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Project Human Resource Management

Information Technology Project Management, Eighth Edition

The Importance of Human Resource Management

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▶ Many corporate executives have said, "People are our most important asset"

▶ People determine the success and failure of organizations and projects

Implications for the Future of IT Human Resource Management

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- ▶ Proactive organizations are addressing workforce needs by
    - ▶ improving benefits
    - ▶ redefining work hours and incentives
    - ▶ finding future workers

What is Project Human Resource Management?

► Making the most effective use of the people involved with a project

► Processes include

   ► **Planning human resource management:** identifying and documenting project roles, responsibilities, and reporting relationships

   ► **Acquiring the project team:** getting the needed personnel assigned to and working on the project

   ► **Developing the project team:** building individual and group skills to enhance project performance

   ► **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

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

Keys to Managing People

- ▶ Psychologists and management theorists have devoted much research and thought to the field of managing people at work

- ▶ Important areas related to project management include
  - ▶ motivation theories
  - ▶ influence and power
  - ▶ Effectiveness
  - ▶ Emotional intelligence
  - ▶ Leadership

Intrinsic and Extrinsic Motivation

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)
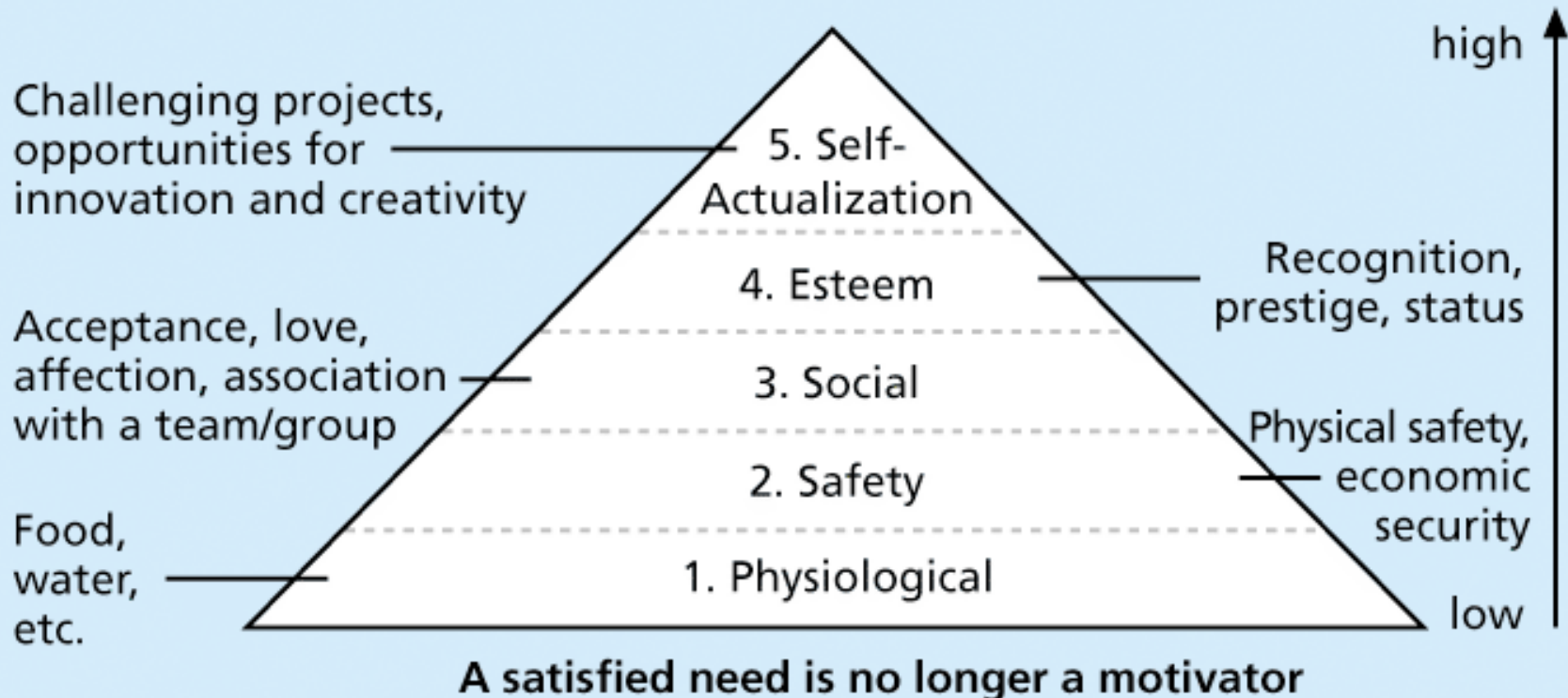
Maslow's Hierarchy of Needs

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

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Figure 9-2. Maslow's Hierarchy of Needs

high

Challenging projects, opportunities for innovation and creativity — 5. Self-Actualization

Recognition, prestige, status

4. Esteem

Acceptance, love, affection, association with a team/group — 3. Social

2. Safety

Physical safety, economic security

Food, water, etc. — 1. Physiological

low

A satisfied need is no longer a motivator

Herzberg's Motivational and Hygiene Factors

Herzberg's Motivational and Hygiene Factors

▶ Frederick Herzberg 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

Table 9-1: Examples of Herzberg's Hygiene Factors and Motivators

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HYGIENE FACTORS	MOTIVATORS
Larger salaries	Achievement
More supervision	Recognition
More attractive work environment	Work itself
Computer or other required equipment	Responsibility
Health benefits	Advancement
Training	Growth

Ways to Influence that Help and Hurt Projects

▶ Projects are more likely to *succeed* when project managers influence with

  ▶ expertise

  ▶ work challenge

▶ Projects are more likely to *fail* when project managers rely too heavily on

  ▶ authority

  ▶ money

  ▶ penalty

Improving Effectiveness

Improving Effectiveness

► Project managers can apply 7 habits to improve effectiveness on projects

- ► Be proactive
- ► Begin with the end in mind
- ► Put first things first
- ► Think win/win
- ► Seek first to understand, then to be understood
- ► Synergize
- ► Sharpen the saw

Developing the Human Resource Plan

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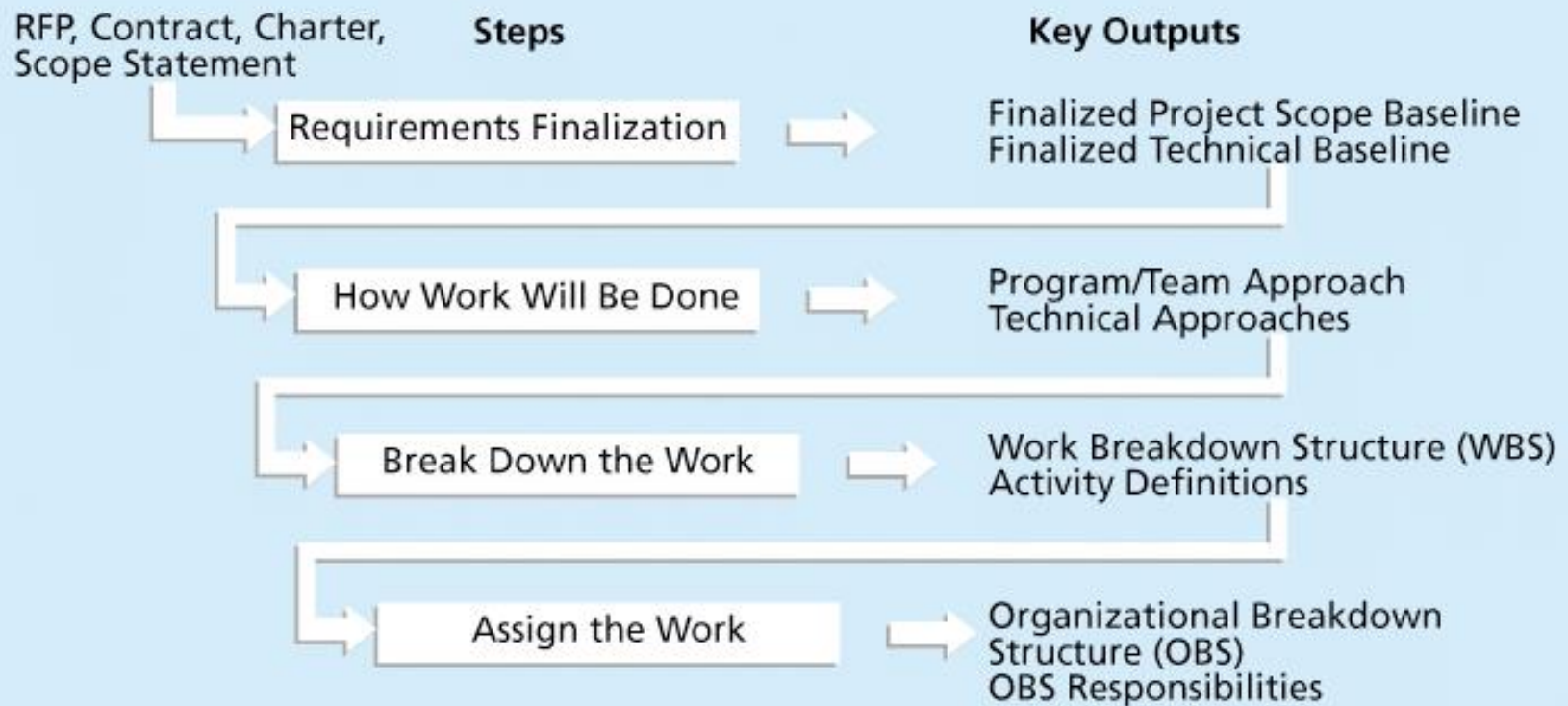- ▶ Contents include
  - ▶ project organizational charts
  - ▶ staffing management plan
  - ▶ responsibility assignment matrixes
  - ▶ resource histograms

Work Definition and Assignment Process

Work Definition and Assignment Process

RFP, Contract, Charter, Scope Statement	Steps	Key Outputs
→	Requirements Finalization	→ Finalized Project Scope Baseline Finalized Technical Baseline
→	How Work Will Be Done	→ Program/Team Approach Technical Approaches
→	Break Down the Work	→ Work Breakdown Structure (WBS) Activity Definitions
→	Assign the Work	→ Organizational Breakdown Structure (OBS) OBS Responsibilities

Responsibility Assignment Matrices

Responsibility Assignment Matrices

▶ 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 Sample Responsibility Assignment Matrix (RAM)

Figure Sample Responsibility

OBS units	WBS activities	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 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.

https://www.youtube.com/watch?v=1U2gngDxFkc

Staffing Management Plans and Resource Histograms

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

Sample Resource Histogram

▶ Sample Resource Histogram
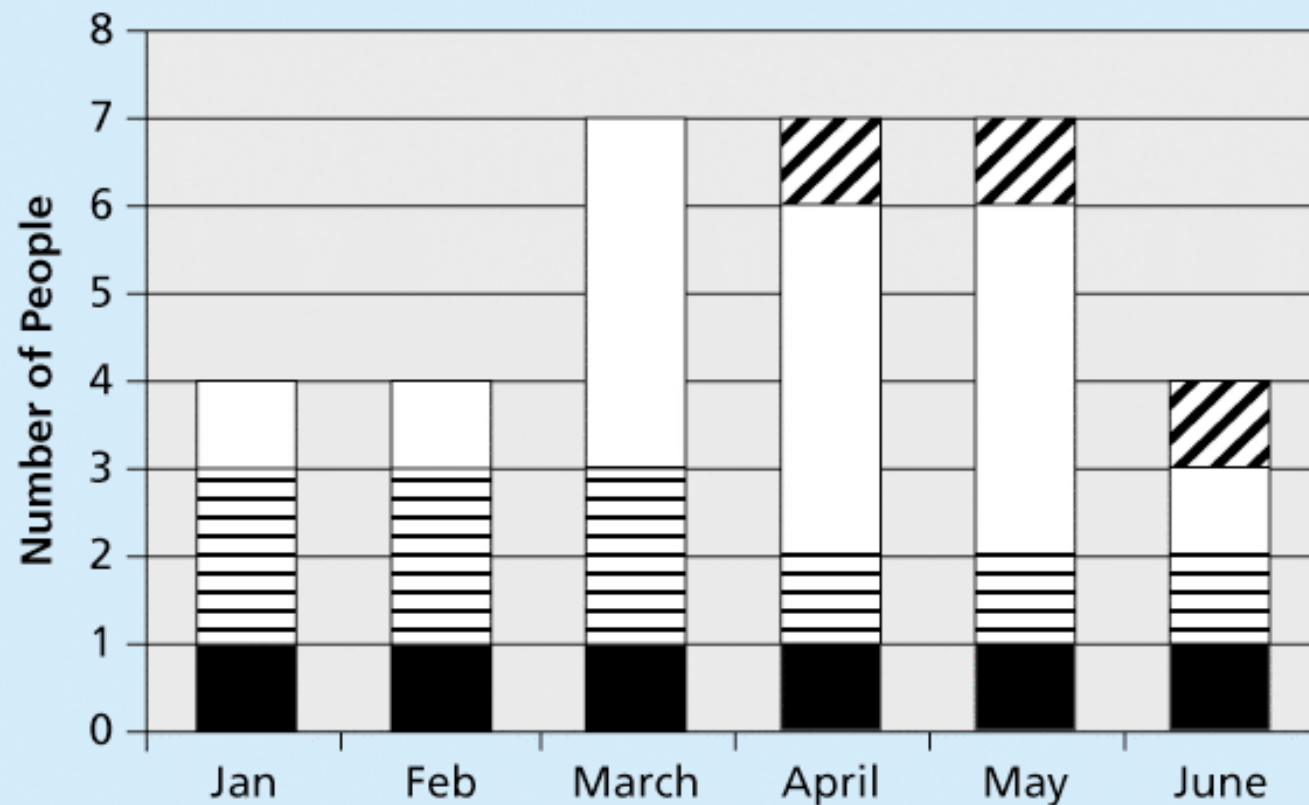
Acquiring the Project Team

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 Assignment

▶ Staffing plans and good hiring procedures are important, as are incentives for recruiting and retention

   ▶ Some companies give their employees one dollar for every hour a new person they helped hire works

   ▶ Some organizations allow people to work from home as an incentive

Resource Loading

- **Resource loading** refers to the amount of individual resources an existing schedule requires during specific time periods

- Helps project managers develop a general understanding of the demands a project will make on the organization's resources and individual people's schedules

- **Overallocation** means more resources than are available are assigned to perform work at a given time

Figure Sample Histogram Showing an Overallocated Individual
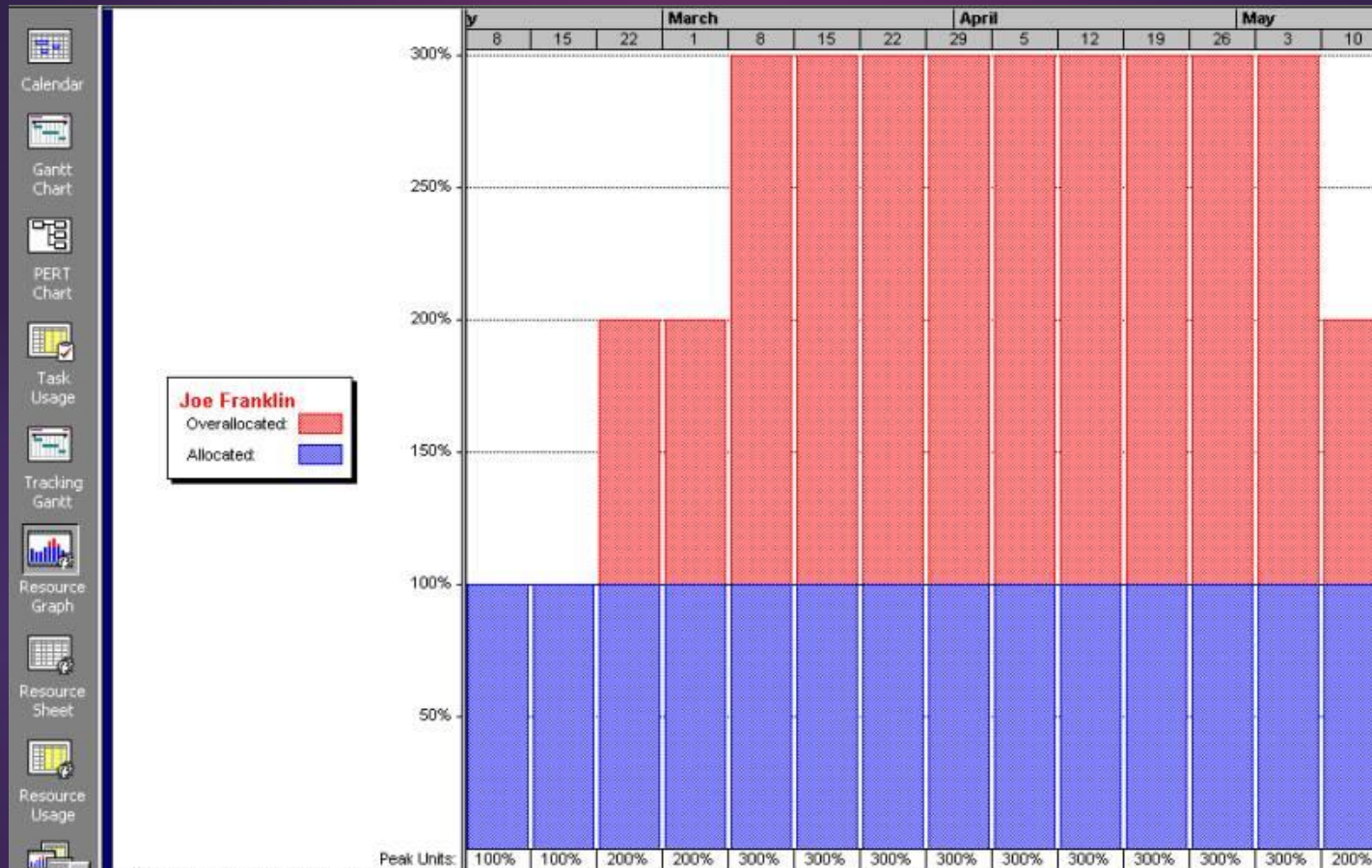
Resource Leveling

- **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
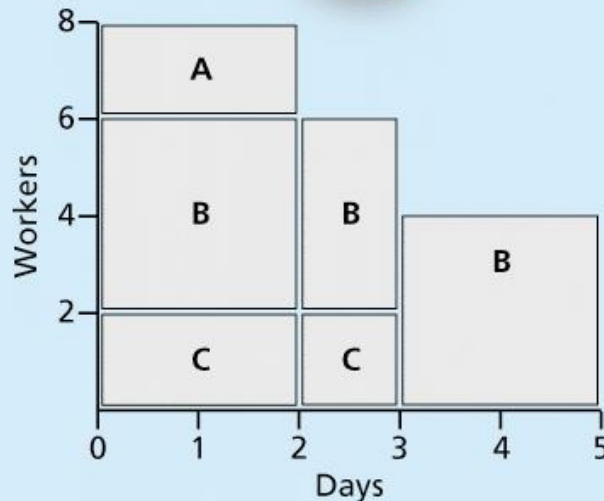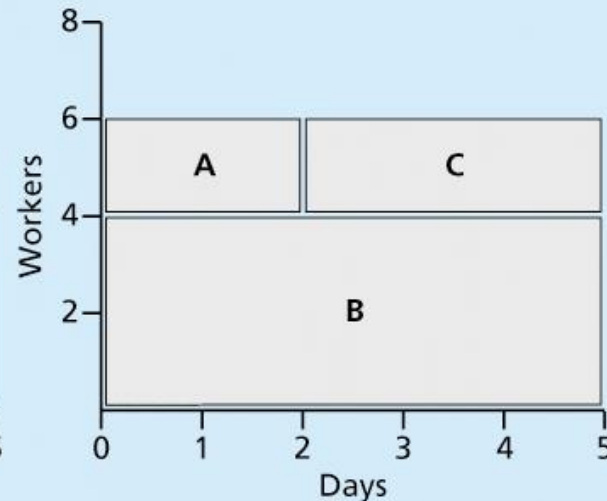
Resource Leveling Example
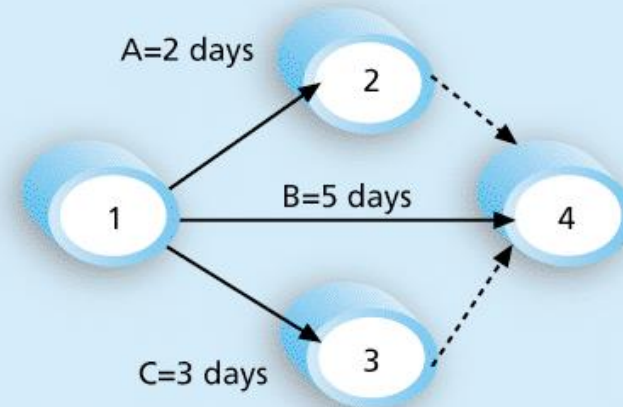
A=2 days

Project network with Activities A, B, and C and durations as shown. Activity A has 3 days of slack, and Activity C has 2 days of slack. Assume Activity A has 2 workers, B has 4 workers, and C has 2 workers.

B=5 days

C=3 days

Resource usage if all activities start on day one

Resource usage if Activity C is delayed 2 days, its total slack

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 often improves morale

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

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

Reward and Recognition Systems

- ▶ Team-based reward and recognition systems can promote teamwork

- ▶ Focus on rewarding teams for achieving specific goals

- ▶ Allow time for team members to mentor and help each other to meet project goals and develop human resources

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

General Advice on Teams

- Be patient and kind with your team
- Fix the problem instead of blaming people
- Establish regular, effective meetings
- Allow time for teams to go through the basic team-building stages
- Limit the size of work teams to three to seven members