

# Chapter Four

## Defining the Project

# Defining the Project

Step 1: Defining the Project Scope

Step 2: Establishing Project Priorities

Step 3: Creating the Work Breakdown Structure

Step 4: Integrating the WBS with the Organization

Step 5: Coding the WBS for the Information  
System

# Step 1: Defining the Project Scope

- Project Scope
  - A definition of the end result or mission of the project—a product or service for the client/customer
- Purposes of the Project Scope Statement
  - To clearly define the deliverable(s) for the end user.
  - To focus the project on successful completion of its goals.
  - To be used by the project owner and participants as a planning tool and for measuring project success

# Project Scope Checklist

1. Project objective
2. Deliverables
3. Milestones
4. Technical requirements
5. Limits and exclusions
6. Reviews with customer



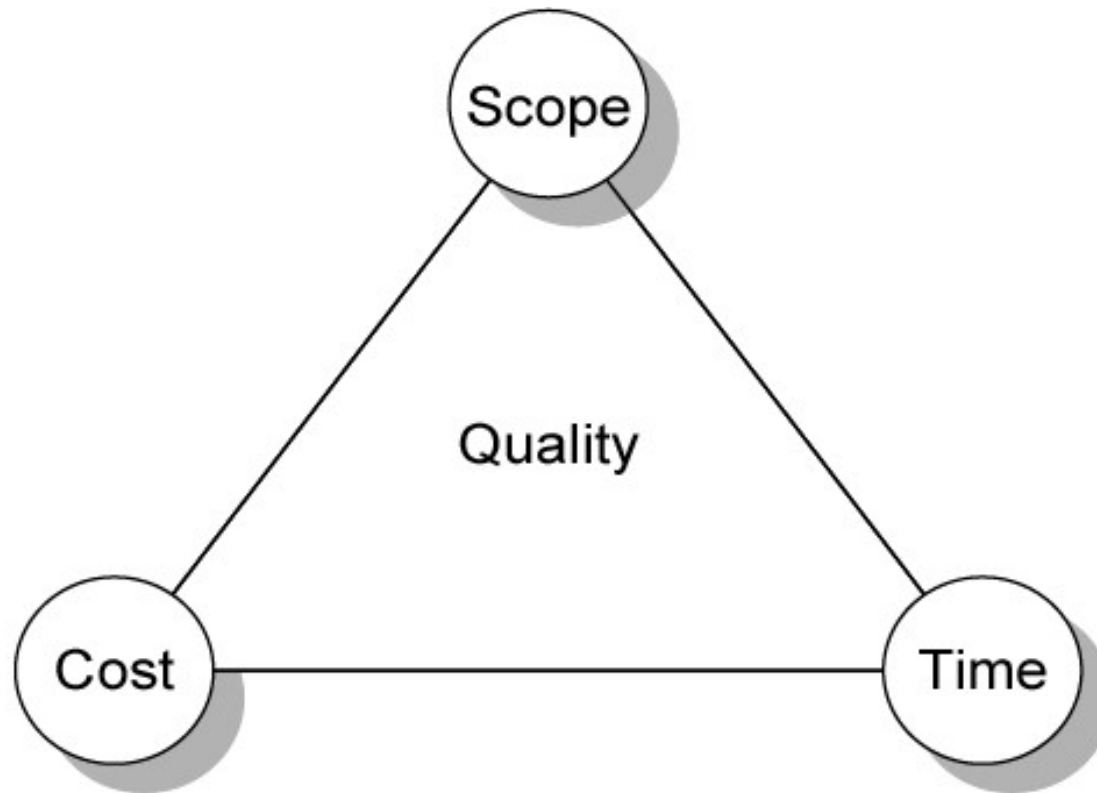
# Project Scope: Terms and Definitions

- Scope Statements
  - Also called statements of work (SOW)
- Project Charter
  - Can contain an expanded version of scope statement.
  - A document authorizing the project manager to initiate and lead the project
- Scope Creep
  - The tendency for the project scope to expand over time due to changing requirements, specifications, and priorities

## Step 2: Establishing Project Priorities

- Causes of Project Trade-offs
  - Shifts in the relative importance of criteria related to cost, time, and performance parameters
    - Budget–Cost
    - Schedule–Time
    - Performance–Scope
- Managing the Priorities of Project Trade-offs
  - Constrain: original parameter is a fixed requirement.
  - Enhance: optimizing a criterion over others
  - Accept: reducing (or not meeting) a criterion requirement

# Project Management Trade-offs



**FIGURE 4.1**

# Project Priority Matrix




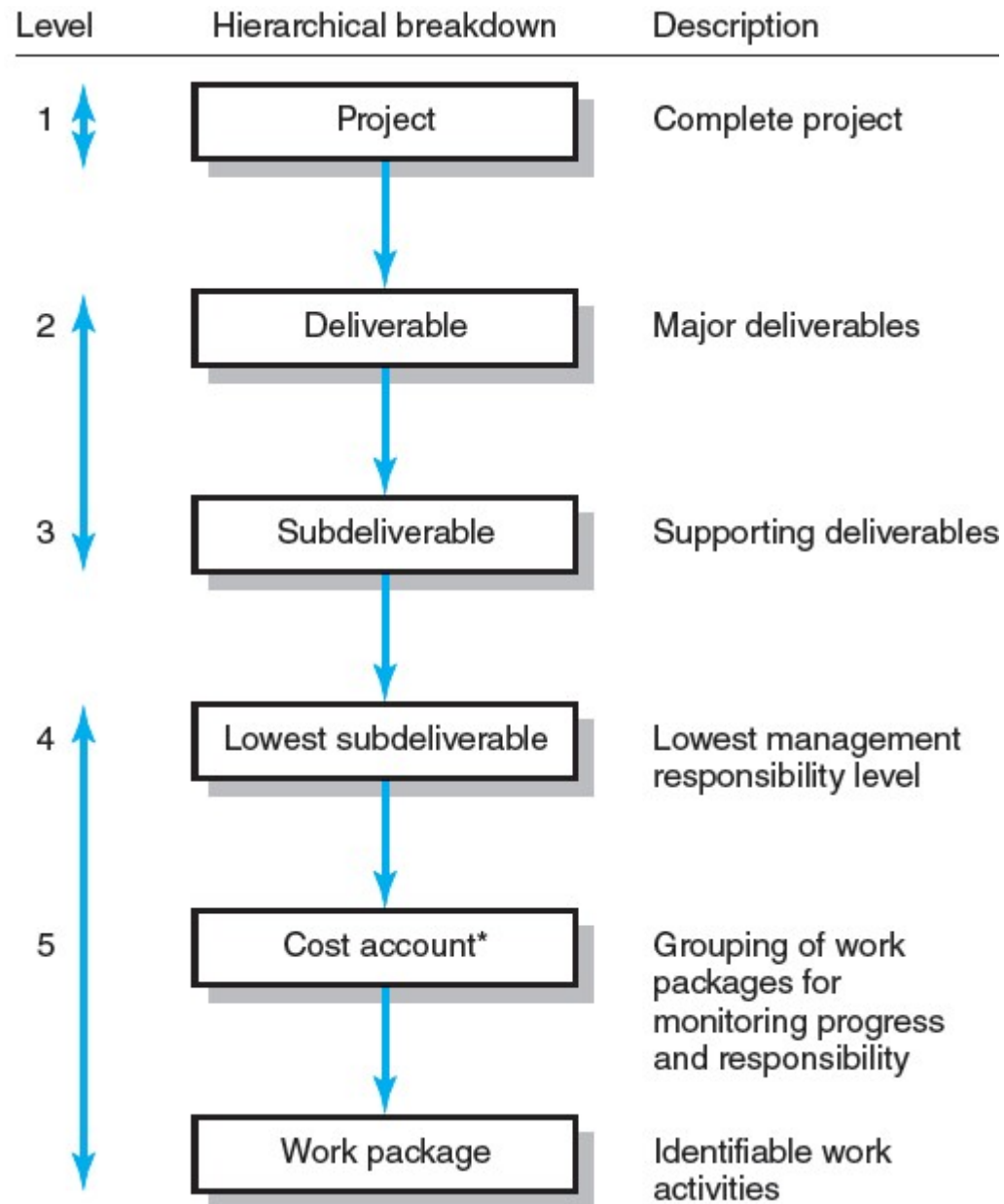
	Time	Performance	Cost
Constrain			
Enhance			
Accept			

FIGURE 4.2



## Step 3: Creating the Work Breakdown Structure

- Work Breakdown Structure (WBS)
  - A hierarchical outline (map) that identifies the products and work elements involved in a project
  - Defines the relationship of the final deliverable (the project) to its subdeliverables, and in turn, their relationships to work packages.
  - Best suited for design and build projects that have tangible outcomes rather than process-oriented projects



## Hierarchical Breakdown of the WBS

\* This breakdown groups work packages by type of work within a deliverable and allows assignment of responsibility to an organizational unit. This extra step facilitates a system for monitoring project progress (discussed in Chapter 13).

**FIGURE 4.3**

# How WBS Helps the Project Manager

- WBS

- Facilitates evaluation of cost, time, and technical performance of the organization on a project.
- Provides management with information appropriate to each organizational level.
- Helps in the development of the organization breakdown structure (OBS), which assigns project responsibilities to organizational units and individuals
- Helps manage plan, schedule, and budget.
- Defines communication channels and assists in coordinating the various project elements.

# Work Breakdown Structure

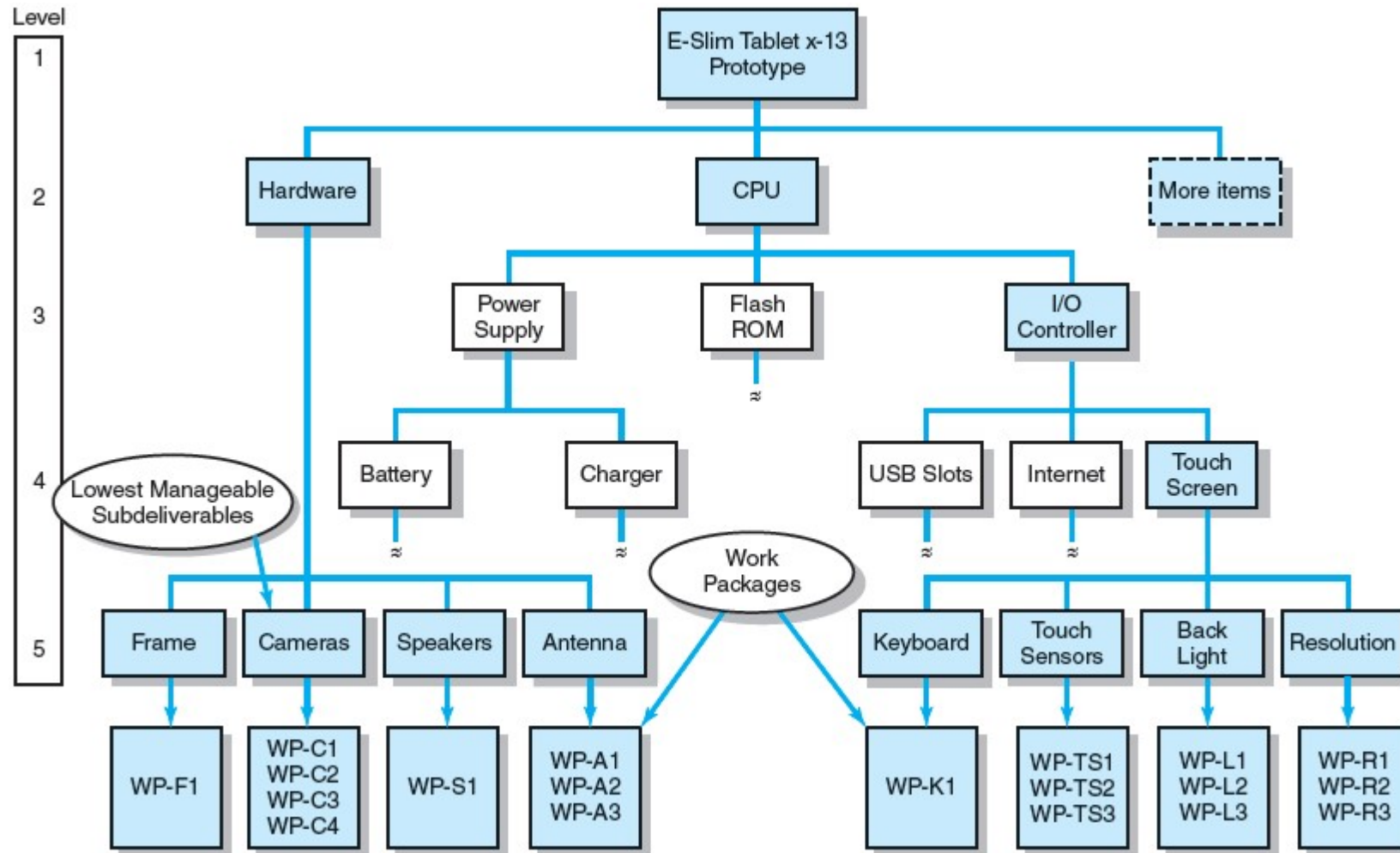


FIGURE 4.4

# Work Packages

- A work package is the lowest level of the WBS.
  - It is output-oriented in that it:
    1. Defines work (what).
    2. Identifies time to complete a work package (how long).
    3. Identifies a time-phased budget to complete a work package (cost).
    4. Identifies resources needed to complete a work package (how much).
    5. Identifies a person responsible for units of work (who).
    6. Identifies monitoring points for measuring success (how well).

## Step 4: Integrating the WBS with the Organization

- Organizational Breakdown Structure (OBS)
  - Depicts how the firm is organized to discharge its work responsibility for a project.
  - Provides a framework to summarize organization unit work performance.
  - Identifies organization units responsible for work packages.
  - Ties organizational units to cost control accounts.

## Integration of WBS and OBS

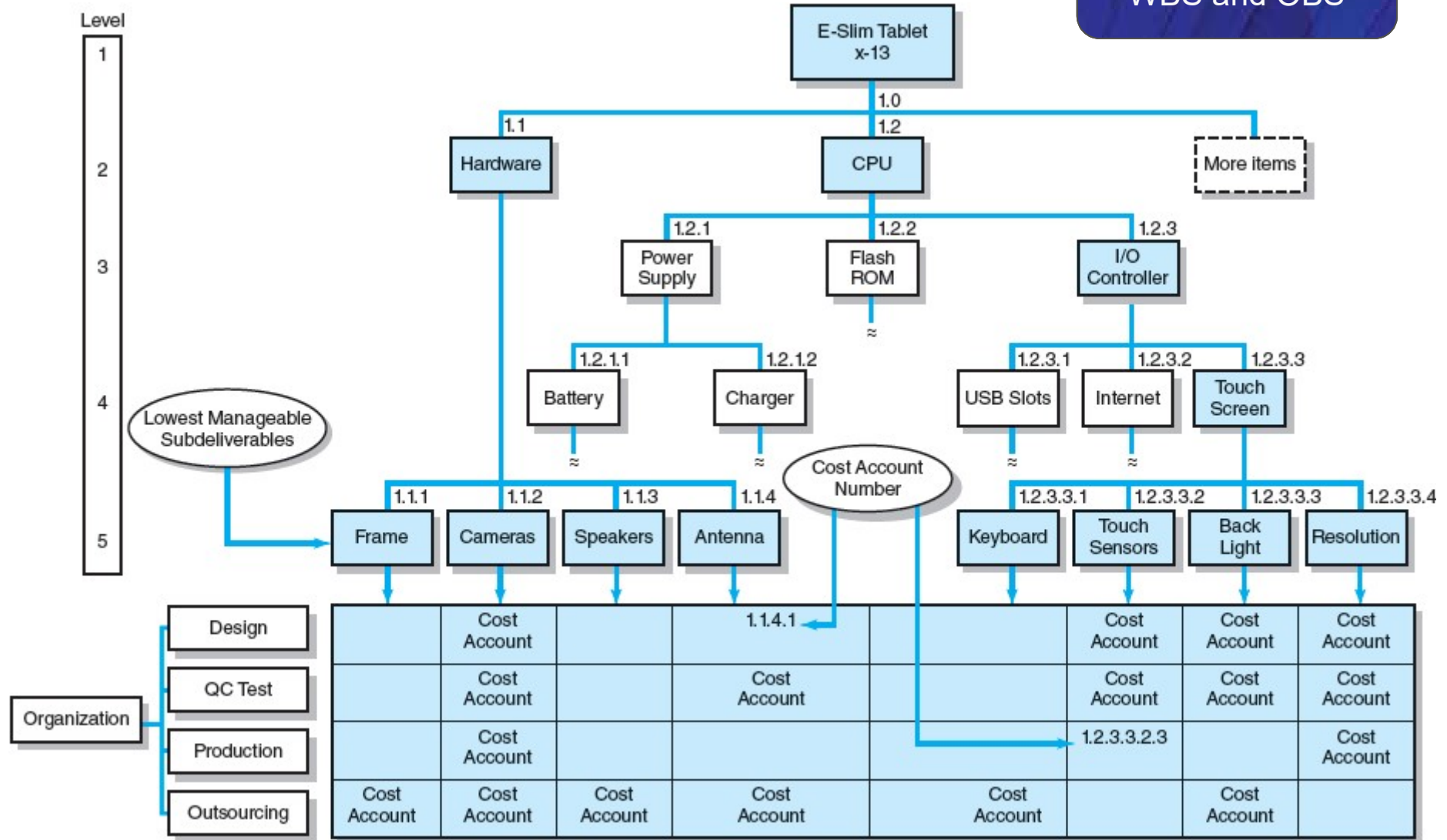


FIGURE 4.5
























## Step 5: Coding the WBS for the Information System

- WBS Coding System
  - Defines:
    - Levels and elements of the WBS
    - Organization elements
    - Work packages
    - Budget and cost information
  - Allows reports to be consolidated at any level in the organization structure
- WBS Dictionary
  - Provides detailed information about each element in the WBS.





## Coding the WBS

		Task Mode ▼	Task Name ▼
1			[-] <b>1 E-Slim Tablet x-13 Prototype</b>
2			[-] <b>1.1 Hardware</b>
3			1.1.1 Cameras
4			1.1.2 Speakers
5			1.1.3 Antenna
6			[-] <b>1.2 CPU</b>
7			[-] <b>1.2.1 Power supply</b>
8			1.2.1.1 Battery (more items)
9			1.2.1.2 Charger (more items)
10			[-] <b>1.2.2 Flash Rom (more items)</b>
11			1.2.2.1 I/O controller
12			1.2.2.2 USB slots (more items)
13			1.2.2.3 Internet (more items)
14			[-] <b>1.2.3 Touch screen</b>
15			[-] <b>1.2.3.1 Keyboard</b>
16			1.2.3.1.1 Work package
17			[-] <b>1.2.3.2 Touch sensors</b>
18			1.2.3.2.1 Work package
19			1.2.3.2.2 Work package
20			1.2.3.2.3 Work package
21			1.2.3.3 Back light (more items)
22			1.2.3.4 Resolution (more items)

**EXHIBIT 4.1**

# Responsibility Matrices

- Responsibility Matrix (RM)
  - Also called a linear responsibility chart
  - Summarizes the tasks to be accomplished and who is responsible for what on the project.
    - Lists project activities and participants responsible for each activity.
    - Clarifies critical interfaces between units and individuals that need coordination.
    - Provide a means for all participants to view their responsibilities and agree on their assignments.
    - Clarifies the extent or type of authority that can be exercised by each participant.

# Responsibility Matrix for a Market Research Project

Project Team					
Task	Richard	Dan	Dave	Linda	Elizabeth
Identify target customers	R	S		S	
Develop draft questionnaire	R	S	S		
Pilot-test questionnaire		R		S	
Finalize questionnaire	R	S	S	S	
Print questionnaire					R
Prepare mailing labels					R
Mail questionnaires					R
Receive and monitor returned questionnaires				R	S
Input response data			R		
Analyze results		R	S	S	
Prepare draft of report	S	R	S	S	
Prepare final report	R		S		

R = Responsible  
S = Supports/assists

FIGURE 4.7

# Project Communication Plan

- What information needs to be collected and when?
- Who will receive the information?
- What methods will be used to gather and store information?
- What are the limits, if any, on who has access to certain kinds of information?
- When will the information be communicated?
- How will it be communicated?

# Developing a Communication Plan

1. Stakeholder analysis
2. Information needs
3. Sources of information
4. Dissemination modes
5. Responsibility and timing



# Stakeholder Communications

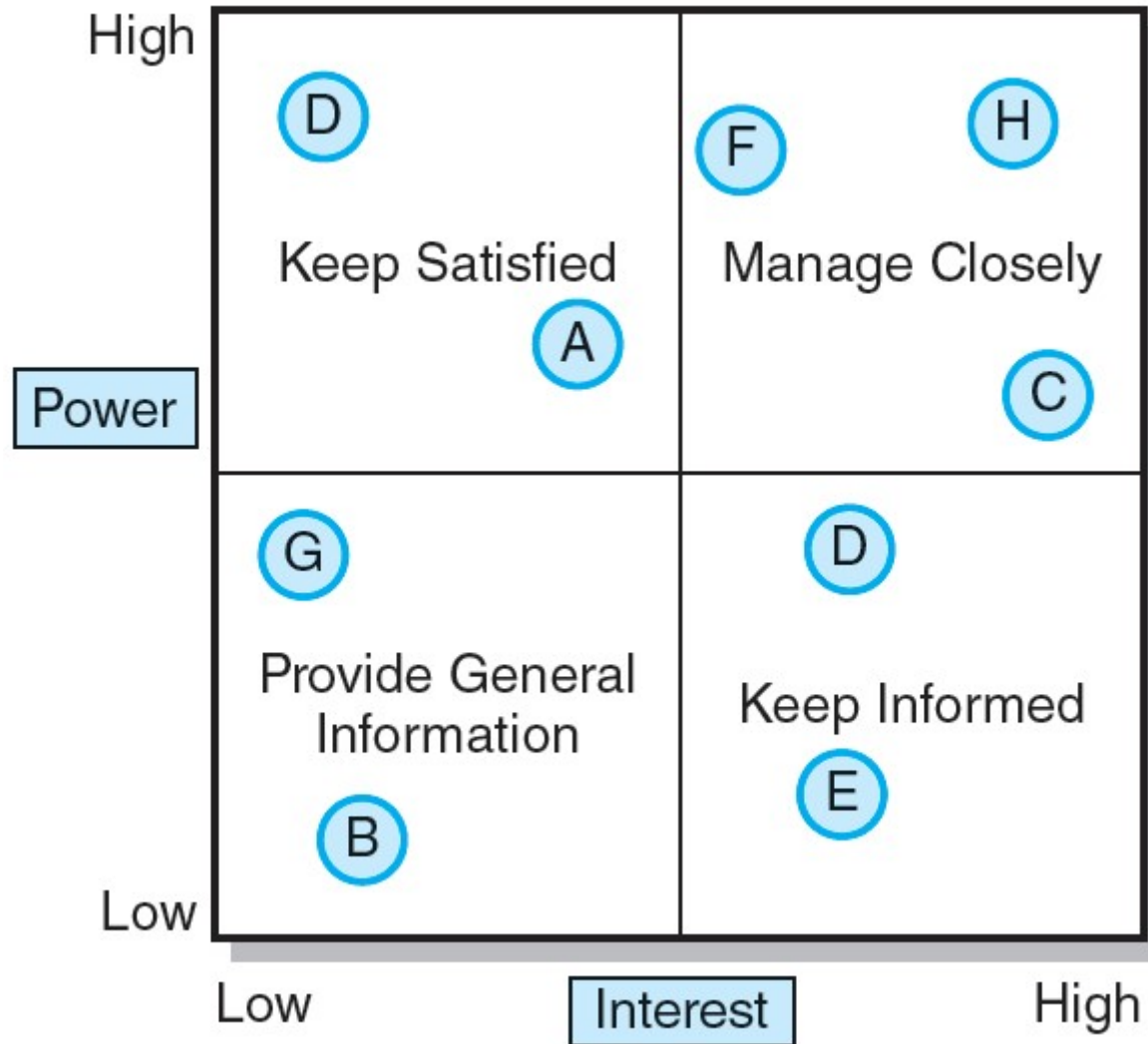


FIGURE 4.9

# Information Needs

- Project status reports
- Deliverable issues
- Changes in scope
- Team status meetings
- Gating decisions
- Accepted request changes
- Action items
- Milestone reports

