

Chapter 9: Project Human Resource Management

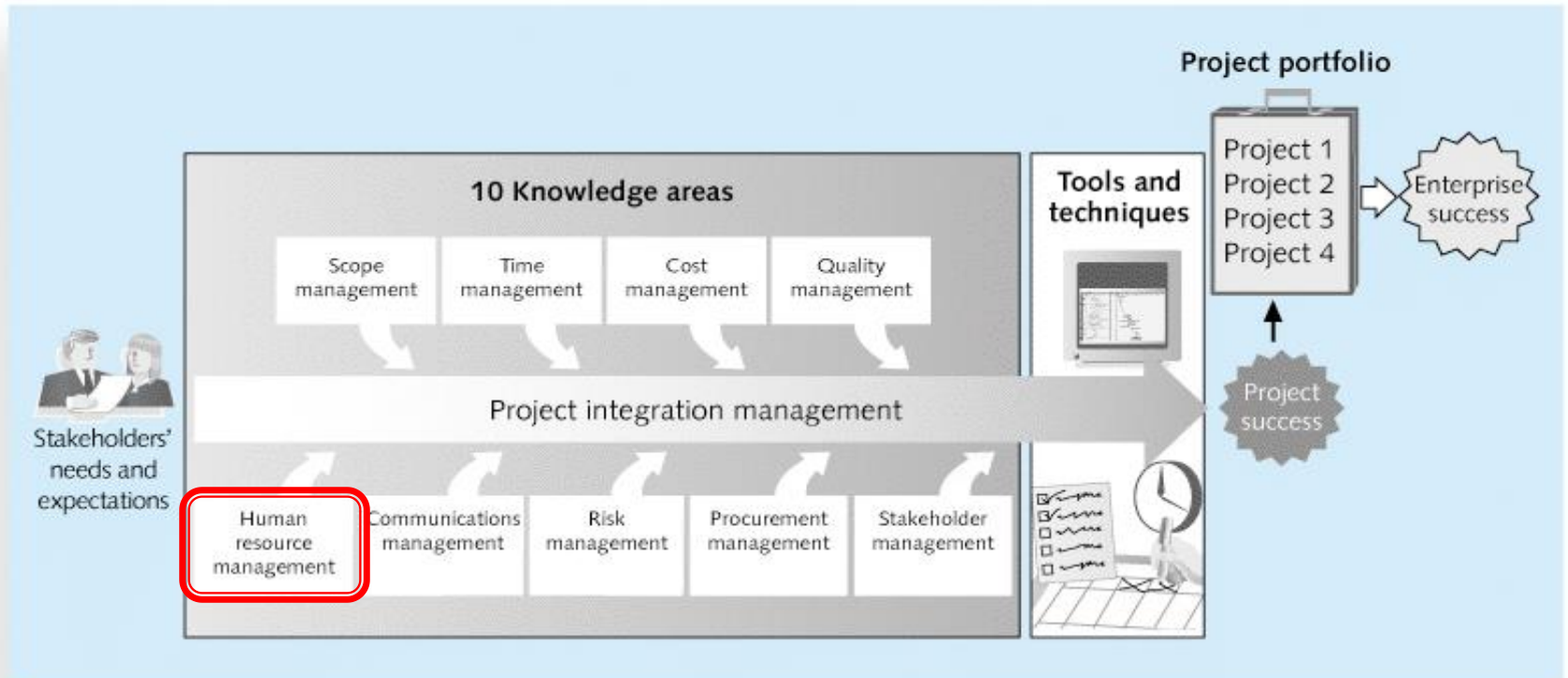
Information Technology Project
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Information Technology
PROJECT MANAGEMENT | 7e

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Learning Objectives

- ▶ Explain the importance of good human resource management on projects
- ▶ Define project human resource management and understand its processes
- ▶ Understand important issues involved in project staff acquisition and explain the concepts of resource assignments, resource loading, and resource leveling
- ▶ Assist in team development with training, team-building activities, and reward systems

The Importance of Human Resource Management

- ▶ Many corporate executives have said, “People are our most important asset”
- ▶ People determine the success and failure of organizations and projects

What is Project Human Resource Management?

9.1.Planning human resource management: identifying and documenting project roles, responsibilities, and reporting relationships

9.2.Acquiring the project team: getting the needed personnel assigned to and working on the project

9.3.Developing the project team: building individual and group skills to enhance project performance

9.4.Managing the project team: tracking team member performance, motivating team members, providing timely feedback, resolving issues and conflicts, and coordinating changes to help enhance project performance.

Figure 9-1. Project Human Resource Management Summary

Planning

Process: **Plan human resource management**

Output: Human resource plan

Executing

Process: **Acquire project team**

Outputs: Project staff assignments, resource calendars, project management plan updates

Process: **Develop project team**

Outputs: Team performance assessments, enterprise environmental factors updates

Monitoring and Controlling

Process: **Manage project team**

Outputs: Change requests, project management plan updates, project documents updates, enterprise environmental factors updates, and organizational process assets updates

Project Start

Project Finish

Keys to Managing People

- ▶ Important areas related to project management include
 - motivation theories
 - influence and power
 - effectiveness

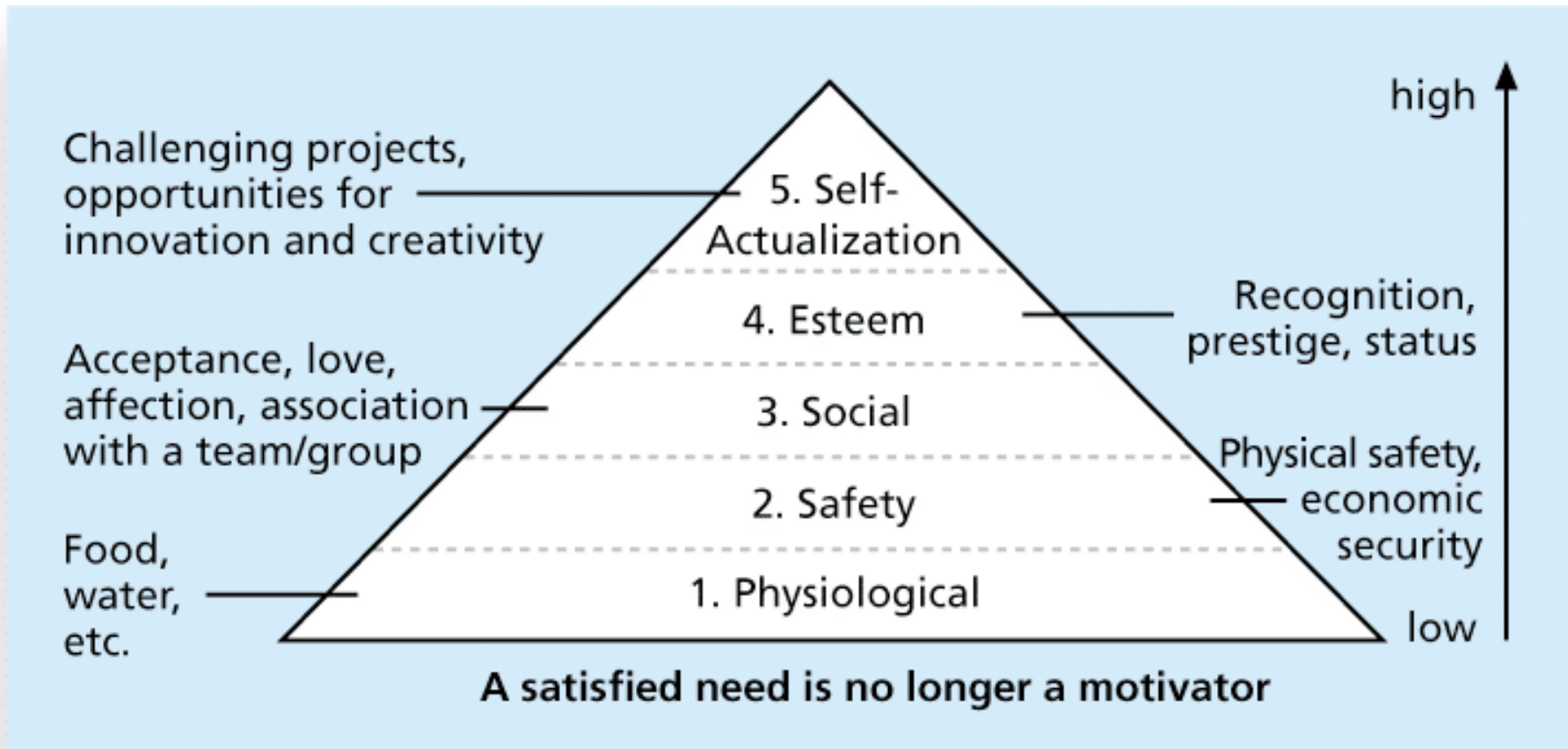
Intrinsic and Extrinsic Motivation

- ▶ **Intrinsic motivation** causes people to participate in an activity for their own enjoyment
- ▶ **Extrinsic motivation** causes people to do something for a reward or to avoid a penalty
- ▶ For example, some children take piano lessons for intrinsic motivation (they enjoy it) while others take them for extrinsic motivation (to get a reward or avoid punishment)

Maslow's Hierarchy of Needs

- ▶ Abraham Maslow argued that humans possess unique qualities that enable them to make independent choices, thus giving them control of their destiny
- ▶ Maslow developed a **hierarchy of needs** which states that people's behaviors are guided or motivated by a sequence of needs

Figure 9-2. Maslow's Hierarchy of Needs



Herzberg's Motivational and Hygiene Factors

- ▶ Frederick Herzberg wrote several famous books and articles about worker motivation. He distinguished between
 - motivational factors: achievement, recognition, the work itself, responsibility, advancement, and growth, which produce job satisfaction
 - hygiene factors: cause dissatisfaction if not present, but do not motivate workers to do more.

Examples include larger salaries, more supervision, and a more attractive work environment

9.1. Developing the Human Resource Plan

- ▶ Involves identifying and documenting project roles, responsibilities, and reporting relationships
- ▶ Contents include
 - project organizational charts
 - staffing management plan
 - responsibility assignment matrixes
 - resource histograms

Figure 9-3. Sample Organizational Chart for a Large IT Project

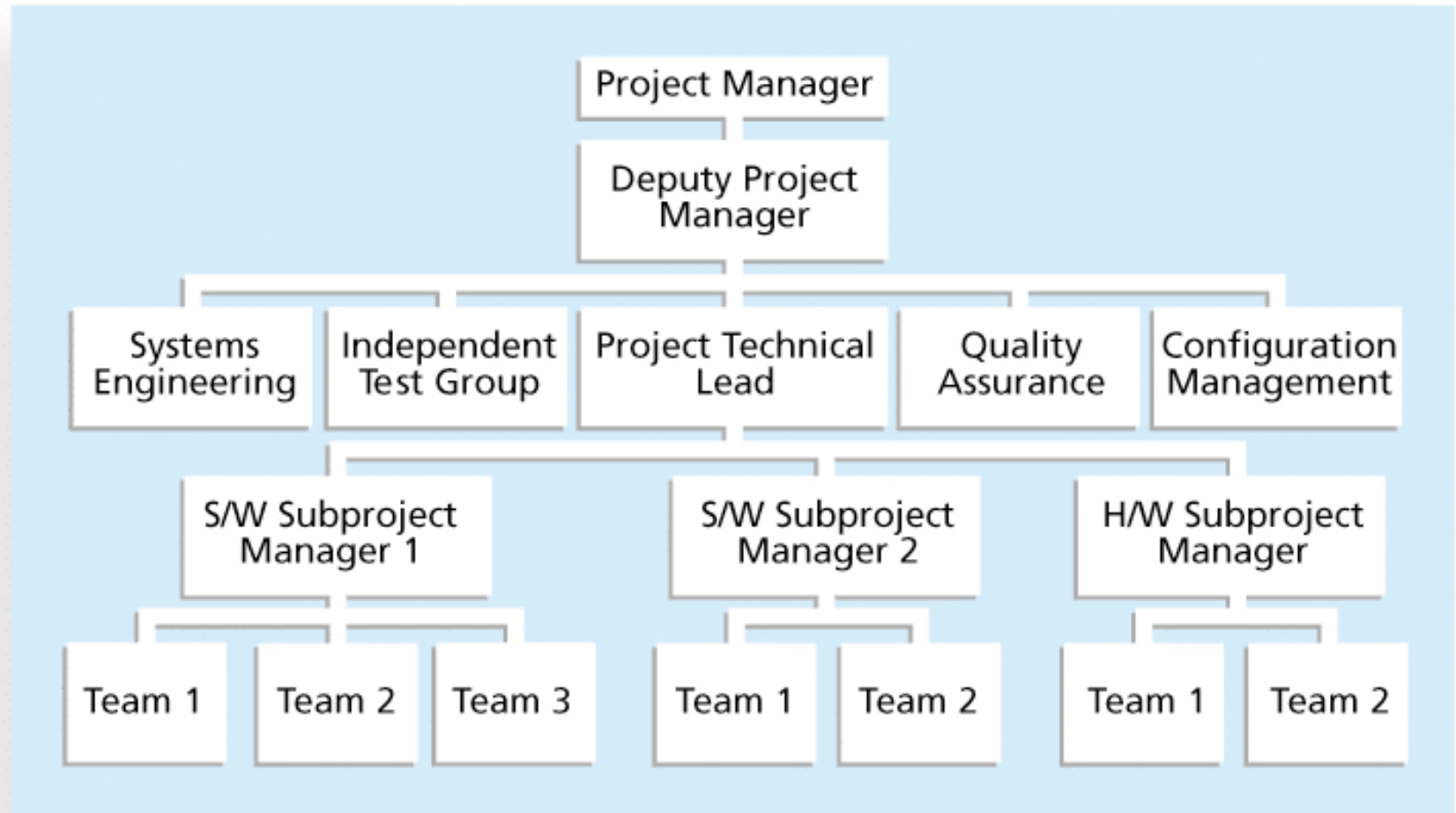
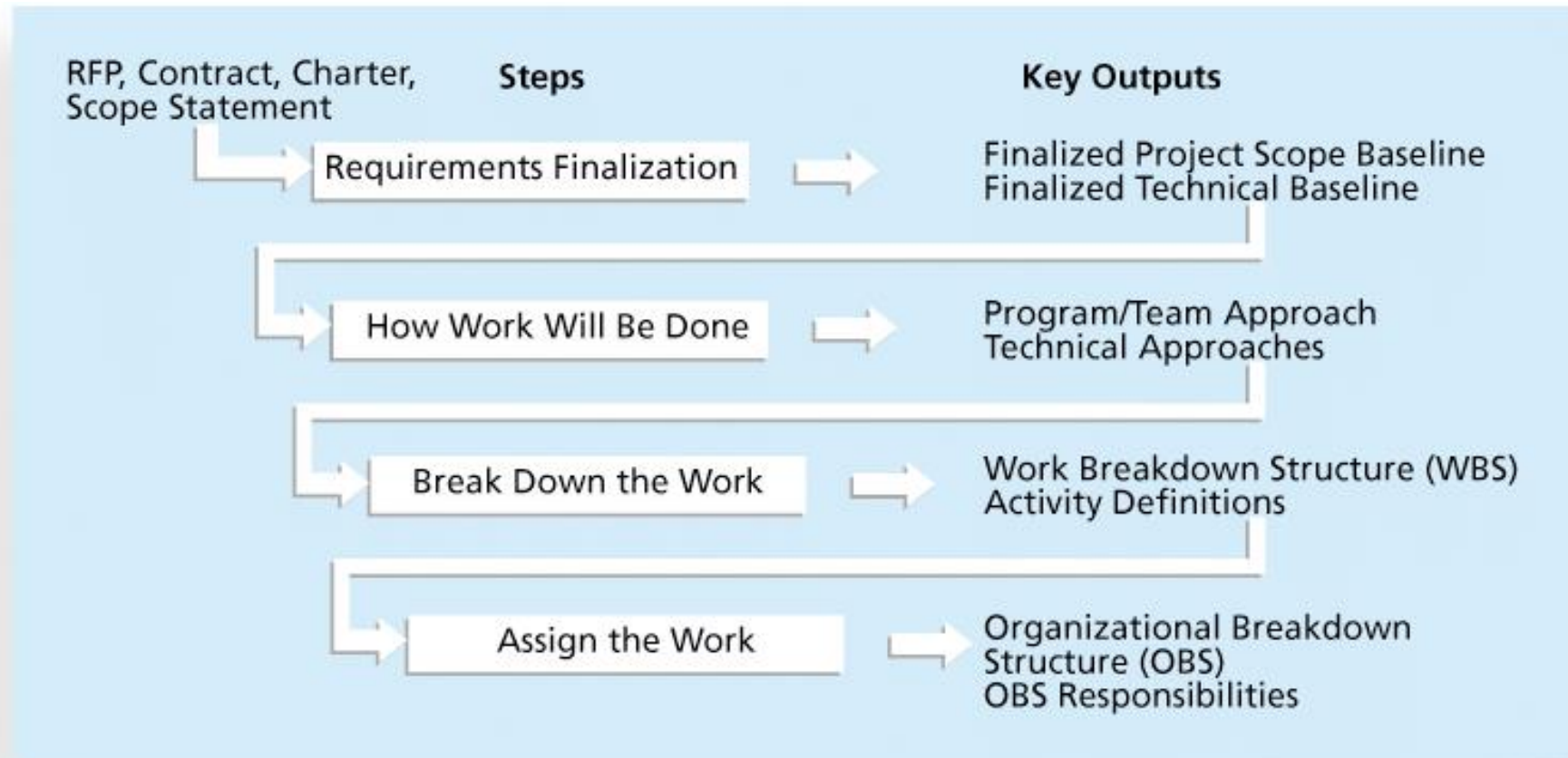


Figure 9-4. Work Definition and Assignment Process



Responsibility Assignment Matrixes

- ▶ A **responsibility assignment matrix (RAM)** is a matrix that maps the work of the project as described in the WBS to the people responsible for performing the work as described in the OBS
- ▶ Can be created in different ways to meet unique project needs

Figure 9-5. Sample Responsibility Assignment Matrix (RAM)

WBS activities →

OBS units ↓

	1.1.1	1.1.2	1.1.3	1.1.4	1.1.5	1.1.6	1.1.7	1.1.8
Systems Engineering	R	R P					R	
Software Development			R P					
Hardware Development				R P				
Test Engineering	P							
Quality Assurance					R P			
Configuration Management						R P		
Integrated Logistics Support							P	
Training								R P

R = Responsible organizational unit

P = Performing organizational unit

Table 9-2. Sample RACI Chart

	Group A	Group B	Group C	Group D	Group E
Test Plans	R	A	C	C	I
Unit Test	C	I	R	A	I
Integration Test	A	R	I	C	C
System Test	I	C	A	I	R
User Acceptance Test	R	I	C	R	A

R = responsibility

A = accountability, only one A per task

C = consultation

I = informed

Note that some people reverse the definitions of responsible and accountable.

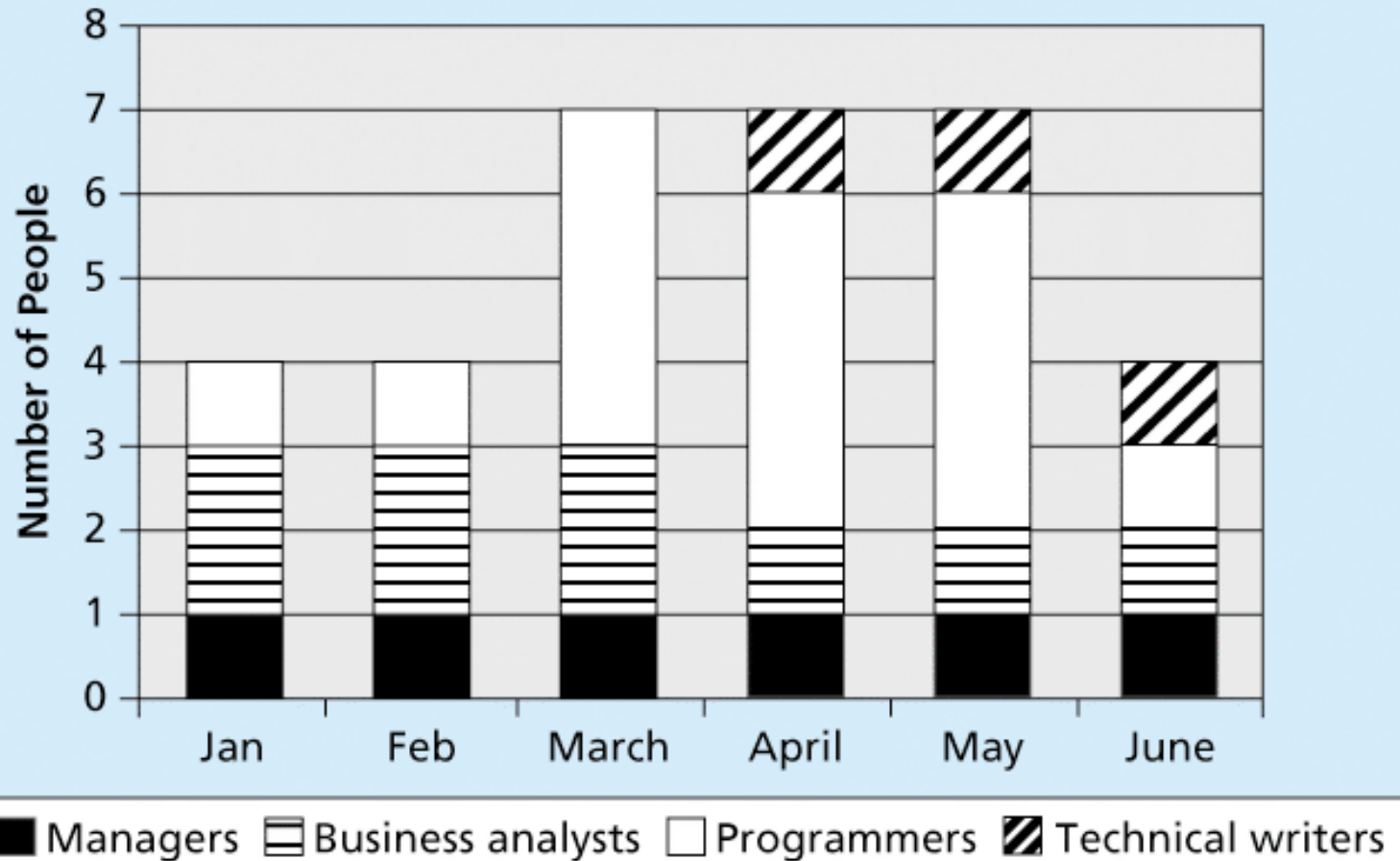
Function	Project Sponsor	Project Manager	Developer	Analyst
Project Initiation		R		
Establish Project Plan		R		
Collate User Requirement				R
Define Technical Requirements				R
Develop Software Tools			R	
Test Software				R
Install Software				R

Function	Project Sponsor	Project Manager	Developer	Analyst
Project Initiation	C	A	R	
Establish Project Plan	I	A	R	C
Collate User Requirement	I	A	I	R
Define Technical Requirements	I	A	I	R
Develop Software Tools	I	A	R	C
Test Software	I	A	C	R
Install Software	C	A	C	R

Staffing Management Plans and Resource Histograms

- ▶ A **staffing management plan** describes when and how people will be added to and taken off the project team
- ▶ A **resource histogram** is a column chart that shows the number of resources assigned to a project over time

Figure 9-6. Sample Resource Histogram



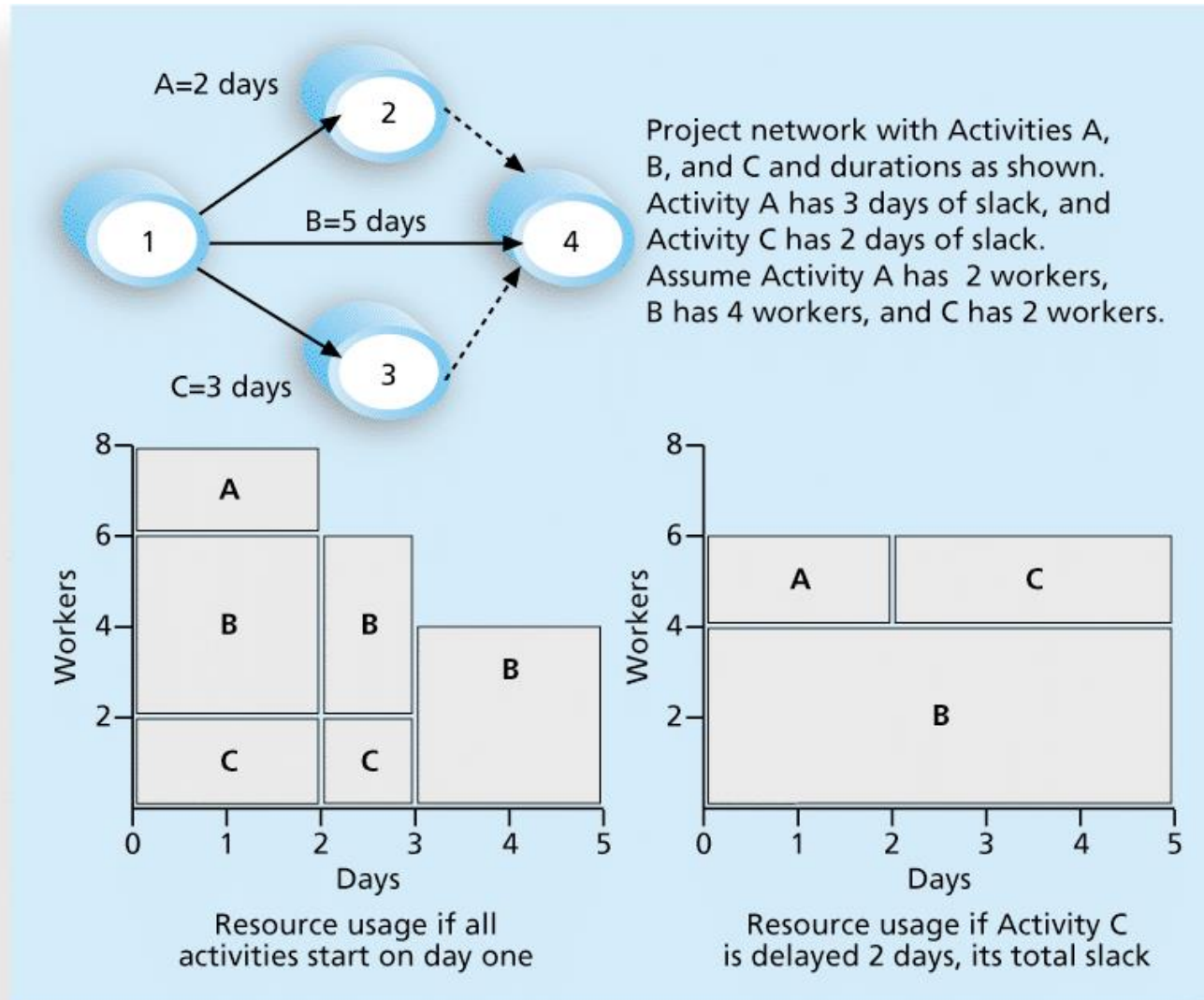
9.2.Acquiring the Project Team

- ▶ Acquiring qualified people for teams is crucial
- ▶ The project manager who is the smartest person on the team has done a poor job of recruiting!
- ▶ It's important to assign the appropriate type and number of people to work on projects at the appropriate times

Resource Leveling

- ▶ **Resource leveling** is a technique for resolving resource conflicts by delaying tasks
- ▶ The main purpose of resource leveling is to create a smoother distribution of resource usage and reduce overallocation

Figure 9-8. Resource Leveling Example



Benefits of Resource Leveling

- ▶ When resources are used on a more constant basis, they require less management
- ▶ It may enable project managers to use a just-in-time inventory type of policy for using subcontractors or other expensive resources
- ▶ It results in fewer problems for project personnel and accounting department
- ▶ It often improves morale

9.3.Developing the Project Team

- ▶ The main goal of **team development** is to help people work together more effectively to improve project performance
- ▶ It takes teamwork to successfully complete most projects

Model of Team Development

- ▶ Forming
- ▶ Storming
- ▶ Norming
- ▶ Performing
- ▶ Adjourning

Training

- ▶ Training can help people understand themselves, each other, and how to work better in teams
- ▶ Team building activities include
 - physical challenges
 - psychological preference indicator tools

9.4.Managing the Project Team

- ▶ Project managers must lead their teams in performing various project activities
- ▶ After assessing team performance and related information, the project manager must decide
 - if changes should be requested to the project
 - if corrective or preventive actions should be recommended
 - if updates are needed to the project management plan or organizational process assets.

Tools and Techniques for Managing Project Teams

- ▶ Observation and conversation
- ▶ Project performance appraisals
- ▶ Interpersonal skills
- ▶ Conflict management

Conflict Handling Modes

1. **Confrontation:** Directly face a conflict using a problem-solving approach
2. **Compromise:** Use a give-and-take approach
3. **Smoothing:** De-emphasize areas of difference and emphasize areas of agreement
4. **Forcing:** The win-lose approach
5. **Withdrawal:** Retreat or withdraw from an actual or potential disagreement
6. **Collaborating:** Decision makers incorporate different viewpoints and insights to develop consensus and commitment

Conflict Can Be Good

- ▶ Conflict often produces important results, such as new ideas, better alternatives, and motivation to work harder and more collaboratively
- ▶ **Groupthink:** Conformance to the values or ethical standards of a group. Groupthink can develop if there are no conflicting viewpoints
- ▶ Research suggests that task-related conflict often improves team performance, but emotional conflict often depresses team performance

Five Dysfunctions of a Team

- ▶ The five dysfunctions of teams are
 1. Absence of trust
 2. Fear of conflict
 3. Lack of commitment
 4. Avoidance of accountability
 5. Inattention to results

*Lencioni, Patrick, “Overcoming the Five Dysfunctions of a Team,” Jossey-Bass: San Francisco, CA (2005), p. 3.

Chapter Summary

- ▶ Project human resource management includes the processes required to make the most effective use of the people involved with a project
- ▶ Main processes include
 - Plan human resource management
 - Acquire project team
 - Develop project team
 - Manage project team