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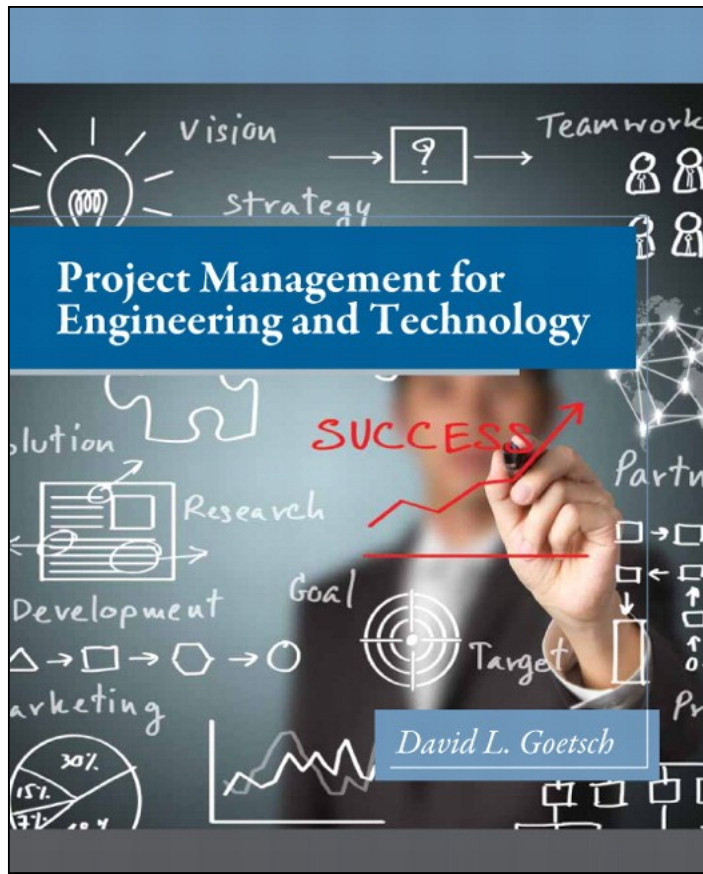
Slides for Lecture and Discussion

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Chapter One

Overview of Project Management

Overview

- A project is a fully-coordinated group of interdependent tasks that are completed by people using resources and processes.

- Projects have definite starting and ending dates as well as success criteria.

Overview

- Project managers are needed in engineering and technology firms for the same reason conductors are needed in orchestras.

- Projects consist of tasks that must be planned, scheduled, budgeted, staffed, and coordinated.

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Overview

- Projects that are properly managed are completed on time, within budget, and according to specifications.

- There are four interrelated and interdependent components of any project:
    - scope
    - schedule
    - resources
    - leadership

Overview

- The project scope summarizes everything members of the project team need to know to fully understand the project.

- A project's scope includes a project overview, deliverables, features and functions, acceptance criteria, restrictions/constraints, and uncertainties.

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Overview

- The schedule for a project includes the beginning and ending times and duration for all project tasks.

- Project resources include any and all assets needed to complete the project on time, within budget, and according to specifications.

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Overview

- Internal project are initiated by engineering and technology firms for the purpose of enhancing the firm's competitiveness.

- External projects are initiated by customers that need a project and/or service.

Overview

- Projects have five distinct phases:
  - Initiation
  - Planning
  - Execution
  - Monitoring/control
  - Closeout

Figure 1.2 Phases and elements of the project management process.

Process Groups	Integration	Scope	Time Management	Cost Management	Quality Management	HR Management	Communication Management	Risk Management	Procurement Management
		KNOWLEDGE AREAS							
Initiating	• Project charter (Contract, drawings, and specifications)	–	–	–	–	–	• Identify stakeholders	–	–
Planning	• Project management plan	• Scope development • Work breakdown structure development	• Estimate time and duration of activities • Develop schedule	• Estimate costs • Establish budget	• Plan quality	• Develop HR plan	• Develop communication plan	• Identify and analyze risks • Plan risk management	• Develop procurement plan
Executing	• Project execution	–	–	–	• Assure quality	• Establish build/lead project	• Communicate with all stakeholders regularly	–	• Procure needed resources
Monitoring/ Controlling	• Monitor, track progress, control • Adjust as changes occur	• Control scope	• Control schedule	• Control costs	• Control quality	• Monitor team performance	• Report on progress and performance	• Monitor and control risks	• Manage the procurement process
Closing	• Close	–	–	–	–	–	–	–	• Close procurements

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Overview

- People skills needed by project managers include:
  - Teambuilding
  - Leadership
  - Motivation
  - Communication

Overview

- People skills needed by project managers include:
  - Time management
  - Change management
  - Dealing with diversity
  - Leading times in times of adversity

Chapter Two

Roles and Responsibilities of Project Managers

Roles and Responsibilities

- Project managers perform both process and people functions. Both types of functions are necessary for effective project management.

Roles and Responsibilities

- Process functions fall into the following groups:
  - initiating
  - planning
  - executing
  - monitoring and controlling, and
  - closing out projects

Roles and Responsibilities

- People functions include:
  - leadership
  - teambuilding
  - motivation
  - communication
  - time management
  - change management
  - diversity management
  - adversity management

Figure 2.1 Project managers provide the leadership in carrying out these process functions.

PROCESS FUNCTIONS OF PROJECT MANAGERS

1. **Project initiation**
   - Develop project charter
   - Identify stakeholders

2. **Project planning**
   - Develop the project schedule
   - Develop the cost estimate/budget
   - Develop the quality, human resource, communication, and risk management plans

3. **Project execution**
   - Direct and manage project work
   - Assure quality
   - Conduct procurements

4. **Project monitoring/control**
   - Control changes
   - Control the scope, schedule, costs, qualify, performance, and risk

5. **Project closeout**
   - Close procurements
   - Close all other project activities

Figure 2.5 People functions are half of a project manager's job.

CHECKLIST OF THE PROJECT MANAGER'S PEOPLE FUNCTIONS

- ✓ Leadership
- ✓ Teambuilding
- ✓ Conflict management
- ✓ Motivation
- ✓ Communication
- ✓ Time management
- ✓ Change management
- ✓ Diversity management
- ✓ Adversity management

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Roles and Responsibilities

- Effective project managers have the following characteristics:
  - advanced process skills
  - advanced people skills
  - intellectual curiosity
  - commitment
  - vision
  - insight
  - people orientation
  - character

Roles and Responsibilities

- Effective project managers do the following:
  1. focus on solutions
  2. practice decisive and participatory management
  3. focus on the customer
  4. focus on win-win outcomes
  5. lead by example
  6. elicit the best from all stakeholders
     (From Duncan Brodie of ProjectSmart)

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Roles and Responsibilities

- Project managers may work in organizations that have a functional, matrix, or project-oriented structure.

  - In functional organizations (Hierarchical or line structure), projects managers typically do not have line authority over members of project teams.

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Roles and Responsibilities

- Project managers may work in organizations that have a functional, matrix, or project-oriented structure.
  - In matrix organizations each department (e.g. engineering, manufacturing, etc.) is considered a pool from which project team members are drawn as needed.
  - Project managers do not have line authority over team members in matrix organizations.

Roles and Responsibilities

- In organizations with a project structure all work revolves around projects. In this type of organization, project managers have line authority over their team members.

Roles and Responsibilities

- Various project management certifications are available from the Project Management Institute.

- For information about certification requirements and levels go to www.pmi.org

Chapter Three

Project Initiation

Project Initiation

- The outcomes of the project initiation phase of a project are:
  - project description, feasibility analysis report, concept document, project charter with scope, stakeholder register, and the project kickoff meeting.
- The project description summarizes what the project involves, who the project is for, and why the project is important.

Project Initiation

- The feasibility analysis should answer these questions:
    - Is the firm already operating at capacity?
    - Does the project fall within the firm's core competencies?
    - Is the potential return on investment sufficient?
    - Is the customer financially able to meet its contractual obligations?

Project Initiation

- The project concept document should contain the following:
  - overview of the project, purpose statement, goals and objectives, selected approach and strategies for implementing it, success factors, financial information and resource requirements, schedule information, and risk information.

Project Initiation

- The project charter is more detailed than the project concept document. It should contain:

  - general information, project overview, assumptions, scope, milestones, deliverables, authority/responsibility, organization, roles, disaster recovery, resources, funding, and signatures.

Project Initiation

- The project stakeholder register is a directory of all individuals who have a stake in the project. It contains complete contact information on all stakeholders.

Project Initiation

- The project kickoff meeting should cover the following agenda items as a minimum:

    - welcome, introductions, distribution and discussion of the project charter, discussion of the stakeholder register, discussion of next steps, and questions/concerns from team members.

Figure 3.8 Project managers should develop a comprehensive agenda for the kickoff meeting.

Agenda
KICKOFF MEETING: XYZ PROJECT

Date: September 27, 9:00 AM, 3rd Floor Conference Room

Project Manager: Mark Wheland

AGENDA ITEMS

1. Welcome by Mark Wheland

2. Introductions of team members

3. Distribution and discussion of the project charter:
   a. Project overview
   b. Assumptions
   c. Project scope with milestones and deliverables
   d. Authority and responsibility
   e. Project organization
   f. Roles and responsibilities
   g. Disaster recovery
   h. Resources and funding

4. Stakeholder register
   a. Known stakeholders
   b. Hidden stakeholders

5. Next steps

6. Around the room
   a. Questions
   b. Concerns

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Chapter Four

Project Planning:
The Schedule

Develop the Management Plan and Schedule

- Effective scheduling can result in benefits in the critical areas of time, cost, and quality. Consequently, project managers must be good schedulers.

Develop the Management Plan and Schedule

- The scheduling process consists of the following steps:
    1. clarify the project's goal
    2. develop the work breakdown structure (WBS)
    3. put the WBS activities in sequence
    4. compute and chart the durations of all WBS activities

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Develop the Management Plan and Schedule

- The scheduling process consists of the following steps:
  5. develop the network diagram and determine the critical path
  6. update the schedule as needed
  7. monitor the schedule throughout the project

Figure 4.6 WBS for producing a motorcycle with time allocations and numbering.
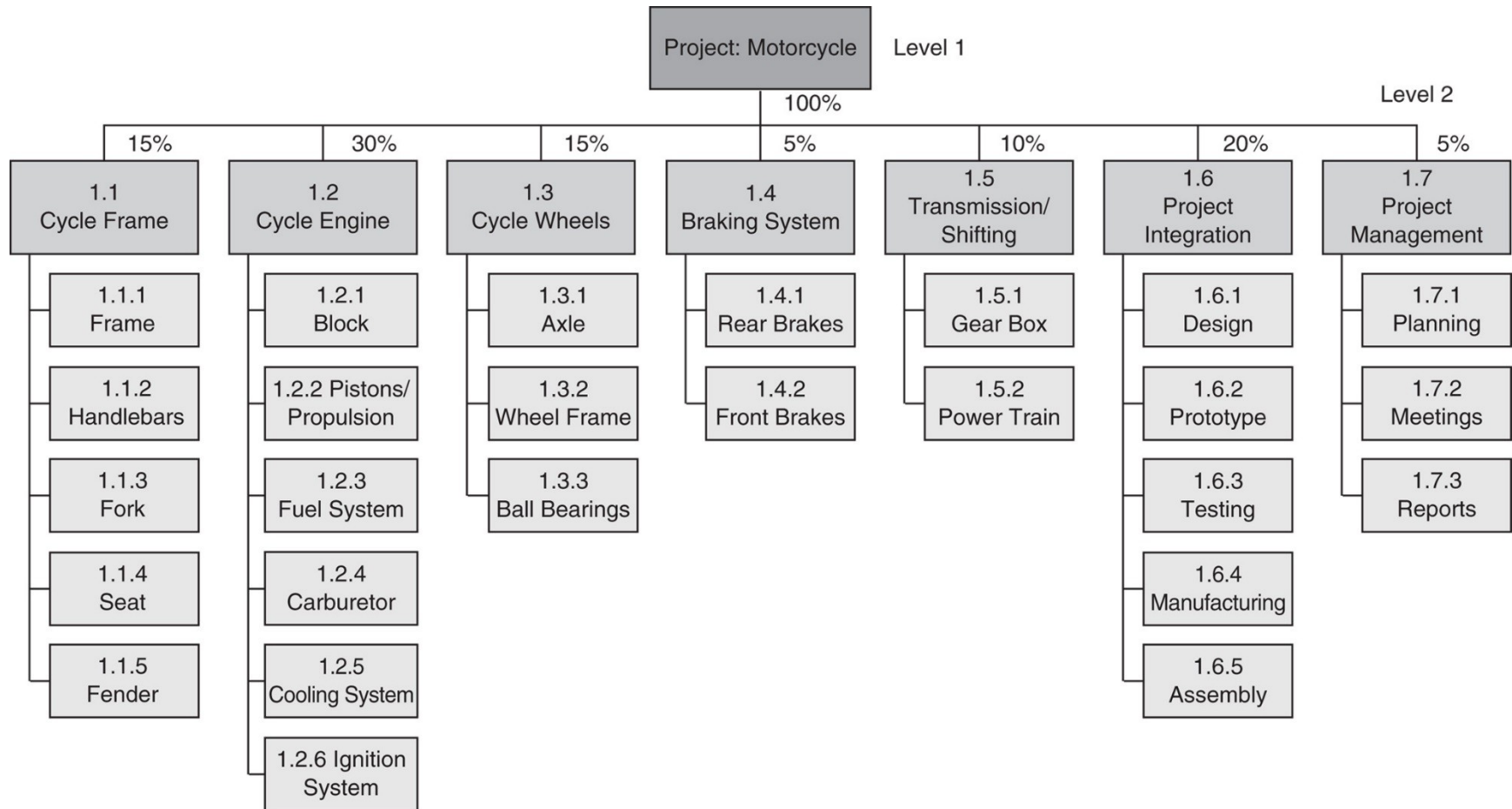
Figure 4.9 Sample Gantt chart schedule.

				ABC Technologies: Manufacturing Division					
Welding and Machining Certification Update				**Quarter 3**			**Quarter 4**		
ID	Test Name	Start/Finish	Days	July	August	September	October	November	
1	Welding-GT-AL-01	7/1-7/30	21	▉					
2	Welding-GT-AL-01	8/1-8/31	23		▉				
3	Welding-GT-AL-01	9/1-9/30	22			▉			
4	Machining-QT-01	8/11-9/21	30		▉				
5	Machining-QT-01	9/22-10/31	35				▉		
6	Machining-QT-01	10/6-11/10	26					▉	

Figure 4.10 CPM network diagram.
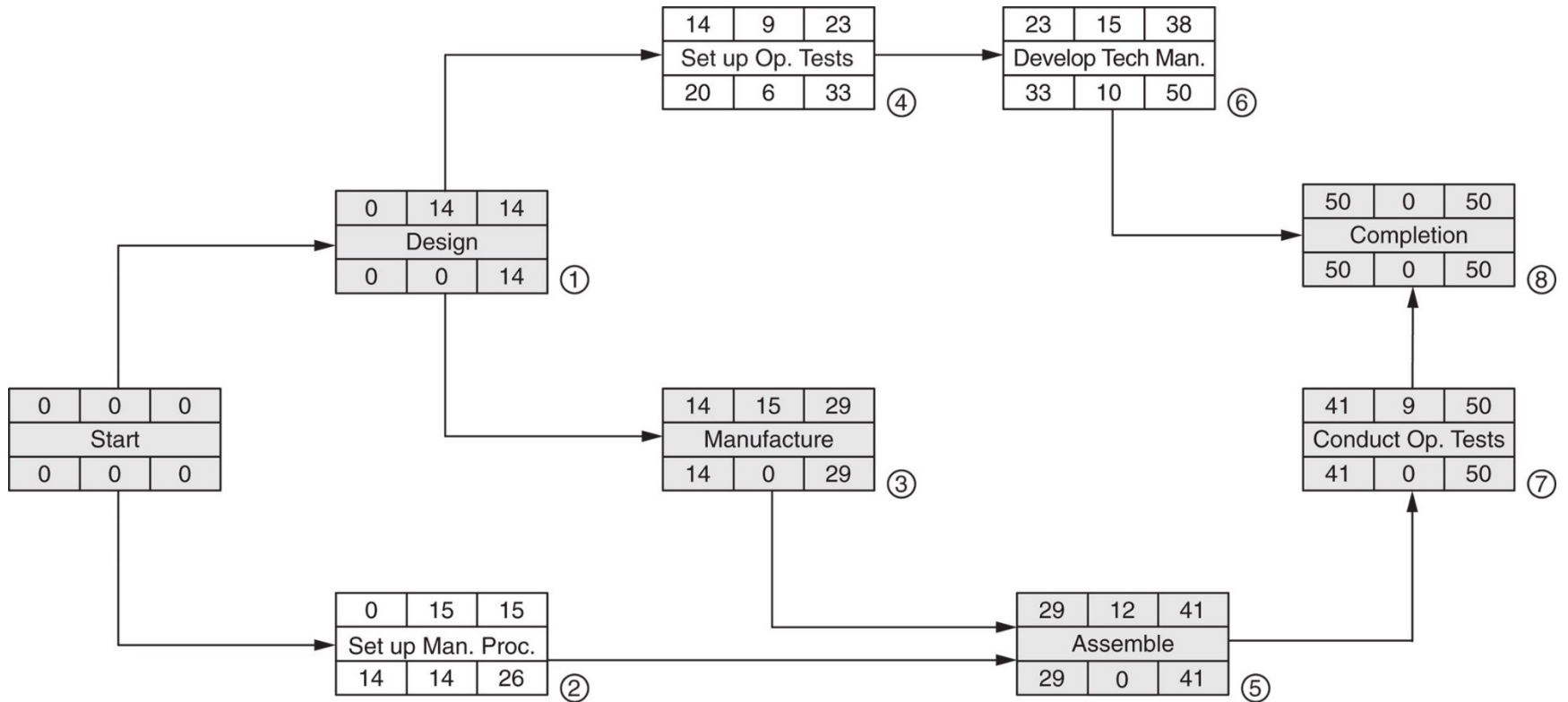
Chapter Five

Project Planning:
The Cost Estimate and Budget

Develop the Cost Estimate and Budget

- Accurately estimating the cost of a project and translating that estimate into a realistic budget are important planning activities for project managers.

- Preparing an accurate estimate is a matter of answering the following question:

  - How much will it cost our firm to complete this project?

Develop the Cost Estimate and Budget

- An estimate that is too high will lessen the firm's chances of winning the contract.

- An estimate that is too low may cause the firm to win the contract but lose money.

Develop the Cost Estimate and Budget

- Padding a cost estimate (building in contingencies) is common practice to cover unanticipated costs or errors. However, an overly padded estimate is not likely to win the contract.

Develop the Cost Estimate and Budget

- When developing a cost estimate it is necessary to consider both direct and indirect costs.

  - Direct costs are those tied directly to the project in question including personnel, material, equipment, facilities, services, inflation, cost of money (interest), and contingency funds.

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Develop the Cost Estimate and Budget

- When developing a cost estimate it is necessary to consider both direct and indirect costs.

  - Indirect costs consist of the firm's overhead and are often computed as a percentage of the overall cost estimate for a project.

Develop the Cost Estimate and Budget

- Inputs for cost estimating include:
  - scope statement, schedule, human resource plan, risk register, and enterprise environmental factors.

- Cost estimation methods include:
  - expert judgment, analogous estimating, parametric estimating, bottom-up estimating, three-point estimating, reserve analysis, vendor bid analysis, and the use of estimating software.

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Figure 5.6 Sample budget summary forms.

Project Name:							
Project Manager:							

	Project Task	Labor Hours	Labor Cost ($)	Material Cost ($)	Travel Cost ($)	Other Cost ($)	Total per Task
1	**Design**						
1.1	Broad Specifications						
1.2	Preliminary Specifications						
1.3	Detailed Specifications						
1.4	Acceptance Test						
	Subtotal						
2	**Development**						
2.1	Develop Components						
2.2	Develop Software						
2.3	Procure Hardware						
2.4	Integrate the Components						
2.5	Perform Integration Test						
	Subtotal						
3	**Delivery**						
3.1	Install System						
3.2	Train Customers						
3.3	Perform Acceptance Test						
	Subtotal						
9	**Project Management**						
9.1	Progress Meetings/Reports						
9.2	Interface with Vendors						
9.3	Interface with Internal Departments						
9.4	Quality Assurance						
	Subtotal						
10 - Other	Other Cost						
11 - Other	Other Cost						
	Sub-totals:						
	(Contingency):						
	TOTAL (*scheduled*):						

Chapter Six

Project Planning:

Human Resource, Communication, Procurement, and Quality Plans

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Develop the Quality, HR, Procurement, and Communication Plans

- The human resource, communication, procurement, and quality plans are all components of the larger project management plan.

- A human resource plan includes:
  - roles and responsibilities, organizational chart, training needs, recognition and rewards, compliance, and safety.

Develop the Quality, HR, Procurement, and Communication Plans

- A communication plan includes:
  - communication requirements, who is responsible for providing information to stakeholders, who can receive confidential information, conveyance methods, resources, chain of command, and updating methods.

Develop the Quality, HR, Procurement, and Communication Plans

- A procurement plan includes:
  - types of contracts to be used
  - criteria for evaluating bids and quotes
  - resources that will be acquired by the firm's procurement office and those that will be acquired directly by the project team
  - standardized procurement documents
  - how multiple suppliers will be managed
  - coordinating procurements with other aspects of the project

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Develop the Quality, HR, Procurement, and Communication Plans

- A procurement plan includes:
  - constraints
  - assumptions
  - lead times
  - how make-or-buy decisions will be made
  - coordination of delivery dates
  - risks
  - prequalified suppliers
  - formats for SOW
  - metrics

Develop the Quality, HR, Procurement, and Communication Plans

- The quality management plan should be a subset of the firm's larger organization-wide quality plan.
  - This allows the project manager to simply refer to the applicable parts of the larger plan.

Develop the Quality, HR, Procurement, and Communication Plans

- If a larger quality plan is done available, the project specific plan should include:

  - QM approach, quality definitions, quality objectives, process quality measures, product quality measures, quality responsibilities of team members, quality tools to be used, and reporting requirements.
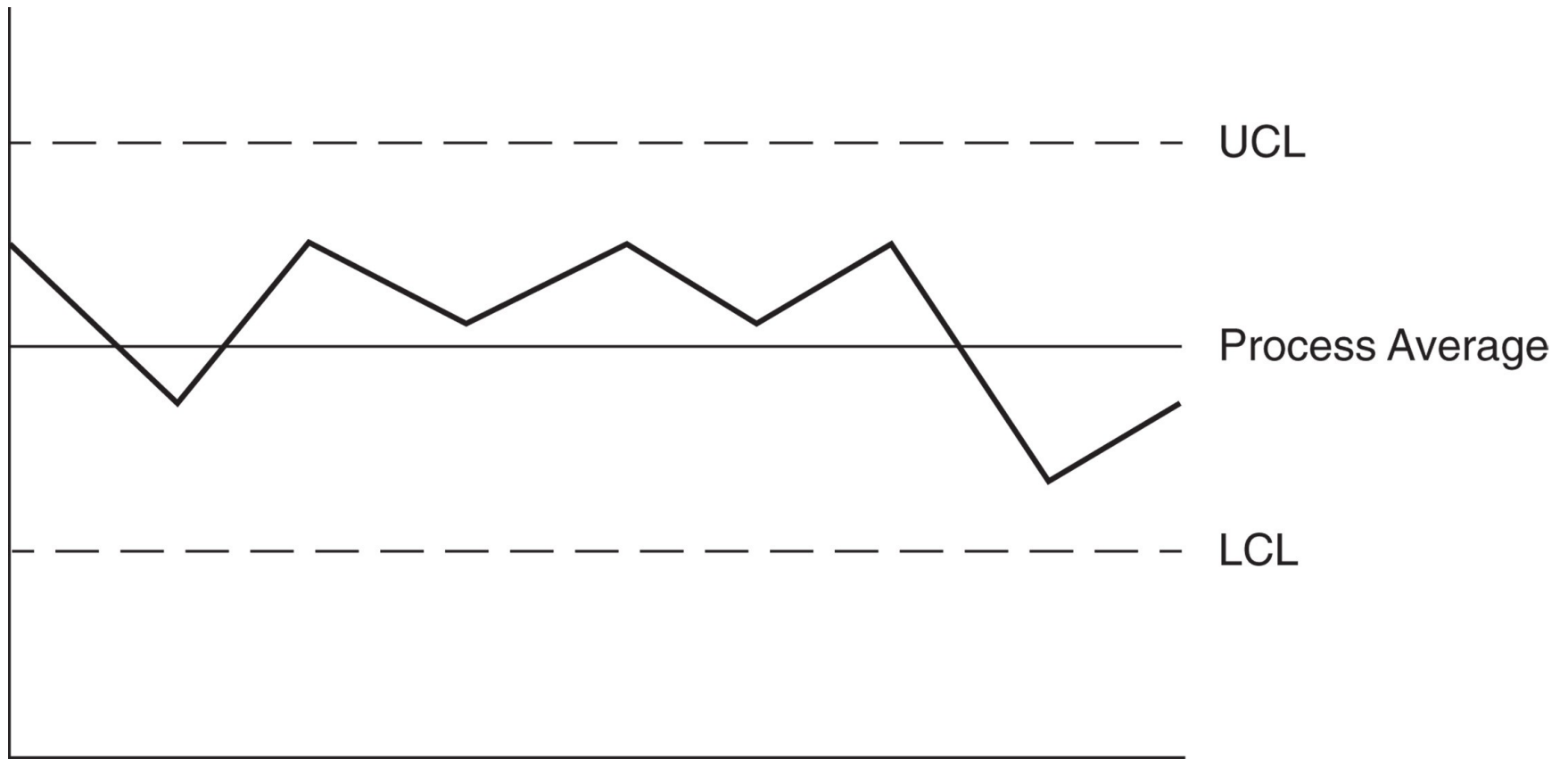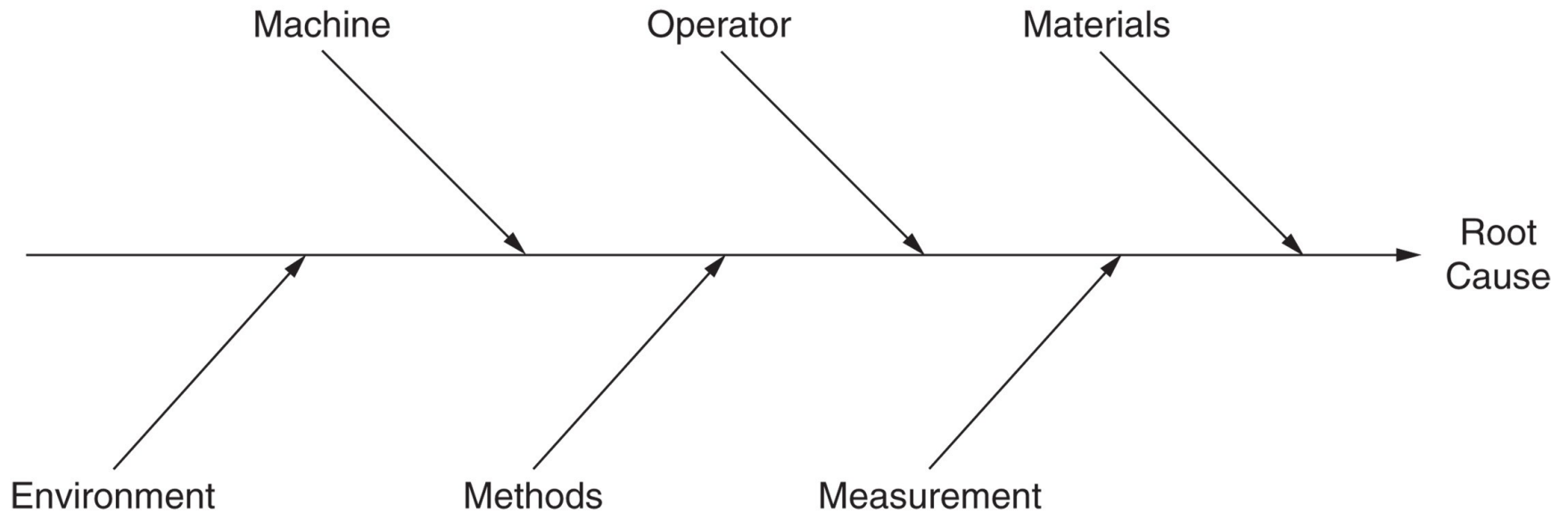
Figure 6.10 Basic control chart.

Figure 6.11 Basic cause-and-effect diagram.

Chapter Seven

Project Planning:
The Risk Management Plan

Develop the Risk Management Plan

- Risk the possibility that things will not go as planned and that counterproductive unplanned events might arise during a project.

Develop the Risk Management Plan

- Several factors can increase the level of risk in a project:
  - duration
  - lapse time
  - inexperience
  - insufficient maturation
  - unfamiliarity

Develop the Risk Management Plan

- Risk management involves:
  - identifying risks
  - assessing their potential impact
  - developing risk-mitigation plans
  - implementing the plans in ways that minimize the risk

Develop the Risk Management Plan

- Risk factors can be classified as:
  - external–unpredictable
  - external–predictable
  - internal–technical
  - internal–nontechnical
  - legal/ethical–civil/criminal

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Develop the Risk Management Plan

- Risk identification steps
  - forming the risk management team
  - distribute the Risk Breakdown Structure
  - select risk ID methods
  - decide what the outcome of the risk identification process will be
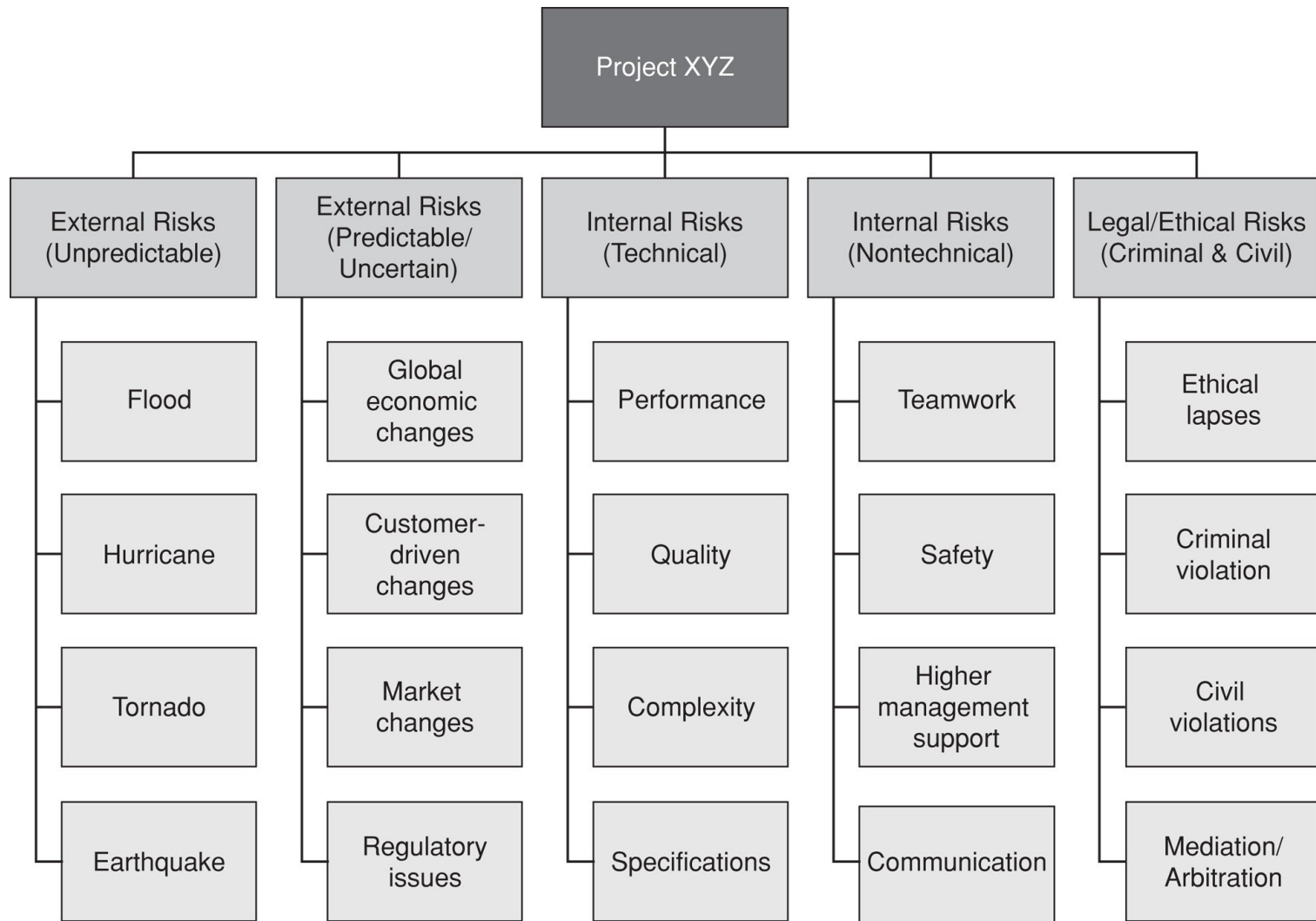
Develop the Risk Management Plan

- Risk ID methods
  - document review
  - brainstorming
  - SWOT analysis
  - experience
  - literature review
  - Delphi
  - expert judgment

Develop the Risk Management Plan

- Risk responses
  - elimination
  - transfer
  - minimization

Figure 7.3 Template for a Risk Breakdown Structure (RBS) for projects.

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Chapter Eight

Project Execution:
Build the Project Team

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Build the Project Team

- The first step in building a project team is developing a mission statement so that all team members can understand and buy into it.

- The core of a project team's mission is always to complete the project on time, within budget, and according to specifications.

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Build the Project Team

- A complete mission statement contains:
    - the name of the project
    - a description of the project
    - a statement of purpose
- Team building involves four steps:
    1. assess
    2. plan
    3. implement
    4. evaluate

Build the Project Team

- Conflict will occur in even the best of teams.
  - Consequently, project managers must be prepared to deal with it.
- Human responses to conflict:
  - escape (denial, flight, suicide)
  - attack (litigation, grievances, assault, murder)
  - resolution (overlook, reconcile, negotiate, mediate, arbitrate).

Build the Project Team

- Project managers should encourage resolution responses to conflict.

Chapter Nine

Project Execution:

Procurements

Conduct Procurements

- Before work can be done on a project, the necessary materials and subcontractors must be procured.
  - The process is known as *procurement*.

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Conduct Procurements

- The most commonly used procurement methods are:
  - low-bid
  - best-value
  - micro-purchase
  - small purchase
  - sole provider

Conduct Procurements

- A comprehensive bid package (RFQ or RFP) contains an invitation to bid, announcement of the pre-bid conference, bidding instructions, and the bidding form. A "responsive" bid complies with all requirements in the RFP or RFQ.

Figure 9.10 This checklist will help ensure a complete bid package.

BIDDER'S CHECKLIST

This checklist is provided for the convenience of bids. The accuracy or completeness of this checklist is neither warranted by FWB Eng-Tech nor is the checklist necessarily comprehensive. Its use is not mandatory and it does not have to be returned with the Proposal. It is provided as an optional tool.

- ✓ The bidder has read and understands the requirements of the RFP.
- ✓ The Receipt Confirmation Form has been submitted.
- ✓ The Proposal meets all mandatory requirements.
- ✓ The Proposal addresses all elements of the RFP.
- ✓ The Proposal clearly identifies the bidder, the project, and RFP number.
- ✓ The appropriate number of copies of the Proposal have been included in the submittal package.
- ✓ The Proposal will be delivered to the Closing Location before the deadline.

Chapter Ten

Project Monitoring and Control

Project Monitoring and Control

- Once the project management plan has been implemented, all activities in it must be monitored carefully and controlled.

- Monitoring and control are aimed primarily at the scope, schedule, costs, quality, and risk.

  - These are most likely areas to go awry without close monitoring and control.

Project Monitoring and Control

- Changes made after the project plan has been executed can lead to cost overruns. Methods used to monitor the budget include EVM, TCPI, and performance reviews.

Figure 10.3 Comprehensive change order forms can prevent oversights.

CHANGE ORDER FORM

Project Number: _____   Date: _____

Project Name: _____

Change Order Number: _____

Description of the Change:

_____

Not valid until signed by the Customer and the Contractor
_____

The Contract Sum prior to this Change Order was..$ _____
The Contract Sum will be (increased) (decreased)
(unchanged) by this Change Order in the amount of ....$ _____
The new Contract Sum including this Change Order will be ....$ _____
The Contract Time will be (increased) (decreased) (unchanged) by ....
The Date of Completion as of the date of this
Change Order is now ....

_____   _____
Customer   Project Manager   Date

_____
By   Date

Chapter Eleven

Project Closeout

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Project Closeout

- Project closeout does not always receive the attention it should. This can lead to problems including:
  - Repeating the same mistakes in future projects
  - Failing to take advantage of lessons learned
  - Failing to incorporate best practices into SOPs

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Project Closeout

- Project closeout does not always receive the attention it should. This can lead to problems including:
  - Failing to tie up loose ends
  - Failing to secure the customer's support for future contracts
  - Failing to ensure the customer is completely satisfied

Chapter Twelve

Project Managers as Team Leaders

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Project Managers as Team Leaders

- Leadership in project management involves inspiring team members to make a whole-hearted commitment to the success of the project.

- Commitment means more than just trying hard. Commitment means being willing to sacrifice to get the project completed on time, within budget, and according to specifications.

Project Managers as Team Leaders

- The Eight Cs of leadership are:
  - caring
  - competence
  - character
  - communication
  - clarity
  - commitment
  - courage
  - credibility

Chapter Thirteen

Project Managers as Motivators

Project Managers as Motivators

- Motivation is the drive to do something. It can be external, internal, or a combination of both.

- Project managers want all team members to be motivated to complete projects on time, within budget, and according to specifications.

Project Managers as Motivators

- Understanding Maslow's Hierarchy of Needs will help project managers become effective motivators.

- All people have basic survival, safety and security, social, esteem, and self-actualization needs.

- Project managers can use these needs for motivating team members.

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Project Managers as Motivators

- There is no one-size-fits-all strategy project managers can use to motivate team members.

- Motivation strategies must be tailored to the individual(s) in question.

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Project Managers as Motivators

- An effective way to tailor motivational strategies to individuals is to develop Personal Motivation Plans (PMPs) for team members.

  - A PMP plan for an individual takes into account that individual's specific human needs (some thing that can vary greatly from person to person).

Chapter Fourteen

Project Managers as Communicators and Negotiators

Project Managers as Communicators and Negotiators

- Project managers must keep a number of different individuals and constituent groups up to date throughout a project. Hence, they must be effective communicators.

- Communication is the transfer of information that is received and fully understood from one source to another.

Project Managers as Communicators and Negotiators

- Communication has the following components:
  - sender
  - receiver
  - method
  - medium
  - message

Project Managers as Communicators and Negotiators

- There are four basic types of communication:
  - verbal
  - non-verbal
  - written
  - graphic

Project Managers as Communicators and Negotiators

- Effective communication occurs when the message that is received and understood is acted on in the desired manner.

- Communication can be inhibited by a number of factors including:

  - differences in meaning, insufficient trust, information overload, interference, condescending tones, listening problems, premature judgments, inaccurate assumptions, and technological glitches.

Project Managers as Communicators and Negotiators

- Listening is the most important communication skill for project managers.

- Inhibitors of effective listening include:
  - lack of concentration, preconceived notions, thinking ahead, interruptions, and tuning out.

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Project Managers as Communicators and Negotiators

- The five-minute rule allows project managers to maintain an open-door policy for team members.
    - Within reason team members can have five minutes of the project manager's time at any time to discuss a problem. However, during that five minutes, the team member must explain the problem and provide a well-thought through recommendation for a solution.

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Project Managers as Communicators and Negotiators

- Non-verbal communication consists of body factors, voice factors, and proximity factors.

- The key to understanding non-verbal communication is to look for agreement or disagreement between what is said verbally and what is "said" non-verbally.

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Project Managers as Communicators and Negotiators

- To improve verbal communication project managers should show interest, be positive, be flexible, use tact, and be courteous.

- When communicating corrective feedback, project managers should be positive, prepared, and realistic.

Project Managers as Communicators and Negotiators

- Written communication can be improved by:
  - Identifying the audience you are writing to first
  - Being concise but comprehensive
  - Using graphics wherever appropriate
  - Using language that is appropriate to the audience
  - Highlighting action you want the reader to take

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Project Managers as Communicators and Negotiators

- Project managers must be good negotiators. Often the factors necessary for completing a project successfully must be negotiated.

Project Managers as Communicators and Negotiators

- Important considerations when negotiating include:
  - Observing all phases of the negotiating process
  - Considering timing
  - Choosing an appropriate location
  - Being aware of image
  - Creating momentum
  - Controlling one's behavior during the negotiation

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Chapter Fifteen

Project Managers and Personal Time Management

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Project Managers and Time Management

- Project managers who fail to manage their time effectively are not likely to complete projects on time, within budget, or according to specifications.

- Poor time management can cause wasted time, added stress, lost credibility, missed appointments, poor follow through, inattention to detail, ineffective execution, and poor stewardship.

Project Managers and Time Management

- Common time management problems to avoid include taking on too much, the telephone, crises, unscheduled visitors, poor delegation, personal disorganization, and unnecessary or inefficient meetings.

Chapter Sixteen

Project Managers and Change

Project Managers and Change

- Change is a fact of life. Change orders and the need to continually improve both cause change. To deal effectively with change, project managers have to be able to help team members overcome *comfort-induced inertia*.

Project Managers and Change

- An effective change management model:
  1. develop a written change picture
  2. communicate the change picture to all stakeholders
  3. take responsibility for the change
  4. enlist influential team members
  5. minimize roadblocks
  6. develop an change implementation plan
  7. establish checkpoints, monitor, and adjust

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Chapter Seventeen

Project Managers and Diversity

Project Managers and Diversity

- People can be different in a lot of ways. Hence, project managers can expect to lead diverse teams.

- Dealing with the ways that people can be different in ways that make the team stronger is the project manager's responsibility.

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Project Managers and Diversity

- Important diversity-related concepts project managers must be able to deal with are:
  - prejudice
  - stereotyping
  - labeling
  - discrimination
  - tolerance

Project Managers and Diversity

- Helping team members focus on their common mission rather than their differences is the key for project managers.

Figure 17.1 Members of project teams can be different in many ways.

Checklist of Ways
PEOPLE CAN BE DIFFERENT

- ✓ Race
- ✓ Physical ability
- ✓ Age
- ✓ Gender
- ✓ Religion
- ✓ Ethnicity
- ✓ Worldview
- ✓ Values
- ✓ Interests
- ✓ Cultural background
- ✓ Weight
- ✓ White collar
- ✓ Personal preferences

- ✓ Mental ability
- ✓ Physical appearance
- ✓ Marital status
- ✓ Geography
- ✓ Denominations
- ✓ Nationality
- ✓ Education level
- ✓ Political beliefs
- ✓ Personality
- ✓ Height
- ✓ Career status
- ✓ Blue collar

Chapter Eighteen

Project Managers and Adversity

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Project Managers and Adversity

- Project managers must be able to help team members persevere through times of adversity because projects are seldom completed without problems.

Project Management for Engineering and Technology
David L. Goetsch

PEARSON

Project Managers and Adversity

- Perseverance strategies include:
    1. emulating the examples of others who have faced tough times
    2. remembering that failure teaches valuable lessons for next time
    3. staying focused on solving problems rather than the negative consequences of the problems

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Project Managers and Adversity

- Strategies for effectively facing adversity include:

  - Understand that adversity is a normal part of the job.

  - Look down the road past the difficulties— don't get caught up in the here and now of the situation.

  - Focus on solutions rather than problems.

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Project Managers and Adversity

- Strategies for effectively facing adversity include:
  - Develop a plan of action for solving the problem and implement it.
  - Once the problem is solved, prepare mentally and physically for the next round of adversity.
  - Stay positive and take adversity in stride.

Project Managers and Adversity

- Micromanagers can make the project manager's job difficult. People who micromanage do so because they
  - think no one can do the job right but them
  - cannot let go of work they used to do
  - do not understand how to delegate
  - do not yet have confidence in the project manager
  - are insecure

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Project Managers and Adversity

- Project managers who report to micromanagers must be patient, try to determine the cause of the micromanagement, and do what is necessary to relieve that cause(s).