

CHAPTER 9: PROJECT RESOURCE MANAGEMENT

Information Technology Project Management, Sixth Edition

Note: See the text itself for full citations.



LEARNING OBJECTIVES

- Explain the importance of good human resource management on projects, including the current state and future implications of the global IT workforce
- Define project human resource management and understand its processes
- Summarize key concepts for managing people by understanding the theories of Abraham Maslow, Frederick Herzberg, David McClelland, and Douglas McGregor on motivation, H. J. Thamhain and D. L. Wilemon on influencing workers, and Stephen Covey on how people and teams can become more effective

LEARNING OBJECTIVES (CONTINUED)

- Discuss human resource planning and be able to create a human resource plan, project organizational chart, responsibility assignment matrix, and resource histogram
- 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
- Explain and apply several tools and techniques to help manage a project team and summarize general advice on managing teams
- Describe how project management software can assist in project human resource management

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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

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PROJECT RESOURCE MANAGEMENT

- Including the processes to identify, acquire, and manage the resources needed for the successful completion of the project.

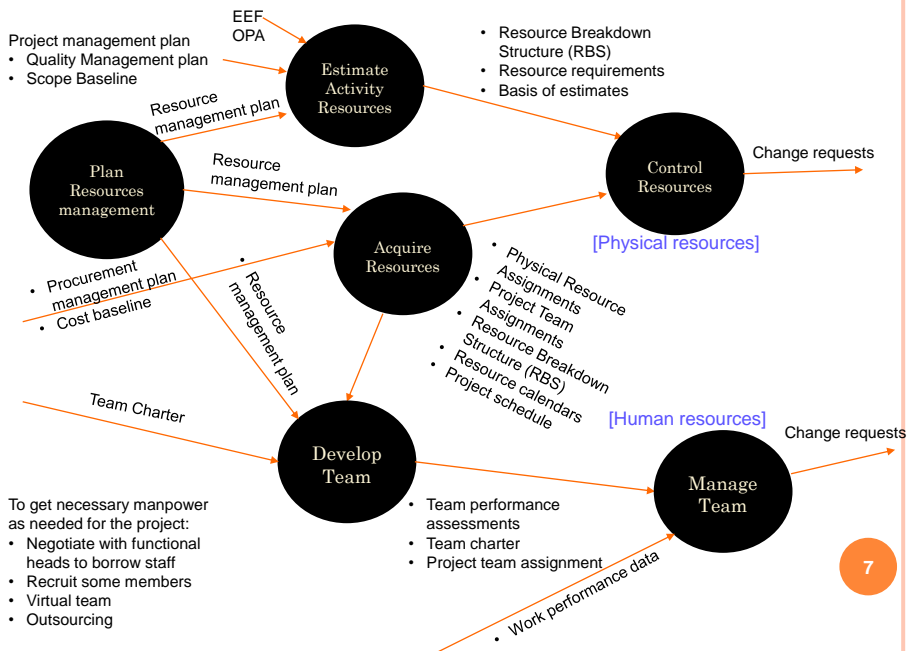
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PROCESSES OF PROJECT RESOURCE MANAGEMENT

- **9.1 Plan Resource Management**—The process of defining how to estimate, acquire, manage, and utilize physical and team resources.
- **9.2 Estimate Activity Resources**—The process of estimating team resources and the type and quantities of material, equipment, and supplies necessary to perform project work.
- **9.3 Acquire Resources**—The process of obtaining team members, facilities, equipment, materials, supplies, and other resources necessary to complete project work.
- **9.4 Develop Team**—The process of improving competencies, team member interaction, and the overall team environment to enhance project performance.
- **9.5 Manage Team**—The process of tracking team member performance, providing feedback, resolving issues, and managing team changes to optimize project performance.
- **9.6 Control Resources**—The process of ensuring that the physical resources assigned and allocated to the project are available as planned, as well as monitoring the planned versus actual use of resources, and performing corrective action as necessary.

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PROJECT HUMAN RESOURCE MANAGEMENT



MOTIVATION AND LEADERSHIP THEORIES

- Maslow's Hierarchy of Needs
- Herzberg's Motivational and Hygiene Factors
- McGregor's Theory X and Y
- McClelland's Acquired-Needs Theory
- Thamhain and Wilemon's Ways to Have Influence on Projects
- Influential Power
- Covey and Improving Effectiveness
- Leadership Styles
- ...

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9.1 PLAN RESOURCE MANAGEMENT

- Involves identifying and documenting project roles, responsibilities, and reporting relationships
- Contents include:
 - Project organizational charts
 - Staffing management plan
 - Responsibility assignment matrixes
 - Resource histograms

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RESPONSIBILITY ASSIGNMENT MATRICES

- A **Responsibility Assignment Matrix (RAM)** is a matrix used to define project responsibilities among the project team.

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RACI CHART

RACI charts are a form of RAM.

	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

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STAFFING MANAGEMENT PLANS

- A **Staffing Management Plan** describes when and how people will be added to and taken off the project team.

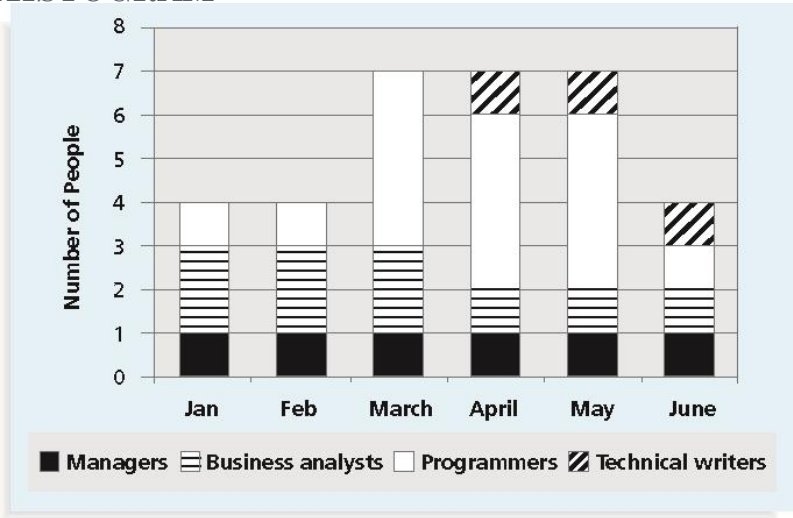
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RESOURCE HISTOGRAMS

- A **Resource Histogram** is a column chart that shows the number of resources assigned to a project over time.

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FIGURE 9-7. SAMPLE RESOURCE HISTOGRAM

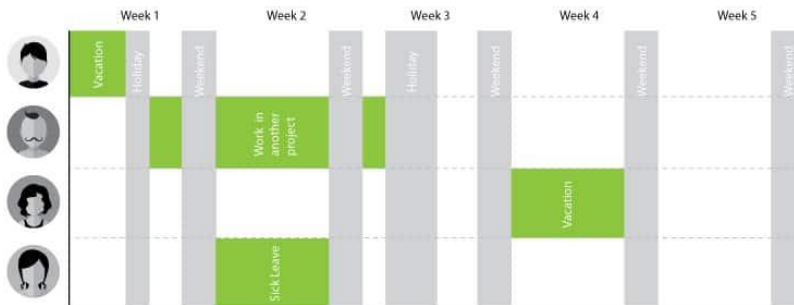


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Project Calendar



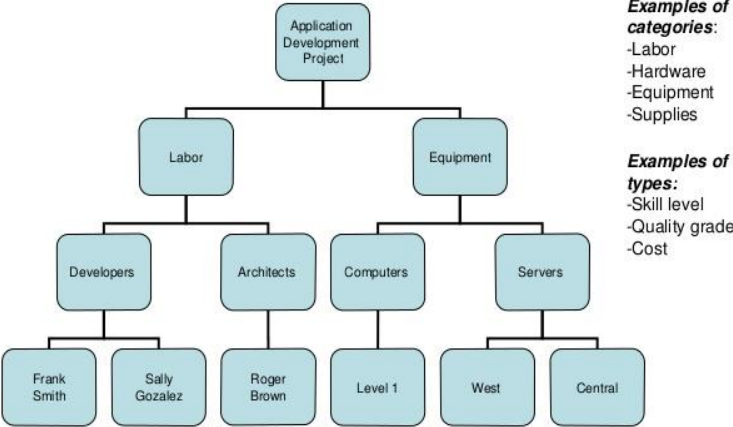
Resource Calendar



9.2 ESTIMATE ACTIVITY RESOURCES

- The process of estimating the types, quantities and characteristics of material, human resources, equipment, or supplies required to perform each activity.

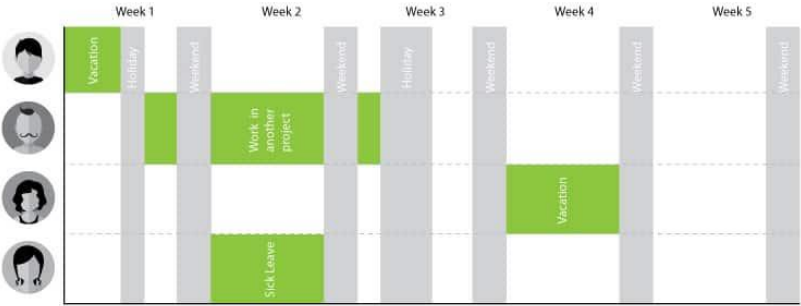
Resource Breakdown Structure



Project Calendar



Resource Calendar



9.2 ACQUIRE PROJECT TEAM

- Acquiring qualified people for teams is crucial
- Recruiting and Selection
- It's important to assign the appropriate type and number of people to work on projects at the appropriate times

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9.3 DEVELOP PROJECT TEAM

- The main goal of **team development** is to help people work together more effectively to improve project performance

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TUCKMAN MODEL OF TEAM DEVELOPMENT



- The team formally comes together

- The team may have disagreements.

- Trust develops within the team.

- The team starts delivering results.

- The team is disseminated after completion.

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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

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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

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9.4 MANAGE PROJECT TEAM

- It involves the following tasks for delivering their best work
 - Leading team to work
 - Tracking team member's performance
 - Giving team members feedback
 - Change team members as necessary
- After assessing team performance and related information, the project manager must decide:
 - If changes should be requested
 - If corrective or preventive actions should be recommended
 - If updates are needed to the project management plan or organizational process assets

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GENERAL ADVICE ON TEAMS

- Be patient and kind with your team (respect your team members)
- Fix the problem instead of blaming people
- Establish regular, effective meetings
- Limit the size of work teams to three to seven members
- Plan some social activities to help project team members and other stakeholders get to know each other better
- Stress team identity

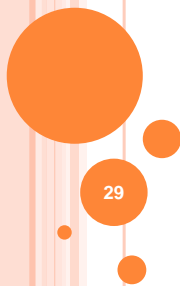
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GENERAL ADVICE ON TEAMS (CONTINUED)

- Nurture team members and encourage them to help each other
- Take additional actions to work with virtual team members

Virtual Team usually refers to a group of individuals who work together from different geographic locations and rely on communication technology.

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SCOPE COMMUNICATION MANAGEMENT

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IMPORTANCE OF FACE-TO-FACE COMMUNICATION

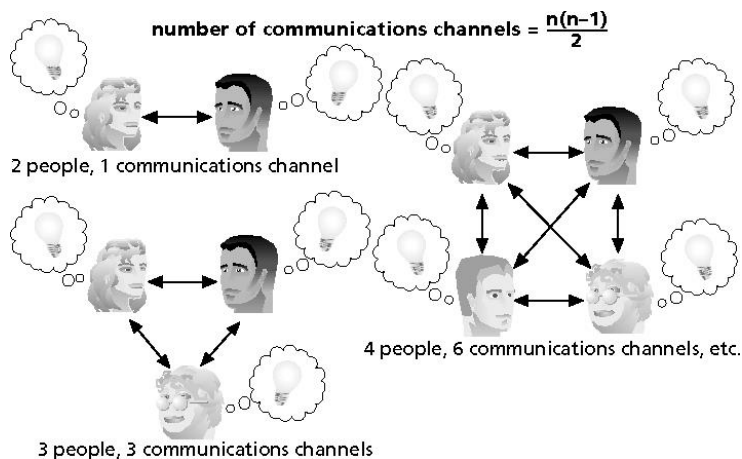
- Research says that in a face-to-face interaction:
 - 58 percent of communication is through body language
 - 35 percent of communication is through how the words are said
 - 7 percent of communication is through the content or words that are spoken
- Pay attention to more than just the actual words someone is saying
- A person's tone of voice and body language say a lot about how he or she really feels

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KEY: 1 = EXCELLENT HOW WELL MEDIUM IS SUITED TO:	2 = ADEQUATE		3 = INAPPROPRIATE			
	HARD COPY	TELEPHONE CALL	VOICE MAIL	E-MAIL	MEETING	WEB SITE
Assessing commitment	3	2	3	3	1	3
Building consensus	3	2	3	3	1	3
Mediating a conflict	3	2	3	3	1	3
Resolving a misunderstanding	3	1	3	3	2	3
Addressing negative behavior	3	2	3	2	1	3
Expressing support/appreciation	1	2	2	1	2	3
Encouraging creative thinking	2	3	3	1	3	3
Making an ironic statement	3	2	2	3	1	3
Conveying a reference document	1	3	3	3	3	1
Reinforcing one's authority	1	2	3	3	1	2
Providing a permanent record	1	3	3	1	3	1
Maintaining confidentiality	2	1	2	3	1	3
Conveying simple information	3	2	1	1	2	3
Asking an informational question	3	2	1	1	3	3
Making a simple request	3	3	1	1	3	3
Giving complex instructions	3	3	3	2	1	2
Addressing many people	2	3	3 or 1*	2	3	1

Galati, Tess. Email Composition and Communication (EmC2) Practical Communications, Inc. (www.pracom.com) (2001).
 *Depends on system functionality

FIGURE 10-2. THE IMPACT OF THE NUMBER OF PEOPLE ON COMMUNICATIONS CHANNELS



FIVE DYSFUNCTIONS OF A TEAM

- Patrick Lencioni, author of several books on teams, says that “Teamwork remains the one sustainable competitive advantage that has been largely untapped”*
- 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.