

Chapter 2

Global E-Business: How Businesses Use Information Systems

True-False Questions

1. Operational management is responsible for directing the day-to-day operations of the business and therefore needs transaction-level information.
Answer: True **Difficulty: Easy** **Reference: p. 52**
2. Deciding whether to introduce a new product line is the responsibility of an operational manager.
Answer: False **Difficulty: Easy** **Reference: p. 57**
3. Operational-level manufacturing systems deal with the firm's long-term manufacturing goals, such as where to locate a new plant.
Answer: False **Difficulty: Medium** **Reference: p. 46**
4. Transaction processing systems are most commonly used by the senior management level of an organization.
Answer: False **Difficulty: Medium** **Reference: p. 52–53**
5. A transaction processing system is a computerized system that performs and records the daily routine transactions necessary to conduct business.
Answer: True **Difficulty: Easy** **Reference: p. 52**
6. A hotel reservation system is a typical example of a management information system.
Answer: False **Difficulty: Medium** **Reference: p. 52**
7. Management information systems typically support nonroutine decision making.
Answer: False **Difficulty: Medium** **Reference: p. 53–54**
8. The decision to grant credit to a customer is normally made by the middle manager.
Answer: False **Difficulty: Medium** **Reference: p. 52**

9. Transaction processing systems are the basic business systems that serve the operational level of the organization.
- Answer: True** **Difficulty: Medium** **Reference: p. 52**
10. Managers need TPSs to monitor the status of internal operations and the firm's relations with the external environment.
- Answer: True** **Difficulty: Medium** **Reference: p. 52**
11. Most MISs use sophisticated mathematical models or statistical techniques.
- Answer: False** **Difficulty: Medium** **Reference: p. 53–54**
12. Decision-support systems help managers make decisions that are unique, rapidly changing, and not easily specified in advance.
- Answer: True** **Difficulty: Easy** **Reference: p. 54**
13. Decision-support systems use internal information as well as information from external sources.
- Answer: True** **Difficulty: Medium** **Reference: p. 54**
14. ESSs are designed to serve the middle management of the organization.
- Answer: False** **Difficulty: Medium** **Reference: p. 57**
15. ESSs are designed to incorporate data about external events, but they also draw summarized information from internal MIS and DSS.
- Answer: True** **Difficulty: Medium** **Reference: p. 57**
16. ESSs are designed primarily to solve specific problems.
- Answer: False** **Difficulty: Medium** **Reference: pp. 57–58**
17. Information supplied by an enterprise system is structured around cross-functional business processes.
- Answer: True** **Difficulty: Medium** **Reference: p. 61**
18. Enterprise systems often include transactions with customers and vendors.
- Answer: True** **Difficulty: Easy** **Reference: p. 61**
19. Supply chain management systems are more externally oriented than enterprise systems.
- Answer: True** **Difficulty: Hard** **Reference: pp. 61–63**

20. Maintaining online directories of employees with special areas of expertise is one application of knowledge management systems.

Answer: True

Difficulty: Medium

Reference: p. 65

Multiple-Choice Questions

21. (Analysis)

Kia's difficulties in getting a complete picture of defects in their cars illustrates:

- a. the difficulties in creating accurate tracking systems.
- b. the challenges posed by having multiple information systems that are not linked.
- c. the difficulties in complying with government regulations.
- d. the compromises made in drawing accurate reports from poorly planned information systems.

Answer: b

Difficulty: Easy

Reference: p. 48

(Analysis in terms of differentiating)

22. (Analysis, Synthesis)

How would you best categorize the types of systems Kia implemented in their defect early warning system?

- a. A TPS to store basic data about vehicles, parts, sales, and warranties, and an MIS to create reports on the data
- b. A TPS to store basic data about vehicles, parts, sales, and warranties, and a DSS for high-level analysis and forecasts
- c. An MIS to create reports from existing TPSs and a DSS for high-level analysis and forecasts
- d. A production and manufacturing system to record basic data about faulty parts and a DSS for high-level analysis and forecasts

Answer: c

Difficulty: Hard

Reference: pp. 48–49

23. Which of the following is a cross-functional business process?

- a. Hiring an employee
- b. Identifying a customer
- c. Fulfilling a customer order
- d. Creating an invoice

Answer: c

Difficulty: Easy

Reference: pp. 42–43

24. Promoting the organization's products or services is a responsibility of the:
- finance and accounting function.
 - human resources function.
 - manufacturing and production function.
 - sales and marketing function.

Answer: d

Difficulty: Easy

Reference: p. 45

25. Market research is an activity associated with the:
- finance and accounting function.
 - human resources function.
 - manufacturing and production function.
 - sales and marketing function.

Answer: d

Difficulty: Easy

Reference: p. 45

26. Pricing analysis is an example of:
- a sales and marketing information system serving senior management.
 - a sales and marketing information system serving middle management.
 - a finance and accounting information system serving senior management.
 - a finance and accounting information system serving middle management.

Answer: b

Difficulty: Medium

Reference: p. 45

27. A sales and marketing information system aids operational management in:
- tracking sales.
 - planning new products and services.
 - analyzing sales performance.
 - preparing sales forecasts.

Answer: a

Difficulty: Medium

Reference: p. 45

28. A sales and marketing information system aids middle management employees in:
- tracking sales.
 - planning new products and services.
 - analyzing sales performance.
 - preparing sales forecasts.

Answer: c

Difficulty: Medium

Reference: p. 45

29. Equipment scheduling and facilities maintenance are functions of:
- finance and accounting systems.
 - human resources systems.
 - manufacturing and production systems.
 - sales and marketing systems.

Answer: c

Difficulty: Easy

Reference: p. 45

30. Senior management uses finance and accounting information systems to:
- plan long-term profits.
 - decide where to locate new facilities.
 - forecast sales trends.
 - control the firms' financial resources.

Answer: a

Difficulty: Medium

Reference: p. 50

31. Budgeting is typically a feature of an information system serving:
- operational management.
 - sales and marketing.
 - senior management.
 - middle management.

Answer: d

Difficulty: Medium

Reference: p. 50

32. A finance and accounting information system aids operational management with:
- establishing long term investment goals.
 - profit planning.
 - accounts receivable.
 - budgeting.

Answer: c

Difficulty: Medium

Reference: p. 50

33. Compensation analysis is an example of:
- finance and accounting information systems.
 - enterprise application information systems.
 - human resources information systems.
 - sales and marketing information systems.

Answer: c

Difficulty: Easy

Reference: p. 51

34. The total elapsed time, from the beginning of a business process to the end of the process, is called:
- completion time.
 - requisition-to-pay.
 - fulfillment.
 - cycle time.

Answer: d **Difficulty: Hard** **Reference: p. 61**

35. A relocation control system that reports summaries on the total moving, house-hunting, and home financing costs for employees in all company divisions would fall into the category of:
- knowledge management systems.
 - transaction processing systems.
 - executive-support systems.
 - management information systems.

Answer: d **Difficulty: Hard** **Reference: p. 53–54**

36. The term “management information systems” designates a specific category of information systems serving:
- integrated data processing throughout the firm.
 - transaction process reporting.
 - employees with online access to historical records.
 - middle management functions.

Answer: d **Difficulty: Easy** **Reference: p. 53**

37. To monitor the status of internal operations and the firm’s relations with the external environment, managers need _____ systems
- decision-support
 - knowledge
 - transaction processing
 - management information

Answer: c **Difficulty: Medium** **Reference: p. 52**

38. As discussed in the chapter case on Tupperware, what major change precipitated Tupperware’s need to implement a new information systems strategy?
- Move into overseas operations
 - Merger
 - Business model change
 - Change in suppliers

Answer: c **Difficulty: Medium** **Reference: p. 39**

39. These systems are typically a major source of data for other systems:
- a. transaction processing systems.
 - b. management information systems.
 - c. executive support systems.
 - d. decision-support systems.

Answer: a **Difficulty: Medium** **Reference: p. 52**

40. Decisions that are unique, rapidly changing, and not easily specified in advance are best suited to this type of system:
- a. management.
 - b. transaction processing.
 - c. executive support.
 - d. decision-support.

Answer: d **Difficulty: Easy** **Reference: p. 54**

41. These systems are especially suited to situations in which the procedure for arriving at a solution may not be fully predefined in advance:
- a. management information systems.
 - b. transaction processing systems.
 - c. decision-support systems.
 - d. knowledge management systems.

Answer: c **Difficulty: Medium** **Reference: p. 54**

42. Executive support systems are information systems that support the:
- a. long-range planning activities of senior management.
 - b. knowledge and data workers in an organization.
 - c. decision-making and administrative activities of middle managers.
 - d. day-to-day processes of production.

Answer: a **Difficulty: Easy** **Reference: p. 57**

43. (Synthesis)

BioSense, the application developed by the CDC to report on disease trends, would be best classified as a(n):

- a. management information system.
- b. transaction processing system.
- c. decision-support system.
- d. executive-support system.

Answer: a **Difficulty: Hard** **Reference: p. 77**

44. (Synthesis)

Many hospitals are described in the BioSense case study as being reluctant to implement BioSense. The organizational challenges that dissuade some hospitals from using the BioSense program include:

- a. the incompatibility of the hospital's information systems to the BioSense system.
- b. the costs of standardizing information.
- c. concerns regarding responsibility for managing a pandemic.
- d. all of the above.

Answer: c

Difficulty: Hard

Reference: p. 78

(Synthesis in terms of bringing knowledge together)

45. (Synthesis)

Concur Expense Service software, described in the Interactive Session: Management as software that automates the travel and entertainment expense-reporting process, would be classified as a(n):

- a. ESS.
- b. DSS.
- c. finance and accounting system.
- d. human resources system.

Answer: d

Difficulty: Medium

Reference: p. 55

(Synthesis in terms of bringing knowledge together)

46. Decision-support systems are often referred to as:

- a. business information systems.
- b. business intelligence systems.
- c. business analysis systems.
- d. business modeling systems.

Answer: b

Difficulty: Medium

Reference: p. 57

47. ESS are specifically designed to serve this level of the organization:

- a. operational.
- b. end-user.
- c. middle management.
- d. senior management.

Answer: d

Difficulty: Easy

Reference: p. 57

48. These systems often deliver information to senior executives through a portal, which uses a Web interface to present integrated personalized business content:
- a. transaction processing systems.
 - b. executive support systems.
 - c. management information systems.
 - d. decision-support systems.

Answer: b

Difficulty: Medium

Reference: p. 58

49. These systems are designed to support organization-wide process coordination and integration.
- a. Decision-support systems
 - b. Management information systems
 - c. CRM
 - d. Enterprise applications

Answer: d

Difficulty: Easy

Reference: p. 59

50. A(n) _____ collects data from various key business processes and stores the data in a single, comprehensive data repository, usable by other parts of the business.
- a. transaction system
 - b. enterprise system
 - c. automatic reporting system
 - d. management information system

Answer: b

Difficulty: Medium

Reference: p. 61

51. _____ is the process that integrates supplier, manufacturer, distributor, and customer logistics processes.
- a. Collaborative distribution
 - b. Supply-chain management
 - c. Reverse logistics
 - d. Enterprise planning

Answer: b

Difficulty: Medium

Reference: p. 62

52. _____ uses a set of integrated applications to address all aspects of the customer relationship.
- a. CRM
 - b. MIS
 - c. CLE
 - d. CLU

Answer: a

Difficulty: Easy

Reference: p. 64

53. (Analysis)

Which type of system would you use to determine what trends in your supplier's industry will affect your firm the most in five years?

- a. ESS
- b. TPS
- c. MIS
- d. DSS

Answer: a

Difficulty: Easy

Reference: p. 57

(Analysis in terms of differentiate and appraise)

54. (Analysis)

Which type of system would you use to forecast the return on investment if you used new suppliers with better delivery track records?

- a. ESS
- b. TPS
- c. MIS
- d. DSS

Answer: d

Difficulty: Medium

Reference: pp. 54–56

(Analysis in terms of differentiate and appraise)

55. (Analysis)

Which type of system would you use to change a production schedule if a key supplier was late in delivering goods?

- a. ESS
- b. TPS
- c. MIS
- d. DSS

Answer: b

Difficulty: Medium

Reference: pp. 52–53

(Analysis in terms of differentiate and appraise)

56. (Analysis)

Which type of system would you use to determine the five suppliers with the worst record in delivering goods on time?

- a. ESS
- b. TPS
- c. MIS
- d. DSS

Answer: c

Difficulty: Medium

Reference: pp. 53–54

(Analysis in terms of differentiate and appraise)

57. Which types of systems consolidate the relevant knowledge and experience in the firm to make it available to improve business processes and management decision making?

- a. TPS
- b. Extranets
- c. KMS
- d. CRM

Answer: c

Difficulty: Medium

Reference: pp. 65–66

58. (Synthesis)

What type of information system is an intranet most easily adapted to:

- a. CRM.
- b. MIS.
- c. TPS.
- d. KMS.

Answer: d

Difficulty: Hard

Reference: pp. 65–66

(Synthesize in terms of bringing information together)

59. Buying or selling goods over the Internet is called:

- a. e-commerce.
- b. e-business.
- c. an intranet.
- d. an extranet.

Answer: a

Difficulty: Easy

Reference: p. 67

60. The use of digital technology and the Internet to execute the major business processes in the enterprise is called:
- e-commerce.
 - e-business.
 - enterprise applications.
 - MIS.

Answer: b

Difficulty: Easy

Reference: p. 67

61. The principal liaison between the information systems groups and the rest of the organization is a(n):
- programmer.
 - information systems manager.
 - systems analyst.
 - CTO.

Answer: c

Difficulty: Easy

Reference: p. 68

62. A _____ is a senior manager who oversees the use of IT in the firm.
- CEO
 - CFO
 - CIO
 - CTO

Answer: c

Difficulty: Easy

Reference: p. 68

63. The advantage of a having a centralized information services department, which operates as a separate department similar to other departments is:
- that this is more likely to produce more compatible systems and more coherent long-term systems development plans.
 - that this lowers costs of technology purchases.
 - that systems are built that directly address that function's business needs.
 - that systems are built that can function independently and more efficiently.

Answer: a

Difficulty: Hard

Reference: p. 70

64. (Evaluate)

What is the most important benefit of an enterprise application?

- Enabling speed of communicating
- Enabling business functions and departments to share information
- Enabling a company to work collaboratively with customers and suppliers
- Enabling cost-effective, e-business processes

Answer: b

Difficulty: Hard

Reference: p. 59

65. (Evaluation)

You manage the Information Systems department at a small startup Internet advertiser. You need to set up an inexpensive system that allows customers to see real-time statistics such as views and click-throughs about their current banner ads. Which type of system will most efficiently provide a solution?

- a. CRM
- b. Enterprise system
- c. Extranet
- d. Intranet

Answer: c

Difficulty: Hard

Reference: p. 66

66. (Synthesis)

You work for a highly successful advertiser that is just about to expand nationally. Of utmost importance will be finding a way to store and disseminate their client's constantly updating branding and style guides, which include multiple image files and text documents, to all of their branches. What system will best serve these needs?

- a. An intranet with KMS capabilities
- b. An extranet with KMS capabilities
- c. A TPS with KMS capabilities
- d. A sales and marketing information system

Answer: b

Difficulty: Hard

Reference: pp. 60–66

(Synthesis in terms of bringing information together)

67. (Synthesis)

You have been hired by a non-profit agency to implement a system to handle their donations. Event fundraisers need to be able to quickly access a donor's information and history. The marketing department needs to be able to create customized mailing lists, in order to send different messages to different types of donors. What system(s) will best meet these needs?

- a. TPS
- b. TPS with DSS capabilities
- c. TPS with MIS capabilities
- d. TPS with ESS capabilities

Answer: c

Difficulty: Hard

Reference: pp 52–58

(Synthesis in terms of bringing information together)

68. *(Synthesis)*

You have been hired by Inspiration Inc, to help improve their profit margin. Inspiration Inc. is a business communications consultancy that services many clients in different industries throughout the United States. The end products of the company are customized recommendations for the best use of a client's existing resources for improving internal communications, typically delivered via documentation in different media. The company has approximately 100 consultants, all of whom are located in their central headquarters in Chicago. What system do you recommend to improve the company's business processes and increase their profit margin?

- a. Extranet, to enable quick collaboration over the Internet , minimize the time spent communicating with the client, and minimize the amount of paperwork needed
- b. CRM, to maintain easily accessible customer records to minimize the time spent looking for client data
- c. KMS, for minimizing redundant work on similar clients
- d. Marketing system, for improving sales levels

Answer: a

Difficulty: Hard

Reference: pp. 64–66

(Synthesis in terms of bringing information together)

69. Which of the following types of organizing the information systems function would you be most likely to find in a very large, multinational corporation?

- a. As departments within each functional area
- b. As a separate, centralized department
- c. Represented within each major division of the company
- d. None of the above

Answer: c

Difficulty: Medium

Reference: pp. 68–70

70. Which of the following types of organizing the information systems function would you be most likely to find in a small company with 50 employees?

- a. As departments within each functional area
- b. As a separate, centralized department
- c. Represented within each major division of the company
- d. None of the above

Answer: d

Difficulty: Medium

Reference: p. 68

Fill In the Blanks

71. A(n) business process is a set of logically related activities for accomplishing a specific business result. [[ED QUERY: This term is not in the Key Terms; replace with appropriate fill-in]]

Difficulty: Easy

Reference: pp. 41–42

72. A Web interface used to present integrated personalized business content to users is called a portal.

Difficulty: Medium

Reference: p. 58

73. Enterprise applications span the entire firm, integrating information from multiple functions and business processes to enhance the performance of the organization as a whole.

Difficulty: Medium

Reference: p. 59

74. Decision-support systems are used by middle management to combine data and sophisticated analytical models or data analysis tools to support nonroutine decision making.

Difficulty: Easy

Reference: p. 54

75. The economic order quantity formula calculates the least expensive quantity to reorder for restocking inventory.

Difficulty: Hard

Reference: p. 47

76. Human resources information systems support activities such as identifying potential employees, maintaining complete records on existing employees, and creating programs to develop employees' talents and skills.

Difficulty: Easy

Reference: p. 51

77. (Application)●

A state Web site that allows citizens to pay parking fines online is a form of e-government.

Difficulty: Hard

Reference: p. 67

78. Supply chain management systems are one type of interorganizational system because they automate the flow of information across organizational boundaries.

Difficulty: Medium

Reference: p. 63

79. Programmers are highly trained technical specialists who write the software instructions for computers.

Difficulty: Easy

Reference: p. 68

80. End users are representatives of departments outside of the information systems group for whom applications are developed.

Difficulty: Easy

Reference: p. 68

Business Leaders

Essay Questions

81. **Identify and discuss the major types of systems in a business from a constituency perspective. What is the relationship between these systems?**

The four major categories of information systems from a constituency perspective are:

1. Transaction processing systems, such as payroll or order processing, track the flow of the daily routine transactions that are necessary to conduct business.
2. Management-information systems (MIS) provide the management control level with reports and access to the organization's current performance and historical records. Most MIS reports condense information from TPS and are not highly analytical.
3. Decision-support systems (DSS) support management decisions when these decisions are unique, rapidly changing, and not specified easily in advance. They have more advanced analytical models and data analysis capabilities than MIS and often draw on information from external as well as internal sources.
4. Executive-support systems (ESS) support senior management by providing data of greatest importance to senior management decision makers, often in the form of graphs and charts delivered via portals. They have limited analytical capabilities but can draw on sophisticated graphics software and many sources of internal and external information.

The various types of systems in the organization exchange data with one another. TPS are a major source of data for other systems, especially MIS and DSS. ESSs primarily receive data from lower-level systems.

Difficulty: Medium

Reference: pp. 52–58

82. *(Evaluation)*
In your opinion, what are at least three factors that contribute to the difficulty of integrating systems for different organizational levels and functions within an organization? Support your answer.

One answer might be similar to this: A business firm is not a simple mechanism, and firms that have been in business any length of time will have highly individualized ways of conducting common business procedures. Even though software programs can be customized, it will be necessary for the business to change because new procedures are always required by new software, and these changes are expensive partly because of the time involved. On the other hand, if the company decides to write software to fit the specialized methods it has developed to conduct its business, it will most certainly find this process to be much more expensive and technologically difficult than anyone imagined! Though many companies do not realize it, it will be necessary for them to map and to understand their systems before they will be able to integrate them. This is another time-consuming and expensive process, and is not easy to achieve.

Difficulty: Medium

Reference: pp. 41–44; 58–60

(Evaluation in terms of assess and compare)

83. . **Discuss the difference between the finance function and the accounting function.**

The finance function is responsible for managing the firm's financial assets, such as cash, stocks, bonds, and other investments, to maximize the return on these financial assets. The finance function is also in charge of managing the capitalization of the firm. To determine whether the firm is getting the best return on its investments, the finance function must obtain a considerable amount of information from sources external to the firm.

The accounting function is responsible for maintaining and managing the firm's financial records—receipts, disbursements, depreciation, and payroll—to account for the flow of funds in a firm. The accounting function obtains information from sources internal to the firm.

Difficulty: Medium

Reference: p. 47

84. **Describe the information systems supporting the major business functions: sales and marketing, manufacturing and production, finance and accounting, and human resources.**

- Sales and marketing help the firm identify customers for the firm's products or services, develop products and services to meet customers' needs, promote the products and services, sell the products and services, and provide ongoing customer support.
- Manufacturing and production systems deal with the planning, development, and production of products and services, and controlling the flow of production.
- Finance and accounting systems keep track of the firm's financial assets and fund flows.
- Human resources systems maintain employee records; track employee skills, job performance, and training; and support planning for employee compensation and career development.

Difficulty: Medium

Reference: p. 45–52

85. *(Synthesis, Evaluation)*

Apex Vacuum, a family-owned manufacturer of budget vacuums, has grown exponentially over the last few years. However, the company is having difficulty preparing for future growth. The only information system used at Apex is an antiquated accounting system. The company has one manufacturing plant located in Arkansas; and three warehouses, in Arkansas, Delaware, and California. The Apex sales force is national, and Apex purchases about a third of its vacuum parts and materials from a single overseas supplier. You have been hired to recommend the information systems Apex should implement in order to maintain their competitive edge. However, there is not enough money for a full-blown, cross-functional enterprise application, and you will need to limit the first step to a single functional area or constituency. What will you choose, and why?

A TPS focusing on production and manufacturing to keep production costs low while maintaining quality, and for communicating with other possible vendors. The TPS would later be used to feed MIS and other higher level systems.

Difficulty: Medium Reference: pp. 44–58

(Synthesis in terms of arrange, propose; evaluation in terms of appraise, defend)

86. **Describe at least two benefits of using enterprise systems.**

Enterprise systems integrate the firm's key business processes in sales, production, finance, logistics, and human resources into a single software system so that information can flow throughout the organization, improving coordination, efficiency, and decision making. These systems help create a more uniform organization in which everyone uses similar processes and information, and measures their work in terms of organization-wide performance standards. The coordination of the firm's key business processes allows the firm to respond more rapidly to customer demands.

Difficulty: Medium Reference: pp. 60–62

87. **How can a good CRM system increase profits for a company?**

Customer relationship management uses information systems to coordinate all of the business processes surrounding the firm's interactions with its customers. The systems consolidate customer information from multiple sources—telephone, e-mail, wireless devices, traditional sales and marketing systems, and the Web—so that the firm can obtain a unified view of a customer. This allows the firm to identify its most profitable customers and make special efforts to please them.

Difficulty: Medium Reference: pp. 64–65

88. *(Synthesis)*

What is the connection between organizations, information systems, and business processes?

Business processes refer to the manner in which work activities are organized, coordinated, and focused to produce a specific business result. They also represent unique ways in which organizations coordinate work, information, and knowledge and the ways in which management chooses to coordinate work. Managers need to pay attention to business processes because they determine how well the organization can execute, and thus are a potential source for strategic success or failures. Although each of the major business functions has its own set of business processes, many other business processes are cross-functional. Information systems can help organizations achieve great efficiencies by automating parts of these processes or by helping organizations rethink and streamline them. Firms can become more flexible and efficient by coordinating and integrating their business processes to improve management of resources and customer service.

Difficulty: Medium

Reference: pp. 41–44

(Synthesis in terms of bringing together parts of knowledge)

89. **Define and discuss the use of cross-functional business processes within a firm.**

Cross-functional processes are those that require input, cooperation, or coordination between the major business functions in an organization. For instance, when a salesman takes an order, the major business functions of planning, production, inventory control, shipping, accounting, and customer relations will all be involved before the order is completed.

Difficulty: Medium

Reference: pp. 42–43

90. *(Synthesis, Evaluation)*

The retail home improvement chain you work for, DIY Discount, has noticed that one of its brands of faucets is not selling nearly as well as anticipated. What information systems of the business will you use to determine the reason for the poor sales? Discuss what information you will retrieve from which system. Which of the information systems will be most important for your analysis? Which of the systems will be least important?

- You might query operational level manufacturing and production TPS to make sure that the product is actually getting to the stores and being restocked.
- You could query MIS to see average sales levels according to geography, location, and other factors to see if there are any specific factors affecting the sales.
- You might query marketing systems to see what was seen as the appeal of these faucets and what, if any, promotions were used, and executive-level sales and marketing systems to see what trends are predicted for faucets.
- You might query human resource systems to make sure that there aren't any incentive programs that are diminishing the importance of the faucet sales.
- You might query ESS to see if the same faucets are being sold by competitors and what these prices are.
- You might use DSS to see what factors could increase sales.

Assuming that the faucets are being properly stocked at the stores, the most important systems to query are the managerial-level systems: MIS for summaries of sales records to help pinpoint any other factors, sales and marketing to assure that promotion and pricing is accurate, ESS to check competition, and DSS for higher-level analysis to forecast possible solutions. The least important to query would be finance and accounting systems as these record data that shouldn't be affecting the sales of a faucet.

(Synthesis in terms of plan, set up; evaluation in terms of appraise and compare)

Difficulty: Hard

Reference: pp. 52–58