the specific engagement. However, in most cases, the amount of documentation and time spent documenting will be significantly less than for an assurance engagement. The focus typically will be on the final product and providing observations and recommendations to management. Sufficient documentation should be maintained to support those overall internal audit recommendations.

As consulting work is performed, it is important to document the results as they become known. There should be a record of the work performed to support advice provided to the customer. Specifically, this documentation should corroborate the assumptions and hypotheses underlying the advice. Additionally, the internal audit function may find that this documentation will enhance the effectiveness and efficiency of similar internal audit engagements in the future.

EXHIBIT 15-6
INTERIM CONSULTING ENGAGEMENT COMMUNICATION

From: Moritz, Lenny F.
Sent: Thursday, March 13, 20XX 2:44 PM
To: Fish, Kerry S.
Subject: Client Data Conversion Status

Client Data Conversion Project
Review Status and Next Steps

- **Pre-Conversion Review**
  - Completion of audit work today (May 2, 20XX)
  - Finalize control matrix (COSO)
  - Ongoing monitoring
  - Issue final report on or about May 3, 20XX to Kerry Fish and Julie Sangren
- **At- and Post-Conversion Review**
  - Review scope.
  - Appropriate execution of the conversion weekend execution plan, including critical path tasks, adequate communications, and timely issue resolution.
  - Accuracy and completeness of the account data conversion.
  - Position custody conversion (stock, bonds, mutual funds, options, etc.), including physical custody transition and secure, authorized movement of the securities.
  - Cash management conversion, including cash account ownership transition and secure, authorized movement of cash.
  - Regulatory compliance and related requirements with respect to net capital calculations.
  - Validation of key balancing and reconciliation controls post conversion (like depository reconciliations).
  - Fieldwork to occur over and after conversion weekend.
  - Issue report on or about May 25, 20XX.

High Priority Gap Projects (Final)

Project	**Sponsor**	**Report Date**	**Report Rating**
B of C De-Conversion	Braden House	June 28, 20XX	SATISFACTORY
Retail Bank Infr. Rollout	Stacie Waverly	Sept. 22, 20XX	SATISFACTORY
Consolidated Customer Portal	Frank Daniels	Oct. 20, 20XX	SATISFACTORY
Net Worth Evaluator	Stacie Waverly	Dec. 8, 20XX	SATISFACTORY
CAT Integration	Janis Pearlman	Jan. 12, 20XX	SATISFACTORY
Regulatory Approval	Stacie Waverly	March 9, 20XX	SATISFACTORY

Lenny Moritz
Audit Consulting Manager
BUS Financial Services
lmoritz@BUS.com

EXHIBIT 15-7
FINAL CONSULTING ENGAGEMENT COMMUNICATION

BUS
Financial Services

To: Kerry Fish and Julie Sellers, Co-Chairs
From: Lenny Moritz, Audit Consulting Manager
BUS Financial Services
Subject: Bank of China Client Data Conversion Project
Pre-Conversion Advisory Consulting Review
Date: May 30, 20XX

Corporate Audit completed a pre-conversion advisory consulting review of the Bank of China Client Data Conversion Project. The scope of the review, performed as of May 11, 20XX, was to advise the Conversion Steering Committee on the bank's readiness to complete the conversion of client data on June 12, 20XX.

Add Value

Value is added by providing opportunities to achieve organizational objectives, identifying operational improvement, and/or reducing risk exposure through both assurance and consulting services.

The scope of the engagement included, but was not limited to, a review of the following pre-conversion activities:

- Identification and remediation of all functional gaps between legacy BUS and Bank of China systems.
- Evaluation of system and process capabilities to support an accurate and timely conversion of client data (including accounts, assets, and web experience).
- Receipt of required regulatory approvals to proceed with the Client Data Conversion Project.
- Identification and management of project, technology, and operational risks.

OUTCOMES

Overall, pre-conversion activities have been effectively managed and monitored by the Conversion Steering Committee. During the course of our review, several items came to our attention that we believe must be completed or resolved prior to commencement of the data conversion. Without appropriate resolution, the success of the conversion will be subject to increased risk. If timely resolution is not possible, consideration should be given to postponing the data conversion. The Conversion Steering Committee should work to resolve these concerns expeditiously.

SIGNIFICANT CONCERNS

Functional Gap Completion – Several functional gaps remain open which have been deemed "showstoppers" for the Client Data Conversion Project. The Conversion Steering Committee is actively tracking these items and has high confidence they will be resolved prior to conversion weekend.

BUS Client Support Information System Testing - Complete validation testing for the Client Support application software has not been completed and there are outstanding data format inconsistencies that impair the system's ability to fully accept all Bank of China data. The Conversion Steering Committee has high confidence that testing will be completed and all inconsistencies will be resolved prior to the conversion of client data.

Regulatory Approval - Regulatory approval to proceed with the Client Data Conversion Project has not been received from FINRA. Approval is anticipated the week of June 7th and the Conversion Steering Committee is confident approval will be granted prior to conversion weekend.

THE CHANGING LANDSCAPE OF CONSULTING SERVICES

Traditionally, internal audit functions have focused primarily on assurance services because this aspect of internal auditing is relied upon by organizations to be confident that the risks threatening the achievement of objectives are sufficiently mitigated. The current regulatory environment across the globe certainly contributes to this reliance on assurance services. Many organizations, however, are increasingly recognizing the value an internal audit function can add through the performance of consulting services. Because internal auditors' knowledge and skills relating to governance, risk management, and control have advanced in recent years, there are ample opportunities for them to leverage this expertise and add value through consulting services.

Impairment to Independence or Objectivity

The introduction of threats that may result in a substantial limitation, or the appearance of a substantial limitation, to the internal auditor's ability to perform an engagement without bias or interference.

While a greater proportion of internal audit resources are being allocated to consulting services, there are still many lost opportunities for internal audit functions to increase the value they add to the organization through the wide range of activities that fall into the consulting category. The accelerating pace of global change presents superb opportunities for expanding consulting services as organizations continuously focus on enhancing revenues and controlling costs. Given the internal audit function's knowledge and expertise, it is a prime source from which management can draw to serve as advisors, facilitators, and trainers. Forward-thinking leaders in a growing number of organizations recognize this and are partnering with the internal audit function in new and creative ways.

When management of an organization does not recognize the opportunity to tap the internal audit function in this way, the CAE should educate them on the value the internal audit function can add when partnered with other areas of the organization to work toward achieving non-assurance-related objectives. As CAEs increasingly become agents of change within their organizations, they must ensure that their internal audit functions are prepared to deliver value-adding consulting services.

CAPABILITIES NEEDED

The increased opportunities that result from this changing landscape have provided the impetus for progressive CAEs to ensure that their internal audit functions have the requisite skills to provide value-adding consulting services. These CAEs know that, to effectively provide these services, internal auditors need to be very versatile and able to learn new things quickly. Additionally, depending on the consulting engagement, internal auditors may need significant experience and expertise in process design and engineering, facilitation skills, strategic thinking, consensus building, and/or creative problem solving. Due to the dynamic nature of internal auditing in general, many internal auditors already have the skills necessary to serve as consultants. Those auditors who operate with a "checklist" mentality and are more comfortable using common standardized audit techniques, however, tend to be significantly challenged when asked to provide consulting services due to the unstructured and dynamic nature of the work that is required.

Skills and Experience Required

Internal auditors who are interested in performing consulting services within their internal audit functions can acquire the specific skills to perform consulting services effectively. While many of the skills necessary for conducting consulting engagements are the same as those required for assurance engagements, internal auditors performing consulting engagements must be even more proficient with these skills. Specifically, internal auditors performing consulting engagements are expected to be able to:

- Exhibit facilitation and collaboration skills.
- Demonstrate both broad business experience and specific subject matter expertise (such as accounting, technology, and regulatory).
- Build relationships quickly and demonstrate strong interpersonal skills.
- Think analytically and solve unstructured problems.
- Learn and adapt quickly in a dynamic environment.
- Process information and respond quickly to requests.
- Articulate and communicate results quickly, whether through presentations, written communications, or oral communications.

Sourcing

There will be times when the internal audit function may not have the specialized technical skillsets required to perform certain consulting engagements. When this arises, those skills may need to be obtained from internal sources or external subject matter experts as stated in IIA Standard 1210.C1: "The chief audit executive must decline the consulting engagement or obtain competent advice and assistance if the internal auditors lack the knowledge, skills, or other competencies needed to perform all or part of the engagement." Areas in which outside specialists may need to be engaged can include:

- Financial reporting.
- Technology.
- Treasury/cash management.
- Fraud examination, including forensic accounting.
- Engineering and environmental compliance.
- Regulatory compliance.

The type of outside specialist needed depends on the specialized knowledge that is required for a particular engagement. Specialists from whom supplementary advice and assistance may be acquired include:

- Internal audit service providers.
- Independent outside accountants or tax specialists.
- IT and security specialists.
- Fraud investigators.
- Actuaries, statisticians, and appraisers.
- Engineers, geologists, and environmental specialists.
- Lawyers.

THE IMPACT OF CULTURE AND THE INTERNAL AUDITOR AS A TRUSTED ADVISOR

As internal auditors perform more consulting services they have also strived to improve the relationship with management. As CAEs increasingly become agents of change within their organizations, they must ensure that their internal audit functions are prepared to deliver value-adding consulting services. CAEs can lay the foundation for partnering with other areas by:

- Building relationships with other departments in the organization.
- Increasing internal auditors' subject matter expertise through:
  - Training.
  - Rotating internal auditors into other business units.
- Hiring associates from other business units into the internal audit function.
- Obtaining buy-in from the audit committee and senior management by communicating the benefits of increasing consulting services.

The ability of the internal auditor to perform consulting services or become a trusted advisor can become impacted by the culture within the organization. For instance, it may not be part of the internal audit charter to perform consulting services. The audit committee and management may only want the internal audit function to perform assurance services. It may not be because the internal audit function does not want to offer those services, but that they may be constrained by the organizational structure and understanding of the potential role of the internal audit function.

Since organizational culture and internal audit structure vary from organization to organization, the ability of the internal audit function to become a trusted advisor can be impaired. The degree to which the internal audit function performs consulting engagements has a positive impact on the function to become more than auditors focused on validation of controls. The internal audit function's ability to establish relationships is increased as internal auditors take on an advisory role on risk management techniques and is further accepted by management to be engaged in key strategic initiatives. Some of the key barriers to the trusted advisor are:

- The organizational culture and management are not accepting the internal audit function as a trusted advisor.
- The focus of the internal audit function is on required audits and assurance services only.
- The internal audit staff is not accustomed to building relationships and performing consulting services.
- Internal audit staffing resources are limited to performing only a minimal amount of consulting engagements.

Internal audit groups can begin to overcome those barriers through discussions starting with the audit committee and executive management. As a starting point, the internal audit charter should specifically address the parameters within which the internal audit function performs risk management consulting engagements. When developing the annual internal audit plan, discussions with

SERVING AS A TRUSTED ADVISOR

Essential attributes to becoming a trusted advisor to customers during the consulting engagement are communication and building relationships. Richard Chambers, president and CEO of The IIA, offers valuable advice in *Trusted Advisors: Key Attributes of Outstanding Internal Auditors*, on these two key attributes internal auditors should possess.

On communication, he mentions it is about setting the right tone, actively listening, and delivery of the message—whether verbal or written. He also offers five words (or phrases) to avoid when communicating:

1. Failed
2. Inadequate
3. Ineffective
4. "We found"
5. "It appears"

And above all, use language the reader understands.

On building relationships, Chambers outlines six characteristics that are critical to building a relationship with the customer.

1. **Positive intent**. Trusted advisors demonstrate a positive intent that makes it clear that he or she isn't set on being right, but is set on finding the right answer.
2. **Diplomacy**. Trusted advisors are adept in direct, forthright communication (including listening) skills, political astuteness, and sensitivity to the organization's culture and how things get done.
3. **Prescience**. Trusted advisors can "see around corners." They anticipate the needs of clients before the needs are even evident, and they identify issues before they arise.
4. **Trustworthiness**. Trusted advisors walk the talk, keep confidences, operate with integrity, and are obsessive about maintaining credibility with clients.
5. **Leadership**. Trusted advisors often set the tone for the entire internal audit staff.
6. **Empathy**. Trusted advisors understand and focus on each stakeholder's point of view, and they are sensitive to those needs and feelings.

Source: Chambers, Richard F., *Trusted Advisors: Key Attributes of Outstanding Internal Auditors* (Lake Mary, FL: Internal Audit Foundation, 2017).

the audit committee and management regarding the needed resources to complete the desired amount of consulting engagements needs to take place. It can be helpful during these discussions to identify the value of transitioning assurance work that could be better performed by the second line of defense and increasing reliance on other assurance providers in order to free resources for performance of more valuable consulting services.

Increasing the amount of advisory services provided by the internal audit function within the organization takes time and requires some foundational changes to the organizational culture as well as potential changes in governance. These transformational changes are only possible if internal audit management drives that change throughout the organization and works through cooperative changes to arrive at a clearer understanding on the role the internal audit function can play in adding value through performing internal audit consulting services.

The CAE may determine that the needed resources are available from within the organization. However, when this is not the case, it is prudent to bring in outside specialists to serve a specific need in a consulting engagement. In either case, the *Standards* is clear that providing quality services and adding value to the organization are more important than who provides those services. Even when outside specialists are used on an engagement, however, the internal audit function must maintain overall control of, and supervisory responsibility for, the consulting engagement. Refer to chapter 9 for more on co-sourcing internal audit services.

OPPORTUNITIES TO PROVIDE INSIGHT

As discussed throughout the chapter, consulting services offer opportunities for internal auditors to add value by providing insight to the organization. Exhibit 15-8 presents 10 illustrative opportunities. As these services increase, the opportunity for internal auditors to become true "Trusted Advisors" also increases.

EXHIBIT 15-8
10 OPPORTUNITIES FOR THE INTERNAL AUDIT FUNCTION TO PROVIDE INSIGHT THROUGH CONSULTING ENGAGEMENTS

1. Perform a risk assessment of consulting engagements and ensure involvement by the internal audit function in the highest risk initiatives for the organization.
2. Work with senior management to include internal audit during key projects.
3. Facilitate key risk management activities of the organization and provide training related to controls and risks to the organization.
4. Provide informal recommendations when areas are identified in which control enhancements, cost savings, or efficiencies can be gained.
5. Volunteer the internal audit function during significant events that warrant additional expertise (i.e., disasters, security breach, and fraud).
6. Employ subject matter experts to provide consulting advice when resources are not available internally in the organization.
7. Provide input during change initiatives of the organization.
8. Assist in the review of new policies and procedures.
9. Stay current on emerging and regulatory issues that may impact the organization and provide management with an assessment of the potential impact to the organization.
10. Develop recommendations that provide insight and are forward looking.

SUMMARY

With increased economic pressure on organizations to optimize the use of the resources they have on hand, internal audit functions are in a prime position to step up and increase the value they add to the organization by expanding the amount of consulting services they provide. As enumerated in this chapter, there are many benefits to both the organization and the internal audit function when the number of consulting engagements conducted increases. However, there has been increased pressure for internal auditors to perform some tasks that could be performed by a strong second line of defense.

By committing to the training of internal auditors and adhering to the guidance provided in the *Standards*, the internal audit function can maintain its independence and internal auditors can maintain their objectivity while delivering high-quality consulting services to their organizations. Using a robust risk assessment process, internal auditors can select the consulting engagements that provide the greatest value to the organization. Following the consulting engagement process outlined in the chapter helps ensure such engagements meet customers' specific expectations.

Consulting services provide many opportunities for internal auditors to increase their knowledge and skills in areas that may not be part of the assurance engagement environment. As internal audit functions allocate more resources to consulting engagements, organizations will recognize the full value of internal auditing and position the function to be a "Trusted Advisor."

REVIEW QUESTIONS

1. Why is an internal audit function well qualified to add value by providing insight through its consulting activities?

2. What are the differences between an assurance engagement and a consulting engagement?

3. What are three types of consulting engagements the internal audit function can perform? Give an example of each.

4. What is a blended engagement and when is it appropriate?

5. What are the three ways potential consulting engagements are identified?

6. How are consulting services addressed in the annual internal audit plan?

7. How does the internal audit function choose which consulting engagements to perform?

8. What are the three phases of an advisory consulting engagement?

9. What steps are involved in:

   a. Planning an advisory consulting engagement?

   b. Performing an advisory consulting engagement?

   c. Communicating advisory consulting engagement outcomes?

10. Why is it important to create and maintain robust working papers for a consulting engagement?

11. How can the CAE educate management regarding the value of consulting services to the organization?

12. What capabilities must an internal audit function possess to provide value-adding consulting services?

13. What specific skills are required of an internal auditor performing consulting engagements?

14. What are some areas in which outside specialists may be needed to effectively perform consulting engagements? What are some examples of outside specialists who may be asked to assist in consulting engagements?

15. What are some of the barriers to the internal audit function becoming a trusted advisor? What steps should the internal audit function take to best overcome those barriers?

16. Why is it important for internal auditors to become "Trusted Advisors" on risk management techniques?

MULTIPLE-CHOICE QUESTIONS

Select the best answer for each of the following questions.

1. Which of the following would be a typical consulting engagement activity performed by the internal audit function?

   a. Testing compliance with accounts payable policies and procedures.
   b. Determining the scope of an engagement to test IT application controls.
   c. Reviewing and commenting on a draft of a new ethics policy created by the company.
   d. Testing the design adequacy of controls over the termination of employees.

2. Which of the following is not a required consideration regarding proficiency and due professional care when choosing to perform a consulting engagement?

   a. Availability of adequate skills and resources to conduct the engagement.
   b. Needs and expectations of the engagement customer.
   c. Cost of the engagement relative to the potential benefits.
   d. Potential impact on the independent outside auditor's financial statement audit.

3. Senior management of an organization has requested that the internal audit function help educate employees about internal control concepts. This work is an example of:

   a. An assurance engagement.
   b. A training consulting engagement.
   c. A facilitative consulting engagement.
   d. An advisory consulting engagement.

4. It would be appropriate for the internal audit function to perform which of the following:

   a. Design controls for a process.
   b. Develop a new whistleblower policy.
   c. Review a new IT application before implementation.
   d. Lead a process reengineering project.

5. Which of the following is not likely to be a step during a consulting engagement?

   a. Understanding the objectives of a process.
   b. Assessing the risks in a process.
   c. Flowcharting the key steps in a process.
   d. Expressing a conclusion on the design adequacy and operating effectiveness of a process.

6. The chief operating officer (COO) has requested that the internal audit function advise her regarding a new incentive plan being developed for sales representatives. Which of the following tasks should the CAE decline with respect to providing advice to the COO?

   a. Researching and benchmarking incentive plans provided by other companies in the industry.
   b. Determining the appropriate bonus formula for inclusion in the plan.
   c. Recommending monitoring procedures so that appropriate amounts are paid under the plan.
   d. Determining how to best document the support for amounts paid to provide a sufficient audit trail.

7. When conducting a consulting engagement to improve the efficiency of a production process, the internal audit team is faced with a scope limitation because several months of the production data has been lost or is incomplete. Faced with this scope limitation, the CAE should:

   a. Halt the consulting engagement and conduct a separate assurance engagement to determine why the data was not available.
   b. Discuss the problem with the customer and together evaluate whether the engagement should be continued.
   c. Complete the analysis without the data, but include a scope limitation in the engagement report.
   d. Report the scope limitation to the independent outside auditors.

8. The audit committee has requested that the internal audit function assist with the annual risk assessment process. What type of consulting engagement does this assistance represent?

   a. An assurance engagement.
   b. A training consulting engagement.
   c. A facilitative consulting engagement.
   d. An advisory consulting engagement.

MULTIPLE-CHOICE QUESTIONS

9. A financial services organization is planning on staffing a complex consulting engagement that involves the consolidation of two large banking organizations, including changing many of the processes. Which of the following skills is the least important skill for auditors to possess in assisting in the review of target processes?

   a. Ability to quickly develop relationships.

   b. Specific business-related skills related to the processes being reengineered.

   c. Experience in performing testing of controls.

   d. Unstructured problem-solving skills.

10. Internal auditors are working to become trusted advisors to management on risk management techniques. Which of the following would be the best way for internal audit to demonstrate they are truly a trusted advisor?

    a. Providing testing of key controls.

    b. Assisting management in developing procedures for accounts payable.

    c. Performing a post-implementation review after a system has been installed.

    d. Providing guidance and audit resources to develop an enterprise risk management process for the organization.

11. Which of the following areas of culture presents the greatest challenge for internal audit functions who want to become trusted advisors?

    a. Receiving approval to include consulting services in the internal audit charter.

    b. Educating all areas on the internal audit function's role in performing consultative internal audit services.

    c. Internal audit staff are trained to perform assurance engagements only.

    d. Movement to a more controlled environment for the corporate enterprise.

12. Which of the following best describes internal audit workpapers for consulting engagements?

    a. Workpapers are not required for consulting engagements.

    b. Workpaper requirements for consulting engagements are similar to assurance engagements but typically have less documentation.

    c. Consulting engagements typically require more documentation than assurance engagements.

    d. Workpapers for consulting engagements do not require a review by internal audit management.

13. Which auditor will be the most successful in being perceived as a "Trusted Advisor"?

    a. One who audits using a checklist.

    b. One who best uses audit sampling techniques.

    c. One who ensures 100 percent compliance with all policies, procedures, and rules.

    d. One who collaborates with management to reach a consensus on the best solution to balance controls and efficient processes.

14. In which of the following scenarios do consulting services provided by the internal audit function prove to be most beneficial?

    a. An organization that is completely stable and has very little change.

    b. An organization that has frequent, significant change.

    c. An organization that wants to reduce the level of change in the organization.

    d. An organization that has a lot of standards and procedures already in place and does not want to change them.

15. What is the difference between a blended engagement and a consulting engagement?

    a. Blended engagements include components of both assurance and consulting services.

    b. Blended engagements take advantage of statistical sampling.

    c. A blended engagement always focuses on assurance services versus a balance of assurance and consulting services.

    d. A blended engagement uses external auditors versus a consulting engagement, which uses internal auditors.

DISCUSSION QUESTIONS

1. Explain how the internal audit function can maintain its independence while working with management to deploy improved risk management practices and improve the system of internal controls throughout the organization.

2. An internal audit function has agreed to conduct an advisory consulting engagement related to evaluating the efficiency of a process. During this engagement, an internal auditor identifies a control weakness that could be material to the company. Since a consulting engagement is between two parties—the customer and the auditor—is there any obligation to disclose this weakness to senior management and the audit committee? What are the benefits and drawbacks of an internal auditor communicating such a weakness?

3. Describe a situation in which the internal auditor could be accused of having impaired objectivity while providing consulting services.

4. Typically, an internal audit charter will determine the nature of services provided by an internal audit function. What are the benefits and drawbacks of developing a charter that does not expressly authorize the performance of consulting services?

5. Why is it important for an internal audit function to assess the relevant risks before agreeing to conduct a consulting engagement? Consider risks to both the organization and the internal audit function in your answer.

6. Can consulting engagements be structured to also provide assurance? Why or why not?

7. For an organization going through an acquisition, would involvement by the internal audit function be considered an assurance or consulting activity? Explain your answer.

8. Describe the key steps an internal audit function should follow if asked to facilitate an enterprise risk assessment.

9. Describe factors that might inhibit the internal audit function from becoming a trusted advisor. Include a discussion of what steps the internal audit function can take to reduce those inhibitors.

10. Discuss what skills and training are most important for the internal audit function to be successful at consulting engagements.

CASES

CASE 1

You are working for a new company that is primarily an internet-based seller of goods whose business model is similar to eBay's. The company was founded on principles similar to eBay's and is an online auction business, but it has the added benefit of having one common site that deals with customers worldwide. The CEO knows that privacy is very important in the online business and has requested that the internal audit function draft a best practices privacy policy for customers because the motto for the new company is "Your Privacy is Our Policy." The company neither has, nor plans to hire, a privacy or compliance officer. The CEO expects the CAE to lead this effort and ensure the campaign delivers on the company's motto. With the advertising campaign slated to launch in one month, the CEO wants the privacy documentation finalized as soon as possible.

A. Identify key sources on privacy that are available for you to reference as you define best practices.

B. Determine the consulting engagement steps you would take and the areas of the company from which you would ask representatives to participate in the project.

C. Identify the consulting engagement documentation you would prepare and the information you would present to the CEO.

CASE 2

A large, international bank is considering outsourcing all facets of the human resources (HR) function, including recruiting, benefits, payroll, employee training and development, compensation, and information systems. Three potentially viable vendors have been identified. The internal audit function has been asked to review the vendor selection process and evaluate each vendor's system of internal controls. Senior management has decided it wants a 10 percent equity stake in the company that performs the outsourcing function.

The original terms of the agreement call for 1,000 employees to be moved from the bank's HR function to the company who ultimately receives the contract. The vendor will then be responsible for evaluating the employees' performance and determining which employees will be terminated after a six-month period.

The vendor has the option to determine which computer systems are used. The length of the contract will be either five or 10 years, depending on its pricing structure.

The bank expects to achieve significant financial gains from this outsourcing arrangement, including significant cost reductions associated with the conversion to standard applications provided by the vendor. The vendor will be expected to leverage existing systems, processes, and personnel and be able to make a profit based on the economies of scale, particularly in the systems areas.

A. What role should the internal audit function play in the bank's decision to outsource this function?

B. What specific areas should the internal audit function review during the transition phase?

C. What areas of risk should the bank consider during the transition phase? After the transition is complete?

D. What types of internal audit consulting activities related to the outsourced HR function might be appropriate once the transition is complete?

CASES

CASE 3

KnowledgeLeader Practice Case: The Internal Auditor as a Trusted Advisor

Background Information

Emphasis in recent years has been placed on control testing to ensure controls are working effectively and efficiently, but emerging thought leadership indicates that the internal audit value proposition can best be accomplished through internal audit consulting services. The term "Trusted Advisor" is being used more frequently to describe internal auditors as they strive to add additional value as they gain management's confidence through the impactful consulting services they provide.

Utilize the KnowledgeLeader website and perform the following:

A. Authenticate to the KnowledgeLeader website using your username and password.

B. Perform research and define what it means to be a "Trusted Advisor." What are the best or better practices and/or characteristics that could lead to an internal auditor becoming identified (labeled) as a Trusted Advisor in the eyes of the board audit committee or management they support.

C. Submit a brief write-up indicating the results of your research to your instructor.

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GLOSSARY

NOTE: Many of the definitions in this glossary are taken from the glossary in The IIA's International Professional Practices Framework and other IIA-produced material, or have been modified as appropriate to conform to the discussions in this textbook.

Add Value

Value is provided by improving opportunities to achieve organizational objectives, identifying operational improvement, and/or reducing risk exposure through both assurance and consulting services.

Adequately Designed

See Controls Are Adequately Designed.

Application Systems

Sets of programs that are designed for end users such as payroll, accounts payable, and, in some cases, large applications such as enterprise resource planning (ERP) systems that provide many business functions.

Appropriate Evidence

Any piece or collection of evidence gained during an engagement that provides relevant and reliable support for the judgments and conclusions reached during the engagement.

Asset Misappropriation

Acts involving the theft or misuse of an organization's assets (for example, skimming revenues, stealing inventory, or payroll fraud).

Assurance Layering

A technique of coordinating multiple assurance activities designed to mitigate a known risk to a needed or desired level within an established risk tolerance.

Assurance Map

A visual depiction of the different assurance activities and assurance functions within an organization. Such a depiction can help identify gaps or overlaps in assurance activities and help assess that risk is managed consistent with the board's and management's expectations.

Assurance Services

An objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization. Examples may include financial, performance, compliance, system security, and due diligence engagements.

Attribute Sampling

A statistical sampling approach, based on binomial distribution theory, that enables the user to reach a conclusion about a population in terms of a rate of occurrence.

Audit Engagement

See Assurance Services.

Audit Observation

Any identified and validated gap between the current and desired state arising from an assurance engagement.

Audit Risk

The risk of reaching invalid audit conclusions and/or providing faulty advice based on the audit work conducted.

Audit Sampling

The application of an audit procedure to less than 100 percent of the items in a population for the purpose of drawing an inference about the entire population.

Audit Universe

A compilation of the subsidiaries, business units, departments, groups, processes, or other established subdivisions of an organization that exist to manage one or more business risks.

Auditee

The subsidiary, business unit, department, group, process, or other established subdivision of an organization that is the subject of an assurance engagement.

Big Data

A term used to refer to the large amount of constantly streaming digital information, massive increase in the capacity to store large amounts of data, and the amount of data processing power required to manage, interpret, and analyze the large volumes of digital information.

Board

An organization's governing body, such as a board of directors, supervisory board, head of an agency or legislative body, board of governors or trustees of a nonprofit organization, or any other designated body of the organization.

Bottom-Up Approach

To begin by looking at all processes directly at the activity level, and then aggregating the identified processes across the organization.

Bring Your Own Device (BYOD)

A policy whereby organizations allow associates to access business email, calendars, and other data on their personal laptops, smartphones, tablets, or other devices.

Business Process

The set of connected activities linked with each other for the purpose of achieving one or more business objectives.

Business Process Outsourcing (BPO)

The act of transferring some of an organization's business processes to an outside provider to achieve cost reductions, operating effectiveness, or operating efficiency while improving service quality.

Cause

The reason for the difference between the expected and actual conditions (why the difference exists).

Chief Audit Executive

A senior position within the organization responsible for internal audit activities in accordance with the internal audit charter and the mandatory elements of the International Professional Practices Framework (IPPF). When internal audit activities are obtained from external service providers, the chief audit executive is the person responsible for overseeing the service contract and the overall quality assurance of these activities, and follow-up of engagement results. The term also includes titles such as general auditor, head of internal audit, chief internal auditor, internal audit director, and inspector general.

Classical Variables Sampling

A statistical sampling approach based on normal distribution theory that is used to reach conclusions regarding monetary amounts.

Cloud Computing

The use of various computer resources—both hardware and software—that are delivered through a network like the internet. The cloud can be configured with various options of services along with configurations for the network. It allows for a great deal of flexibility in network, software, and hardware utilization. Cloud computing also provides options for remote storage of data and use of remote applications.

Code of Ethics

The IIA's Code of Ethics comprises principles relevant to the profession and practice of internal auditing, and Rules of Conduct that describe behavior expected of internal auditors. The Code of Ethics applies to both parties and entities that provide internal audit services. The purpose of the Code of Ethics is to promote an ethical culture in the global profession of internal auditing.

Combined Assurance

Aligning various assurance activities within an organization to ensure assurance gaps do not exist and assurance activities minimize duplication and overlap but still manage risk consistent with the board's and management's expectations.

Compensating Control

An activity that, if key controls do not fully operate effectively, may help to reduce the related risk. Such controls also can back up or duplicate multiple controls and may operate across multiple processes and risks. A compensating control will not, by itself, reduce risk to an acceptable level.

Compliance

Conformity and adherence to applicable laws and regulations (COSO definition). May also include conformity and adherence to policies, plans, procedures, contracts, or other requirements.

Computer-Assisted Audit Techniques (CAATs)

Automated audit techniques, such as generalized audit software, utility software, test data, application software tracing and mapping, and audit expert systems, that help the internal auditor directly test controls built into computerized information systems and data contained in computer files.

Condition

The factual evidence that the internal auditor found in the course of the examination (what does exist).

Conflict of Interest

Any relationship that is, or appears to be, not in the best interest of the organization. A conflict of interest would prejudice an individual's ability to perform his or her duties and responsibilities objectively.

Consulting Services

Advisory and related services, the nature and scope of which are agreed to with the customer, are intended to improve an organization's governance, risk management, and control processes without the internal auditor assuming management responsibility. Examples include counsel, advice, facilitation, and training.

Continuous Auditing

The automated performance of an audit activity on a regularly repeated basis that gives timely insight into an organization's risk and control issues.

Continuous Monitoring

The automated review of business processes and controls by associates in the business unit. It helps an organization detect errors, fraud, abuse, and system inefficiencies.

Control

Any action taken by management, the board, and other parties to manage risk and increase the likelihood that established objectives and goals will be achieved. Management plans, organizes, and directs the performance of sufficient actions to provide reasonable assurance that objectives and goals will be achieved. Also see Internal Control and System of Internal Controls.

Control Environment

The attitude and actions of the board and management regarding the importance of control within the organization. The control environment provides the discipline and structure for the achievement of the primary objectives of the system of internal controls. The control environment includes the following elements:

- Integrity and ethical values.
- Management's philosophy and operating style.
- Organizational structure.
- Assignment of authority and responsibility.
- Human resources policies and practices.
- Competence of personnel.

Control Risk

The potential that controls will fail to reduce controllable risk to an acceptable level.

Controllable Risk

The portion of inherent risk that management can reduce through day-to-day operations and management activities.

Controls Are Adequately Designed

Present if management has planned and organized (designed) the controls or the system of internal controls in a manner that provides reasonable assurance that the organization's entity-level and process-level risks can be managed to an acceptable level.

Controls Are Operating Effectively

Present if management has executed (operated) the controls or the system of internal controls in a manner that provides reasonable assurance that the organization's entity-level and process-level risks have been managed effectively and that the organization's goals and objectives will be achieved efficiently and economically.

Core Principles for the Professional Practice of Internal Auditing

The Core Principles for the Professional Practice of Internal Auditing are the foundation for the International Professional Practices Framework (IPPF) and support internal audit effectiveness.

Corruption

Acts in which individuals wrongfully use their influence in a business transaction to procure some benefit for themselves or another person, contrary to their duty to their employer or the rights of another (for example, kickbacks, self-dealing, or conflicts of interest).

Criteria

The standards, measures, or expectations used in making an evaluation and/or verification of an observation (what should exist).

Customer

The subsidiary, business unit, department, group, individual, or other established subdivision of an organization that is the subject of a consulting engagement.

Data Analytics

The science of examining raw data to draw conclusions about that information; A process of inspecting, cleaning, transforming, and modeling data with the goal of highlighting useful information, suggesting conclusions, and supporting decision-making.

Data Visualization

Making complex data more understandable through visual depiction in terms of statistical graphics, plots, information graphics, tables, and charts.

Database

A large repository of data typically contained in many linked files and stored in a manner that allows it to be easily accessed, retrieved, and manipulated.

Descriptive Analytics

The reporting of past events to characterize what has happened. It condenses large chunks of data into smaller, more meaningful bits of information.

Detective Control

An activity that is designed to discover undesirable events that have already occurred. A detective control must occur on a timely basis (before the undesirable event has had a negative impact on the organization) to be considered effective.

Diagnostic Analytics

A process that provides insight into why certain trends or specific incidents occurred and helps analysts gain a better understanding of business performance, market dynamics, and how different inputs affect the outcome.

Effect

The risk or exposure the organization and/or others encounter because the condition is not consistent with the criteria (the consequence of the difference).

Engagement

A specific internal audit assignment or project that includes multiple tasks or activities designed to accomplish a specific set of objectives. Also see Assurance Services and Consulting Services.

Engagement Work Program

A document that lists the procedures to be followed during an engagement, designed to achieve the engagement plan.

Enterprise Risk Management

See Risk Management.

Entity-Level Control

A control that operates across an entire entity and, as such, is not bound by, or associated with, individual processes.

External Auditor

See Independent Outside Auditor.

Framework

A body of guiding principles that form a template against which organizations can evaluate a multitude of business practices. These principles are comprised of various concepts, values, assumptions, and practices intended to provide a yardstick against which an organization can assess or evaluate a particular structure, process, or environment or a group of practices or procedures.

Fraud

Any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving a gain. [From the Fraud Risk Management Guide, Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2016).]

Fraudulent Financial Reporting

Acts that involve falsification of an organization's financial statements (for example, overstating revenues, or understating liabilities and expenses).

General Information Technology Controls

Controls that operate across all IT systems and are in place to ensure the integrity, reliability, and accuracy of the application systems. Also represents a specific example of an "entity-level control."

Governance

The combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives.

Haphazard Sampling

A nonstatistical sample selection technique used to select a sample without intentional bias to include or exclude a sample item that is expected to be representative of the population.

Illegal Acts

Activities that violate laws and regulations of particular jurisdictions where a company is operating.

Impairment to Independence or Objectivity

The introduction of threats that may result in a substantial limitation, or the appearance of a substantial limitation, to the internal auditor's ability to perform an engagement without bias or interference.

Independence

The freedom from conditions that threaten objectivity or the appearance of objectivity. Such threats to objectivity must be managed at the individual auditor, engagement, functional, and organizational levels. Also see Organizational Independence.

Independent Outside Auditor

A registered public accounting firm, hired by the organization's board or executive management, to perform a financial statement audit providing assurance for which the firm issues a written attestation report that expresses an opinion about whether the financial statements are fairly presented in accordance with applicable Generally Accepted Accounting Principles (GAAP).

Individual Objectivity

An unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they believe in their work product and that no quality compromises are made. Objectivity requires that internal auditors do not subordinate their judgment on audit matters to others.

Information Technology Governance

The leadership, structure, and oversight processes that ensure the organization's IT supports the objectives and strategies of the organization.

Information Technology Operations

The department or area in an organization (people, processes, and equipment) that performs the function of running the computer systems and various devices that support the business objectives and activities.

Inherent Limitations of Internal Control

The confines that relate to the limits of human judgment, resource constraints and the need to consider the cost of controls in relation to expected benefits, the reality that breakdowns can occur, and the possibility of collusion or management override.

Inherent Risk

The combination of internal and external risk factors in their pure, uncontrolled state, or, the gross risk that exists, assuming there are no internal controls in place.

Insight

An end product or result from the internal audit function's assurance and consulting work designed to provide valued input or information to an auditee or customer. Examples include identifying entity-level root causes of control deficiencies, emerging risks, and suggestions to improve the organization's governance process.

Internal Audit Charter

A formal, written document that defines the internal audit function's purpose, authority, and responsibility. The charter should a) establish the internal audit function's position within the organization, b) authorize access to records, personnel, and physical properties relevant to the performance of engagements, and c) define the scope of the internal audit function.

Internal Audit Function

A department, division, team of consultants, or other practitioner(s) that provides independent, objective assurance and consulting services designed to add value and improve an organization's operations.

Internal Control

A process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- Effectiveness and efficiency of operations.
- Reliability of financial reporting.
- Compliance with applicable laws and regulations.

Key (Primary) Control

An activity designed to reduce risk associated with a critical business objective.

Key Performance Indicator

A metric or other form of measuring whether a process or individual tasks are operating within prescribed tolerances.

Material Observation

An individual observation, or a group of observations, is considered "material" if the control in question has a reasonable possibility of failing and the impact of its failure is not only significant, but also exceeds management's materiality threshold.

Monitoring

A process that assesses the presence and functioning of governance, risk management, and control over time.

Network

A configuration that enables computers and devices to communicate and be linked together to efficiently process data and share information.

Nonsampling Risk

The risk that occurs when an internal auditor fails to perform his or her work correctly (for example, performing inappropriate auditing procedures, misapplying an appropriate procedure, or misinterpreting sampling results).

Objectives

What an entity desires to achieve. When referring to what an organization wants to achieve, these are called business objectives, and may be classified as strategic, operations, reporting, and compliance. When referring to what an audit wants to achieve, these are called audit objectives or engagement objectives.

Objectivity

See Individual Objectivity.

Observation

A finding, determination, or judgment derived from the internal auditor's test results from an assurance or consulting engagement.

Operating Effectively

See Controls Are Operating Effectively.

Operating System

Software programs that run the computer and perform basic tasks, such as recognizing input from the keyboard, sending output to the printer, keeping track of files and directories on the hard drive, and controlling various computer peripheral devices.

Opportunity

The possibility that an event will occur and positively affect the achievement of objectives.

Organizational Independence

The chief audit executive's line of reporting within the organization that allows the internal audit function to fulfill its responsibilities free from interference. Also see Independence.

Predictive Analytics

Type of analytics that allows users to extract information from large volumes of existing data, apply certain assumptions, and draw correlations to predict future outcomes and trends.

Preventive Control

An activity that is designed to deter unintended events from occurring.

Primary Control

See Key (Primary) Control.

Principle

A fundamental proposition that serves as the foundation for a system of belief or a chain of reasoning.

Probability-Proportional-to-Size (PPS) Sampling

A modified form of attribute sampling that is used to reach a conclusion regarding monetary amounts rather than rates of occurrence.

Process-Level Control

An activity that operates within a specific process for the purpose of achieving process-level objectives.

Professional Skepticism

The state of mind in which internal auditors take nothing for granted; they continuously question what they hear and see and critically assess audit evidence.

Random Sampling

A sampling technique in which each item in the defined population has an equal opportunity of being selected.

Reasonable Assurance

A level of assurance that is supported by generally accepted auditing procedures and judgments. Reasonable assurance can apply to judgments surrounding the effectiveness of internal controls, the mitigation of risks, the achievement of objectives, or other engagement-related conclusions.

Residual Risk

The portion of inherent risk that remains after management executes its risk responses (sometimes referred to as net risk).

Risk

The possibility that an event will occur and adversely affect the achievement of objectives.

Risk Appetite

The types and amount of risk, on a broad level, an organization is willing to accept in pursuit of value. Risk appetite takes into consideration the amount of risk that management consciously accepts after balancing the cost and benefits of implementing controls.

Risk Assessment

The identification and analysis (typically in terms of impact and likelihood) of relevant risks to the achievement of an organization's objectives, forming a basis for determining how the risks should be managed.

Risk Management

A process to identify, assess, manage, and control potential events or situations to provide reasonable assurance regarding the achievement of the organization's objectives.

Risk Mitigation

An action, or set of actions, taken by management to reduce the impact and/or likelihood of a risk to a lower, more acceptable level.

Risk Response

An action, or set of actions, taken by management to achieve a desired risk management strategy. Risk responses can be categorized as risk avoidance, reduction, sharing, or acceptance. Exploiting opportunities that, in turn, enable the achievement of objectives, is also a risk response. ISO 31000 refers to this step in risk management as risk treatment.

Risk Tolerance

Also referred to by COSO as *acceptable variation in performance*, which it defines as the boundaries of acceptable outcomes related to achieving business objectives.

Sampling Risk

The risk that the internal auditor's conclusion based on sample testing may be different than the conclusion reached if the audit procedure was applied to all items in the population.

Secondary Control

An activity designed to either reduce risk associated with business objectives that are not critical to the organization's survival or success or serve as a backup to a key control.

Significant Observation

An individual observation, or a group of observations, is considered "significant" if the control activity in question has a reasonable possibility of failing and the impact of its failure is significant.

Standard

A professional pronouncement promulgated by the International Internal Audit Standards Board that delineates the requirements for performing a broad range of internal audit activities, and for evaluating internal audit performance.

Strategic Objectives

What an entity desires to achieve through the value creation choices management makes on behalf of the organization's stakeholders.

Strategy

Refers to how management plans to achieve the organization's objectives.

Sufficient Evidence

A collection of evidence gained during an engagement that, in its totality, is enough to support the judgments and conclusions made in the engagement.

System of Internal Controls

Comprises the five components of internal control—the control environment, risk assessment, control activities, information and communication, and monitoring—that are in place to manage risks related to the financial reporting, compliance, and operational objectives of an organization. Also see Internal Control.

Third-Party Service Provider

A person or firm, outside the organization, who provides assurance and/or consulting services to an organization.

Three Lines of Defense

A model of assurance whereby management control is the first line of defense in risk management, the various risk, control, and compliance oversight functions established by management serve as the second line of defense, and independent assurance is the third line of defense.

Tolerance

The boundaries of acceptable outcomes related to achieving business objectives.

Tone at the Top

The entitywide attitude of integrity and control consciousness, as exhibited by the most senior executives of an organization. Also see Control Environment.

Top-Down Approach

To begin at the entity level, with the organization's objectives, and then identify the key processes critical to the success of each of the organization's objectives.

Transparency

Communicating in a manner that a prudent individual would consider to be fair and sufficiently clear and comprehensive to meet the needs of the recipient(s) of such communication.

Work Program

See Engagement Work Program.

APPENDICES

APPENDIX A

THE IIA'S CODE OF ETHICS

The purpose of The IIA's Code of Ethics is to promote an ethical culture in the profession of internal auditing.

> *Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.*

A code of ethics is necessary and appropriate for the profession of internal auditing, founded as it is on the trust placed in its objective assurance about governance, risk management, and control.

The Institute's Code of Ethics extends beyond the Definition of Internal Auditing to include two essential components:

1. Principles that are relevant to the profession and practice of internal auditing.
2. Rules of Conduct that describe behavior norms expected of internal auditors. These rules are an aid to interpreting the Principles into practical applications and are intended to guide the ethical conduct of internal auditors.

"Internal auditors" refers to Institute members, recipients of or candidates for IIA professional certifications, and those who perform internal audit services within the Definition of Internal Auditing.

Applicability and Enforcement of the Code of Ethics

This Code of Ethics applies to both entities and individuals that perform internal audit services. For IIA members and recipients of or candidates for IIA professional certifications, breaches of the Code of Ethics will be evaluated and administered according to The Institute's Bylaws and Administrative Directives. The fact that a particular conduct is not mentioned in the Rules of Conduct does not prevent it from being unacceptable or discreditable, and therefore, the member, certification holder, or candidate can be liable for disciplinary action.

Principles

Internal auditors are expected to apply and uphold the following principles:

1. **Integrity**
   The integrity of internal auditors establishes trust and thus provides the basis for reliance on their judgment.

2. **Objectivity**
   Internal auditors exhibit the highest level of professional objectivity in gathering, evaluating, and communicating information about the activity or process being examined. Internal auditors make a balanced assessment of all the relevant circumstances and are not unduly influenced by their own interests or by others in forming judgments.

3. **Confidentiality**
   Internal auditors respect the value and ownership of information they receive and do not disclose information without appropriate authority unless there is a legal or professional obligation to do so.

4. **Competency**
   Internal auditors apply the knowledge, skills, and experience needed in the performance of internal audit services.

Rules of Conduct

1. **Integrity**

   Internal auditors:

   1.1. Shall perform their work with honesty, diligence, and responsibility.

   1.2. Shall observe the law and make disclosures expected by the law and the profession.

   1.3. Shall not knowingly be a party to any illegal activity, or engage in acts that are discreditable to the profession of internal auditing or to the organization.

   1.4. Shall respect and contribute to the legitimate and ethical objectives of the organization.

2. **Objectivity**

   Internal auditors:

   2.1. Shall not participate in any activity or relationship that may impair or be presumed to impair their unbiased assessment. This participation includes those activities or relationships that may be in conflict with the interests of the organization.

   2.2. Shall not accept anything that may impair or be presumed to impair their professional judgment.

   2.3. Shall disclose all material facts known to them that, if not disclosed, may distort the reporting of activities under review.

3. **Confidentiality**

   Internal auditors:

   3.1. Shall be prudent in the use and protection of information acquired in the course of their duties.

   3.2. Shall not use information for any personal gain or in any manner that would be contrary to the law or detrimental to the legitimate and ethical objectives of the organization.

4. Competency

Internal auditors:

4.1. Shall engage only in those services for which they have the necessary knowledge, skills, and experience.

4.2. Shall perform internal audit services in accordance with the *International Standards for the Professional Practice of Internal Auditing.*

4.3. Shall continually improve their proficiency and the effectiveness and quality of their services.

APPENDIX B

THE IIA's *INTERNATIONAL STANDARDS FOR THE PROFESSIONAL PRACTICE OF INTERNAL AUDITING*

Attribute Standards

1000 – Purpose, Authority, and Responsibility

The purpose, authority, and responsibility of the internal audit activity must be formally defined in an internal audit charter, consistent with the Mission of Internal Audit and the mandatory elements of the International Professional Practices Framework (the Core Principles for the Professional Practice of Internal Auditing, the Code of Ethics, the *Standards*, and the Definition of Internal Auditing). The chief audit executive must periodically review the internal audit charter and present it to senior management and the board for approval.

Interpretation:

The internal audit charter is a formal document that defines the internal audit activity's purpose, authority, and responsibility. The internal audit charter establishes the internal audit activity's position within the organization, including the nature of the chief audit executive's functional reporting relationship with the board; authorizes access to records, personnel, and physical properties relevant to the performance of engagements; and defines the scope of internal audit activities. Final approval of the internal audit charter resides with the board.

1000.A1 – The nature of assurance services provided to the organization must be defined in the internal audit charter. If assurances are to be provided to parties outside the organization, the nature of these assurances must also be defined in the internal audit charter.

1000.C1 – The nature of consulting services must be defined in the internal audit charter.

1010 – Recognizing Mandatory Guidance in the Internal Audit Charter

The mandatory nature of the Core Principles for the Professional Practice of Internal Auditing, the Code of Ethics, the *Standards*, and the Definition of Internal Auditing must be recognized in the internal audit charter. The chief audit executive should discuss the Mission of Internal Audit and the mandatory elements of the International Professional Practices Framework with senior management and the board.

1100 – Independence and Objectivity

The internal audit activity must be independent, and internal auditors must be objective in performing their work.

Interpretation:

Independence is the freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner. To achieve the degree of independence necessary to effectively carry out the responsibilities of the internal audit activity, the chief audit executive has direct and unrestricted access to senior management and the board. This can be achieved through a dual-reporting relationship. Threats to independence must be managed at the individual auditor, engagement, functional, and organizational levels.

Objectivity is an unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they believe in their work product and that no quality compromises are made. Objectivity requires that internal auditors do not subordinate their judgment on audit matters to others. Threats to objectivity must be managed at the individual auditor, engagement, functional, and organizational levels.

1110 – Organizational Independence

The chief audit executive must report to a level within the organization that allows the internal audit activity to fulfill its responsibilities. The chief audit executive must confirm to the board, at least annually, the organizational independence of the internal audit activity.

Interpretation:

Organizational independence is effectively achieved when the chief audit executive reports functionally to the board. Examples of functional reporting to the board involve the board:

- *Approving the internal audit charter.*
- *Approving the risk-based internal audit plan.*
- *Approving the internal audit budget and resource plan.*
- *Receiving communications from the chief audit executive on the internal audit activity's performance relative to its plan and other matters.*
- *Approving decisions regarding the appointment and removal of the chief audit executive.*
- *Approving the remuneration of the chief audit executive.*

- *Making appropriate inquiries of management and the chief audit executive to determine whether there are inappropriate scope or resource limitations.*

  1110.A1 – The internal audit activity must be free from interference in determining the scope of internal auditing, performing work, and communicating results. The chief audit executive must disclose such interference to the board and discuss the implications.

1111 – Direct Interaction with the Board

The chief audit executive must communicate and interact directly with the board.

1112 – Chief Audit Executive Roles Beyond Internal Auditing

Where the chief audit executive has or is expected to have roles and/or responsibilities that fall outside of internal auditing, safeguards must be in place to limit impairments to independence or objectivity.

Interpretation:

The chief audit executive may be asked to take on additional roles and responsibilities outside of internal auditing, such as responsibility for compliance or risk management activities. These roles and responsibilities may impair, or appear to impair, the organizational independence of the internal audit activity or the individual objectivity of the internal auditor. Safeguards are those oversight activities, often undertaken by the board, to address these potential impairments, and may include such activities as periodically evaluating reporting lines and responsibilities and developing alternative processes to obtain assurance related to the areas of additional responsibility.

1120 – Individual Objectivity

Internal auditors must have an impartial, unbiased attitude and avoid any conflict of interest.

Interpretation:

Conflict of interest is a situation in which an internal auditor, who is in a position of trust, has a competing professional or personal interest. Such competing interests can make it difficult to fulfill his or her duties impartially. A conflict of interest exists even if no unethical or improper act results. A conflict of interest can create an appearance of impropriety that can undermine confidence in the internal auditor, the internal audit activity, and the profession. A conflict of interest could impair an individual's ability to perform his or her duties and responsibilities objectively.

1130 – Impairment to Independence or Objectivity

If independence or objectivity is impaired in fact or appearance, the details of the impairment must be disclosed to appropriate parties. The nature of the disclosure will depend upon the impairment.

Interpretation:

Impairment to organizational independence and individual objectivity may include, but is not limited to, personal conflict of interest, scope limitations, *restrictions on access to records, personnel, and properties, and resource limitations, such as funding.*

The determination of appropriate parties to which the details of an impairment to independence or objectivity must be disclosed is dependent upon the expectations of the internal audit activity's and the chief audit executive's responsibilities to senior management and the board as described in the internal audit charter, as well as the nature of the impairment.

> **1130.A1** – Internal auditors must refrain from assessing specific operations for which they were previously responsible. Objectivity is presumed to be impaired if an internal auditor provides assurance services for an activity for which the internal auditor had responsibility within the previous year.
>
> **1130.A2** – Assurance engagements for functions over which the chief audit executive has responsibility must be overseen by a party outside the internal audit activity.
>
> **1130.A3** – The internal audit activity may provide assurance services where it had previously performed consulting services, provided the nature of the consulting did not impair objectivity and provided individual objectivity is managed when assigning resources to the engagement.
>
> **1130.C1** – Internal auditors may provide consulting services relating to operations for which they had previous responsibilities.
>
> **1130.C2** – If internal auditors have potential impairments to independence or objectivity relating to proposed consulting services, disclosure must be made to the engagement client prior to accepting the engagement.

1200 – Proficiency and Due Professional Care

Engagements must be performed with proficiency and due professional care.

1210 – Proficiency

Internal auditors must possess the knowledge, skills, and other competencies needed to perform their individual responsibilities. The internal audit activity collectively must possess or obtain the knowledge, skills, and other competencies needed to perform its responsibilities.

Interpretation:

Proficiency is a collective term that refers to the knowledge, skills, and other competencies required of internal auditors to effectively carry out their professional responsibilities. It encompasses consideration of current activities, trends, and emerging issues, to enable relevant advice and recommendations. Internal auditors are encouraged to demonstrate their proficiency by obtaining appropriate professional certifications and qualifications, such as the Certified Internal Auditor designation and other designations offered by The Institute of Internal Auditors and other appropriate professional organizations.

> **1210.A1** – The chief audit executive must obtain competent advice and assistance if the internal auditors lack the knowledge, skills, or other competencies needed to perform all or part of the engagement.

1210.A2 – Internal auditors must have sufficient knowledge to evaluate the risk of fraud and the manner in which it is managed by the organization, but are not expected to have the expertise of a person whose primary responsibility is detecting and investigating fraud.

1210.A3 – Internal auditors must have sufficient knowledge of key information technology risks and controls and available technology-based audit techniques to perform their assigned work. However, not all internal auditors are expected to have the expertise of an internal auditor whose primary responsibility is information technology auditing.

1210.C1 – The chief audit executive must decline the consulting engagement or obtain competent advice and assistance if the internal auditors lack the knowledge, skills, or other competencies needed to perform all or part of the engagement.

1220 – Due Professional Care

Internal auditors must apply the care and skill expected of a reasonably prudent and competent internal auditor. Due professional care does not imply infallibility.

1220.A1 – Internal auditors must exercise due professional care by considering the:

- Extent of work needed to achieve the engagement's objectives.
- Relative complexity, materiality, or significance of matters to which assurance procedures are applied.
- Adequacy and effectiveness of governance, risk management, and control processes.
- Probability of significant errors, fraud, or noncompliance.
- Cost of assurance in relation to potential benefits.

1220.A2 – In exercising due professional care internal auditors must consider the use of technology-based audit and other data analysis techniques.

1220.A3 – Internal auditors must be alert to the significant risks that might affect objectives, operations, or resources. However, assurance procedures alone, even when performed with due professional care, do not guarantee that all significant risks will be identified.

1220.C1 – Internal auditors must exercise due professional care during a consulting engagement by considering the:

- Needs and expectations of clients, including the nature, timing, and communication of engagement results.
- Relative complexity and extent of work needed to achieve the engagement's objectives.
- Cost of the consulting engagement in relation to potential benefits.

1230 – Continuing Professional Development

Internal auditors must enhance their knowledge, skills, and other competencies through continuing professional development.

1300 – Quality Assurance and Improvement Program

The chief audit executive must develop and maintain a quality assurance and improvement program that covers all aspects of the internal audit activity.

Interpretation:

A quality assurance and improvement program is designed to enable an evaluation of the internal audit activity's conformance with the Standards *and an evaluation of whether internal auditors apply the Code of Ethics. The program also assesses the efficiency and effectiveness of the internal audit activity and identifies opportunities for improvement. The chief audit executive should encourage board oversight in the quality assurance and improvement program.*

1310 – Requirements of the Quality Assurance and Improvement Program

The quality assurance and improvement program must include both internal and external assessments.

1311 – Internal Assessments

Internal assessments must include:

- Ongoing monitoring of the performance of the internal audit activity.
- Periodic self-assessments or assessments by other persons within the organization with sufficient knowledge of internal audit practices.

Interpretation:

Ongoing monitoring is an integral part of the day-to-day supervision, review, and measurement of the internal audit activity. Ongoing monitoring is incorporated into the routine policies and practices used to manage the internal audit activity and uses processes, tools, and information considered necessary to evaluate conformance with the Code of Ethics and the Standards.

Periodic assessments are conducted to evaluate conformance with the Code of Ethics and the Standards.

Sufficient knowledge of internal audit practices requires at least an understanding of all elements of the International Professional Practices Framework.

1312 – External Assessments

External assessments must be conducted at least once every five years by a qualified, independent assessor or assessment team from outside the organization. The chief audit executive must discuss with the board:

- The form and frequency of external assessment.
- The qualifications and independence of the external assessor or assessment team, including any potential conflict of interest.

Interpretation:

External assessments may be accomplished through a full external assessment, or a self-assessment with independent external validation. The external assessor must conclude as to conformance with the Code of Ethics and the Standards; *the external assessment may also include operational or strategic comments.*

A qualified assessor or assessment team demonstrates competence in two areas: the professional practice of internal auditing and the external assessment process. Competence can be demonstrated through a mixture of experience and theoretical learning. Experience gained in organizations of similar size, complexity, sector or industry, and technical issues is more valuable than less relevant experience. In the case of an assessment team, not all members of the team need to have all the competencies; it is the team as a whole that is qualified. The chief audit executive uses professional judgment when assessing whether an assessor or assessment team demonstrates sufficient competence to be qualified.

An independent assessor or assessment team means not having either an actual or a perceived conflict of interest and not being a part of, or under the control of, the organization to which the internal audit activity belongs. The chief audit executive should encourage board oversight in the external assessment to reduce perceived or potential conflicts of interest.

1320 – Reporting on the Quality Assurance and Improvement Program

The chief audit executive must communicate the results of the quality assurance and improvement program to senior management and the board. Disclosure should include:

- The scope and frequency of both the internal and external assessments.
- The qualifications and independence of the assessor(s) or assessment team, including potential conflicts of interest.
- Conclusions of assessors.
- Corrective action plans.

Interpretation:

The form, content, and frequency of communicating the results of the quality assurance and improvement program is established through discussions with senior management and the board and considers the responsibilities of the internal audit activity and chief audit executive as contained in the internal audit charter. To demonstrate conformance with the Code of Ethics and the Standards, *the results of external and periodic internal assessments are communicated upon completion of such assessments and the results of ongoing monitoring are communicated at least annually. The results include the assessor's or assessment team's evaluation with respect to the degree of conformance.*

1321 – Use of "Conforms with the *International Standards for the Professional Practice of Internal Auditing*"

Indicating that the internal audit activity conforms with the *International Standards for the Professional Practice of Internal Auditing* is appropriate only if supported by the results of the quality assurance and improvement program.

Interpretation:

The internal audit activity conforms with the Code of Ethics and the Standards *when it achieves the outcomes described therein. The results of the quality assurance and improvement program include the results of both internal and external* *assessments. All internal audit activities will have the results of internal assessments. Internal audit activities in existence for at least five years will also have the results of external assessments.*

1322 – Disclosure of Nonconformance

When nonconformance with the Code of Ethics or the *Standards* impacts the overall scope or operation of the internal audit activity, the chief audit executive must disclose the nonconformance and the impact to senior management and the board.

PERFORMANCE STANDARDS

2000 – Managing the Internal Audit Activity

The chief audit executive must effectively manage the internal audit activity to ensure it adds value to the organization.

Interpretation:

The internal audit activity is effectively managed when:

- *It achieves the purpose and responsibility included in the internal audit charter.*
- *It conforms with the* Standards.
- *Its individual members conform with the Code of Ethics and the* Standards.
- *It considers trends and emerging issues that could impact the organization.*

The internal audit activity adds value to the organization and its stakeholders when it considers strategies, objectives, and risks; strives to offer ways to enhance governance, risk management and control processes; and objectively provides relevant assurance.

2010 – Planning

The chief audit executive must establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals.

Interpretation:

To develop the risk-based plan, the chief audit executive consults with senior management and the board and obtains an understanding of the organization's strategies, key business objectives, associated risks, and risk management processes. The chief audit executive must review and adjust the plan, as necessary, in response to changes in the organization's business, risks, operations, programs, systems, and controls.

2010.A1 – The internal audit activity's plan of engagements must be based on a documented risk assessment, undertaken at least annually. The input of senior management and the board must be considered in this process.

2010.A2 – The chief audit executive must identify and consider the expectations of senior management, the board, and other stakeholders for internal audit opinions and other conclusions.

2010.C1 – The chief audit executive should consider accepting proposed consulting engagements based on the engagement's potential to improve management of risks, add value, and improve the organization's operations. Accepted engagements must be included in the plan.

2020 – Communication and Approval

The chief audit executive must communicate the internal audit activity's plans and resource requirements, including significant interim changes, to senior management and the board for review and approval. The chief audit executive must also communicate the impact of resource limitations.

2030 – Resource Management

The chief audit executive must ensure that internal audit resources are appropriate, sufficient, and effectively deployed to achieve the approved plan.

Interpretation:

Appropriate refers to the mix of knowledge, skills, and other competencies needed to perform the plan. Sufficient refers to the quantity of resources needed to accomplish the plan. Resources are effectively deployed when they are used in a way that optimizes the achievement of the approved plan.

2040 – Policies and Procedures

The chief audit executive must establish policies and procedures to guide the internal audit activity.

Interpretation:

The form and content of policies and procedures are dependent upon the size and structure of the internal audit activity and the complexity of its work.

2050 – Coordination and Reliance

The chief audit executive should share information, coordinate activities, and consider relying upon the work of other internal and external assurance and consulting service providers to ensure proper coverage and minimize duplication of efforts.

Interpretation:

In coordinating activities, the chief audit executive may rely on the work of other assurance and consulting service providers. A consistent process for the basis of reliance should be established, and the chief audit executive should consider the competency, objectivity, and due professional care of the assurance and consulting service providers. The chief audit executive should also have a clear understanding of the scope, objectives, and results of the work performed by other providers of assurance and consulting services. Where reliance is placed on the work of others, the chief audit executive is still accountable and responsible for ensuring adequate support for conclusions and opinions reached by the internal audit activity.

2060 – Reporting to Senior Management and the Board

The chief audit executive must report periodically to senior management and the board on the internal audit activity's purpose, authority, responsibility, and performance relative to its plan and on its conformance with the Code of Ethics and the *Standards*. Reporting must also include significant risk and control issues, including fraud risks, governance issues, and other matters that require the attention of senior management and/or the board.

Interpretation:

The frequency and content of reporting are determined collaboratively by the chief audit executive, senior management, and the board. The frequency and content of reporting depends on the importance of the information to be communicated and the urgency of the related actions to be taken by senior management and/or the board.

The chief audit executive's reporting and communication to senior management and the board must include information about:

- *The audit charter.*
- *Independence of the internal audit activity.*
- *The audit plan and progress against the plan.*
- *Resource requirements.*
- *Results of audit activities.*
- *Conformance with the Code of Ethics and the* Standards, *and action plans to address any significant conformance issues.*
- *Management's response to risk that, in the chief audit executive's judgment, may be unacceptable to the organization.*

These and other chief audit executive communication requirements are referenced throughout the Standards.

2070 – External Service Provider and Organizational Responsibility for Internal Auditing

When an external service provider serves as the internal audit activity, the provider must make the organization aware that the organization has the responsibility for maintaining an effective internal audit activity.

Interpretation:

This responsibility is demonstrated through the quality assurance and improvement program which assesses conformance with the Code of Ethics and the Standards.

2100 – Nature of Work

The internal audit activity must evaluate and contribute to the improvement of the organization's governance, risk management, and control processes using a systematic, disciplined, and risk-based approach. Internal audit credibility and value are enhanced when auditors are proactive and their evaluations offer new insights and consider future impact.

2110 – Governance

The internal audit activity must assess and make appropriate recommendations to improve the organization's governance processes for:

- Making strategic and operational decisions.
- Overseeing risk management and control.

- Promoting appropriate ethics and values within the organization.
- Ensuring effective organizational performance management and accountability.
- Communicating risk and control information to appropriate areas of the organization.
- Coordinating the activities of, and communicating information among, the board, external and internal auditors, other assurance providers, and management.

> **2110.A1** – The internal audit activity must evaluate the design, implementation, and effectiveness of the organization's ethics-related objectives, programs, and activities.
>
> **2110.A2** – The internal audit activity must assess whether the information technology governance of the organization supports the organization's strategies and objectives.

2120 – Risk Management

The internal audit activity must evaluate the effectiveness and contribute to the improvement of risk management processes.

Interpretation:

Determining whether risk management processes are effective is a judgment resulting from the internal auditor's assessment that:

- *Organizational objectives support and align with the organization's mission.*
- *Significant risks are identified and assessed.*
- *Appropri ate risk responses are selected that align risks with the organization's risk appetite.*
- *Relevant risk information is captured and communicated in a timely manner across the organization, enabling staff, management, and the board to carry out their responsibilities.*

The internal audit activity may gather the information to support this assessment during multiple engagements. The results of these engagements, when viewed together, provide an understanding of the organization's risk management processes and their effectiveness.

Risk management processes are monitored through ongoing management activities, separate evaluations, or both.

> **2120.A1** – The internal audit activity must evaluate risk exposures relating to the organization's governance, operations, and information systems regarding the:
>
> - Achievement of the organization's strategic objectives.
> - Reliability and integrity of financial and operational information.
> - Effectiveness and efficiency of operations and programs.
> - Safeguarding of assets.
> - Compliance with laws, regulations, policies, procedures, and contracts.

2120.A2 – The internal audit activity must evaluate the potential for the occurrence of fraud and how the organization manages fraud risk.

2120.C1 – During consulting engagements, internal auditors must address risk consistent with the engagement's objectives and be alert to the existence of other significant risks.

2120.C2 – Internal auditors must incorporate knowledge of risks gained from consulting engagements into their evaluation of the organization's risk management processes.

2120.C3 – When assisting management in establishing or improving risk management processes, internal auditors must refrain from assuming any management responsibility by actually managing risks.

2130 – Control

The internal audit activity must assist the organization in maintaining effective controls by evaluating their effectiveness and efficiency and by promoting continuous improvement.

2130.A1 – The internal audit activity must evaluate the adequacy and effectiveness of controls in responding to risks within the organization's governance, operations, and information systems regarding the:

- Achievement of the organization's strategic objectives.
- Reliability and integrity of financial and operational information.
- Effectiveness and efficiency of operations and programs.
- Safeguarding of assets.
- Compliance with laws, regulations, policies, procedures, and contracts.

2130.C1 – Internal auditors must incorporate knowledge of controls gained from consulting engagements into evaluation of the organization's control processes.

2200 – Engagement Planning

Internal auditors must develop and document a plan for each engagement, including the engagement's objectives, scope, timing, and resource allocations. The plan must consider the organization's strategies, objectives, and risks relevant to the engagement.

2201 – Planning Considerations

In planning the engagement, internal auditors must consider:

- The strategies and objectives of the activity being reviewed and the means by which the activity controls its performance.
- The significant risks to the activity's objectives, resources, and operations and the means by which the potential impact of risk is kept to an acceptable level.
- The adequacy and effectiveness of the activity's governance, risk management, and control processes compared to a relevant framework or model.
- The opportunities for making significant improvements to the activity's governance, risk management, and control processes.

2201.A1 – When planning an engagement for parties outside the organization, internal auditors must establish a written understanding with them about objectives, scope, respective responsibilities, and other expectations, including restrictions on distribution of the results of the engagement and access to engagement records.

2201.C1 – Internal auditors must establish an understanding with consulting engagement clients about objectives, scope, respective responsibilities, and other client expectations. For significant engagements, this understanding must be documented.

2210 – Engagement Objectives

Objectives must be established for each engagement.

2210.A1 – Internal auditors must conduct a preliminary assessment of the risks relevant to the activity under review. Engagement objectives must reflect the results of this assessment.

2210.A2 – Internal auditors must consider the probability of significant errors, fraud, noncompliance, and other exposures when developing the engagement objectives.

2210.A3 – Adequate criteria are needed to evaluate governance, risk management, and controls. Internal auditors must ascertain the extent to which management and/or the board has established adequate criteria to determine whether objectives and goals have been accomplished. If adequate, internal auditors must use such criteria in their evaluation. If inadequate, internal auditors must identify appropriate evaluation criteria through discussion with management and/or the board.

Interpretation:

Types of criteria may include:

- *Internal (e.g., policies and procedures of the organization).*
- *External (e.g., laws and regulations imposed by statutory bodies).*
- *Leading practices (e.g., industry and professional guidance).*

2210.C1 – Consulting engagement objectives must address governance, risk management, and control processes to the extent agreed upon with the client.

2210.C2 – Consulting engagement objectives must be consistent with the organization's values, strategies, and objectives.

2220 – Engagement Scope

The established scope must be sufficient to achieve the objectives of the engagement.

2220.A1 – The scope of the engagement must include consideration of relevant systems, records, personnel, and physical properties, including those under the control of third parties.

2220.A2 – If significant consulting opportunities arise during an assurance engagement, a specific written understanding as to the objectives, scope, respective responsibilities, and other expectations should be reached and the results of the consulting engagement communicated in accordance with consulting standards.

2220.C1 – In performing consulting engagements, internal auditors must ensure that the scope of the engagement is sufficient to address the agreed-upon objectives. If internal auditors develop reservations about the scope during the engagement, these reservations must be discussed with the client to determine whether to continue with the engagement.

2220.C2 – During consulting engagements, internal auditors must address controls consistent with the engagement's objectives and be alert to significant control issues.

2230 – Engagement Resource Allocation

Internal auditors must determine appropriate and sufficient resources to achieve engagement objectives based on an evaluation of the nature and complexity of each engagement, time constraints, and available resources.

Interpretation:

Appropriate refers to the mix of knowledge, skills, and other competencies needed to perform the engagement. Sufficient refers to the quantity of resources needed to accomplish the engagement with due professional care.

2240 – Engagement Work Program

Internal auditors must develop and document work programs that achieve the engagement objectives.

2240.A1 – Work programs must include the procedures for identifying, analyzing, evaluating, and documenting information during the engagement. The work program must be approved prior to its implementation, and any adjustments approved promptly.

2240.C1 – Work programs for consulting engagements may vary in form and content depending upon the nature of the engagement.

2300 – Performing the Engagement

Internal auditors must identify, analyze, evaluate, and document sufficient information to achieve the engagement's objectives.

2310 – Identifying Information

Internal auditors must identify sufficient, reliable, relevant, and useful information to achieve the engagement's objectives.

Interpretation:

Sufficient information is factual, adequate, and convincing so that a prudent, informed person would reach the same conclusions as the auditor. Reliable information is the best attainable information through the use of appropriate engagement techniques. Relevant information supports engagement observations and recommendations and is consistent with the objectives for the engagement. Useful information helps the organization meet its goals.

2320 – Analysis and Evaluation

Internal auditors must base conclusions and engagement results on appropriate analyses and evaluations.

2330 – Documenting Information

Internal auditors must document sufficient, reliable, relevant, and useful information to support the engagement results and conclusions.

> **2330.A1** – The chief audit executive must control access to engagement records. The chief audit executive must obtain the approval of senior management and/or legal counsel prior to releasing such records to external parties, as appropriate.
>
> **2330.A2** – The chief audit executive must develop retention requirements for engagement records, regardless of the medium in which each record is stored. These retention requirements must be consistent with the organization's guidelines and any pertinent regulatory or other requirements.
>
> **2330.C1** – The chief audit executive must develop policies governing the custody and retention of consulting engagement records, as well as their release to internal and external parties. These policies must be consistent with the organization's guidelines and any pertinent regulatory or other requirements.

2340 – Engagement Supervision

Engagements must be properly supervised to ensure objectives are achieved, quality is assured, and staff is developed.

Interpretation:

The extent of supervision required will depend on the proficiency and experience of internal auditors and the complexity of the engagement. The chief audit executive has overall responsibility for supervising the engagement, whether performed by or for the internal audit activity, but may designate appropriately experienced members of the internal audit activity to perform the review. Appropriate evidence of supervision is documented and retained.

2400 – Communicating Results

Internal auditors must communicate the results of engagements.

2410 – Criteria for Communicating

Communications must include the engagement's objectives, scope, and results.

> **2410.A1** – Final communication of engagement results must include applicable conclusions, as well as applicable recommendations and/or action plans. Where appropriate, the internal auditors' opinion should be provided. An opinion must take into account the expectations of senior management, the board, and other stakeholders and must be supported by sufficient, reliable, relevant, and useful information.
>
> **Interpretation:**
>
> *Opinions at the engagement level may be ratings, conclusions, or other descriptions of the results. Such an engagement may be in relation to con-*

trols around a specific process, risk, or business unit. The formulation of such opinions requires consideration of the engagement results and their significance.

2410.A2 – Internal auditors are encouraged to acknowledge satisfactory performance in engagement communications.

2410.A3 – When releasing engagement results to parties outside the organization, the communication must include limitations on distribution and use of the results.

2410.C1 – Communication of the progress and results of consulting engagements will vary in form and content depending upon the nature of the engagement and the needs of the client.

2420 – Quality of Communications

Communications must be accurate, objective, clear, concise, constructive, complete, and timely.

Interpretation:

Accurate communications are free from errors and distortions and are faithful to the underlying facts. Objective communications are fair, impartial, and unbiased and are the result of a fair-minded and balanced assessment of all relevant facts and circumstances. Clear communications are easily understood and logical, avoiding unnecessary technical language and providing all significant and relevant information. Concise communications are to the point and avoid unnecessary elaboration, superfluous detail, redundancy, and wordiness. Constructive communications are helpful to the engagement client and the organization and lead to improvements where needed. Complete communications lack nothing that is essential to the target audience and include all significant and relevant information and observations to support recommendations and conclusions. Timely communications are opportune and expedient, depending on the significance of the issue, allowing management to take appropriate corrective action.

2421 – Errors and Omissions

If a final communication contains a significant error or omission, the chief audit executive must communicate corrected information to all parties who received the original communication.

2430 – Use of "Conducted in Conformance with the *International Standards for the Professional Practice of Internal Auditing*"

Indicating that engagements are "conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing*" is appropriate only if supported by the results of the quality assurance and improvement program.

2431 – Engagement Disclosure of Nonconformance

When nonconformance with the Code of Ethics or the *Standards* impacts a specific engagement, communication of the results must disclose the:

- Principle(s) or rule(s) of conduct of the Code of Ethics or the Standard(s) with which full conformance was not achieved.
- Reason(s) for nonconformance.

- Impact of nonconformance on the engagement and the communicated engagement results.

2440 – Disseminating Results

The chief audit executive must communicate results to the appropriate parties.

Interpretation:

The chief audit executive is responsible for reviewing and approving the final engagement communication before issuance and for deciding to whom and how it will be disseminated. When the chief audit executive delegates these duties, he or she retains overall responsibility.

2440.A1 – The chief audit executive is responsible for communicating the final results to parties who can ensure that the results are given due consideration.

2440.A2 – If not otherwise mandated by legal, statutory, or regulatory requirements, prior to releasing results to parties outside the organization the chief audit executive must:

- Assess the potential risk to the organization.
- Consult with senior management and/or legal counsel as appropriate.
- Control dissemination by restricting the use of the results.

2440.C1 – The chief audit executive is responsible for communicating the final results of consulting engagements to clients.

2440.C2 – During consulting engagements, governance, risk management, and control issues may be identified. Whenever these issues are significant to the organization, they must be communicated to senior management and the board.

2450 – Overall Opinions

When an overall opinion is issued, it must take into account the strategies, objectives, and risks of the organization; and the expectations of senior management, the board, and other stakeholders. The overall opinion must be supported by sufficient, reliable, relevant, and useful information.

Interpretation:

The communication will include:

- *The scope, including the time period to which the opinion pertains.*
- *Scope limitations.*
- *Consideration of all related projects, including the reliance on other assurance providers.*
- *A summary of the information that supports the opinion.*
- *The risk or control framework or other criteria used as a basis for the overall opinion.*

- *The overall opinion, judgment, or conclusion reached.*

The reasons for an unfavorable overall opinion must be stated.

2500 – Monitoring Progress

The chief audit executive must establish and maintain a system to monitor the disposition of results communicated to management.

> **2500.A1** – The chief audit executive must establish a follow-up process to monitor and ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action.
>
> **2500.C1** – The internal audit activity must monitor the disposition of results of consulting engagements to the extent agreed upon with the client.

2600 – Communicating the Acceptance of Risks

When the chief audit executive concludes that management has accepted a level of risk that may be unacceptable to the organization, the chief audit executive must discuss the matter with senior management. If the chief audit executive determines that the matter has not been resolved, the chief audit executive must communicate the matter to the board.

Interpretation:

The identification of risk accepted by management may be observed through an assurance or consulting engagement, monitoring progress on actions taken by management as a result of prior engagements, or other means. It is not the responsibility of the chief audit executive to resolve the risk.

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NOTES

Internal Auditing: Assurance & Advisory Services, Fourth Edition, is a comprehensive textbook designed to teach students the fast-growing global profession of internal auditing. Written through the collaboration of educators and practitioners, this textbook serves as a cornerstone for internal audit education. It covers key fundamentals of internal auditing that can be applied in an ever-changing business world, serving as a reference and training tool for internal audit practitioners.

The textbook is completely aligned to The IIA's Code of Ethics and *International Standards for the Professional Practice of Internal Auditing*. The fourth edition includes online student and instructor tools that include case studies and leading generalized audit software packages and knowledge content from ACL, CaseWare IDEA, Wolters Kluwer's TeamMate, and Protiviti's KnowledgeLeader®. Supplemental teaching materials are available for instructors upon request.

THE FOURTH EDITION HAS BEEN UPDATED TO REFLECT:

- The latest release of The IIA's International Professional Practices Framework (IPPF) and the Committee of Sponsoring Organizations of the Treadway Commission's (COSO's) exposure draft of the *Enterprise Risk Management – Aligning Risk with Strategy and Performance* Framework.
- Emerging developments in technology, including a heightened focus on cybersecurity and the impact of associated risks to organizations.
- The latest information and data from the new COSO Fraud Risk Management Guide and data from the Association of Certified Fraud Examiners (ACFE).
- A robust discussion of the benefits of using data analytics to provide assurance as part of internal audit activities.
- Wolters Kluwer's latest version of TeamMate audit management software enhancements with improved case studies in end-of-chapter material as applicable.
- Protiviti's resource, KnowledgeLeader®, which has been integrated throughout the content in the form of relevant case study material at the end of each chapter, encouraging students to conduct further research and apply critical-thinking skills.

Previous editions have been translated into French, Spanish, and Japanese and adopted by many universities around the world. This fourth edition promises to build on the success of this bestseller, significantly contributing to the internal audit profession's body of knowledge and introducing students to the dynamic world of internal auditing.

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