

SOFTWARE ENGINEERING

PROJECT HUMAN RESOURCE MANAGEMENT

Project Human Resource Management involves managing people and leading the team to meet the needs of organization. Project human resource management includes the processes required to make the most effective use of the people involved with a project.

LEARNING OBJECTIVES

- To learn about Human Resource Management
- To understand the theories in HRM
- To Maximize Productivity as Teams

THAMHAIN AND WILEMON'S WAYS TO HAVE INFLUENCE ON PROJECTS

Thamhain and Wilemon's ways to have influence on projects relies on the following factors:

- **Authority:** the legitimate hierarchical right to issue orders
- **Assignment:** the project manager's perceived ability to influence a worker's later work assignments
- **Budget:** the project manager's perceived ability to authorize others' use of discretionary funds
- **Promotion:** the ability to improve a worker's position
- **Money:** the ability to increase a worker's pay and benefits
- **Penalty:** the project manager's ability to cause punishment
- **Work challenge:** the ability to assign work that capitalizes on a worker's enjoyment of doing a particular task
- **Expertise:** the project manager's perceived special knowledge that others deem important
- **Friendship:** the ability to establish friendly personal relationships between the project manager and others

METHODS OF IMPROVING MOTIVATION

The methods for improving motivation include:

- Setting Specific Goals
- Providing Feedback
- Job Design which involves job enlargement and job enrichment.

WAYS TO INFLUENCE THAT HELP & HURT PROJECTS

Projects are more likely to succeed when project managers influence with expertise and work challenge. Projects are more likely to fail when project managers rely too heavily on authority, money and penalty.

Power

Power is the potential ability to influence behavior to get people to do things they would not otherwise do. Types of power include coercive, legitimate, expert, reward and referent

Improving Effectiveness - Covey's 7 Habits

Project managers can apply Covey's 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

Empathic Listening and Rapport

Good project managers are empathic listeners; they listen with the intent to understand. The establishment of a good rapport is necessary before you can communicate with others. Mirroring is a technique to help establish rapport. IT professionals often need to develop empathic listening and other people skills to improve relationships with users and other stakeholders.

Improving Relationships between Users & Developers

Some organizations require business people, not IT people, to take the lead in determining and justifying investments in new computer systems. CIOs push their staff to recognize that the needs of the business must drive all technology decisions. Some companies reshape their IT units to look and perform like consulting firms.

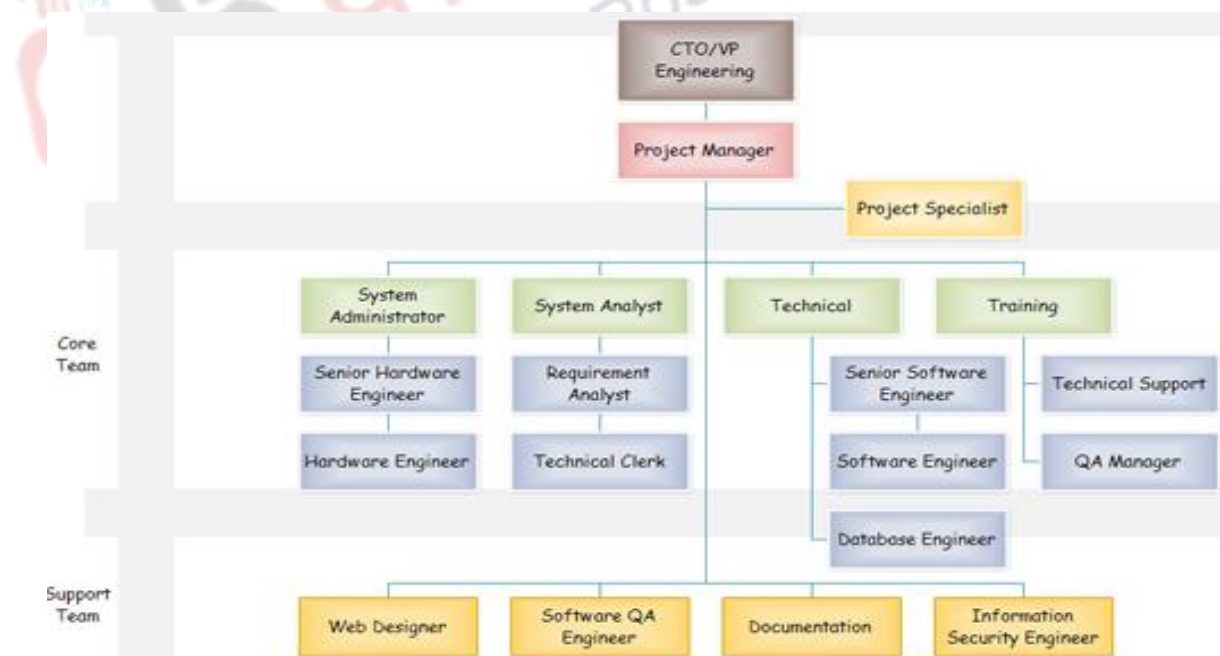
Organizational Planning

Organizational planning involves identifying, documenting, and assigning project roles, responsibilities, and reporting relationships. Outputs and processes include

- project organizational charts
- work definition and assignment process
- responsibility assignment matrixes
- resource histograms

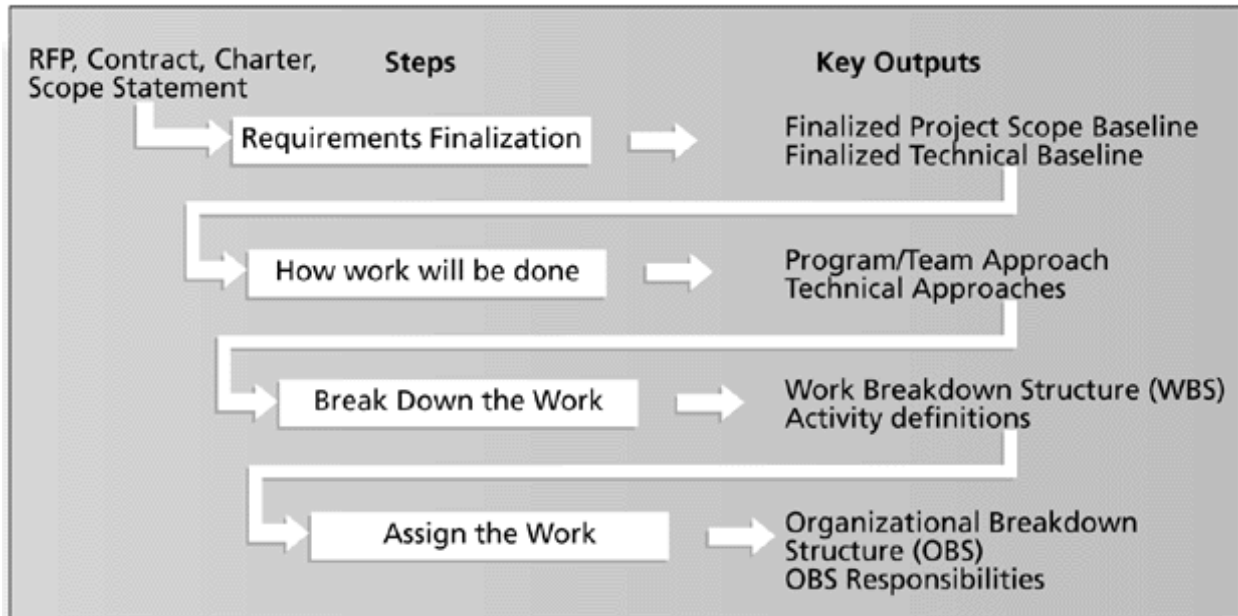
Sample Organizational Chart for a Large IT Project

Organization chart depicts the hierarchy of members in an organization. The following figure shows the organizational chart.



Work Definition and Assignment Process

Work definition and assignment process involves finalization of requirements and it establishes a well defined project scope and requirements. It gives a clear view about the work that will be done and it provides the project team and technical approaches. Once a well defined work framework is set, the work is broken down into various activities. After breaking down the work, the work and responsibilities are assigned.



Sample Responsibility Assignment Matrix (RAM)

Responsibility Assignment Matrix provides who in the organization is responsible for individual work elements and deliverables.

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

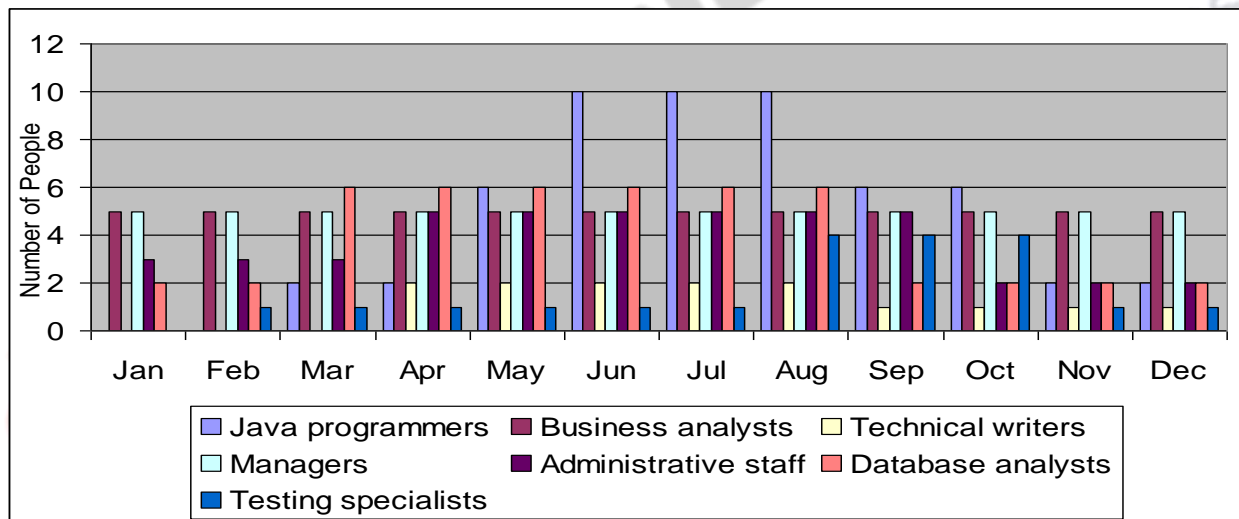
R = Responsible organizational unit
P = Performing organizational unit

RAM Showing Stakeholder Roles

Items	Stakeholders				
	A	B	C	D	E
Unit Test	S	A	I	I	R
Integration Test	S	P	A	I	R
System Test	S	P	A	I	R
User Acceptance Test	S	P	I	A	R

A = Accountable
 P = Participant
 R = Review Required
 I = Input Required
 S = Sign-off Required

Sample Resource Histogram for a Large IT Project



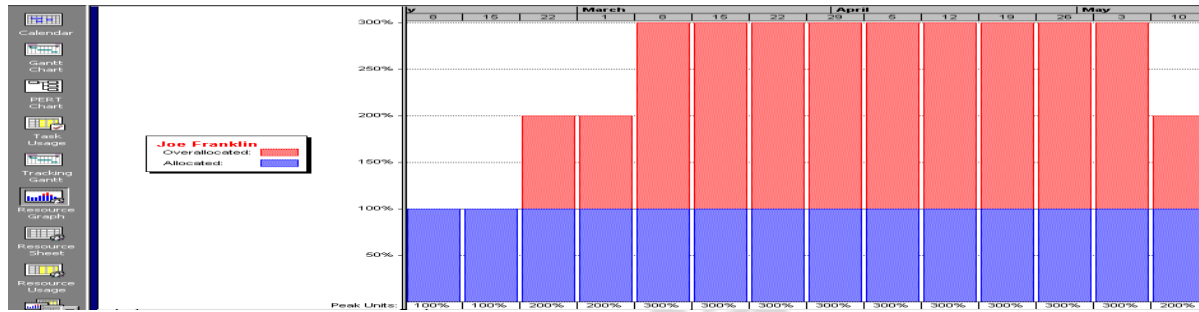
Staff Acquisition

Staffing plans and good hiring procedures are important in staff acquisition, 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. Research shows that people leave their jobs because they don't make a difference, don't get proper recognition, they aren't learning anything new, don't like their coworkers, and want to earn more money.

Resource Loading and Leveling

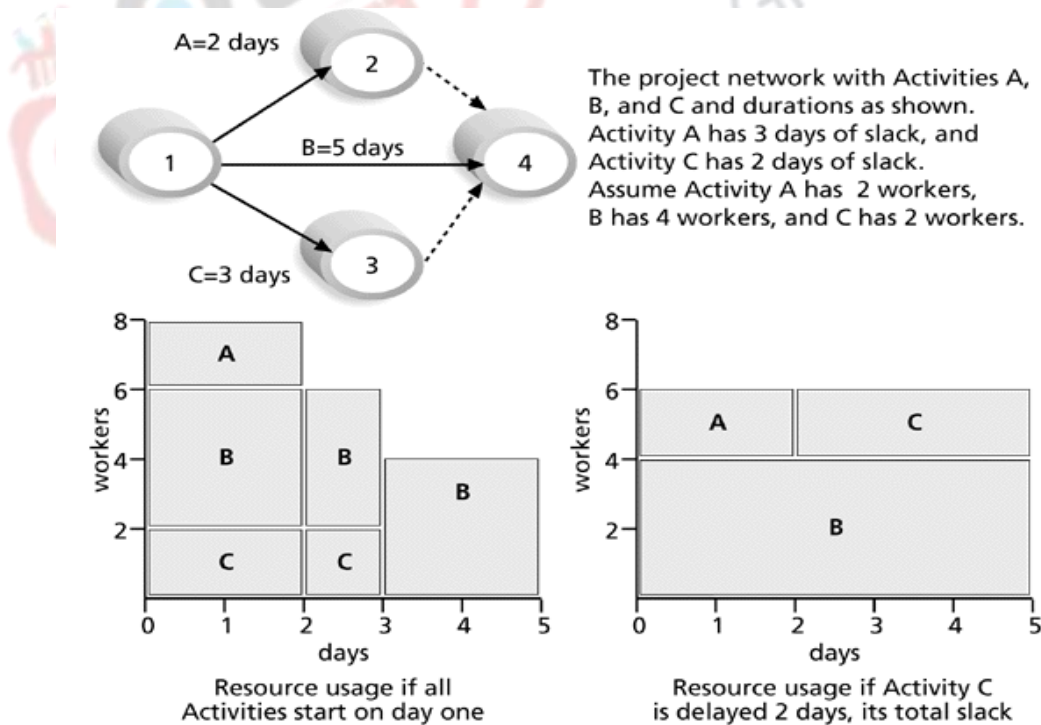
Resource loading refers to the amount of individual resources in an existing project schedule requires during specific time periods. Resource histograms show resource loading. Over-allocation means more resources than are available are assigned to perform work at a given time

Histogram Showing an Over-allocated 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 over-allocation. The given figure provides an example for resource leveling.



Team Development

It takes teamwork to successfully complete most projects. 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

Meyers-Briggs Type Indicator (MBTI)

A popular tool for determining personality preferences and helping teammates understand each other. Four dimensions include:

- Extrovert/Introvert (E/I)
- Sensation/Intuition (S/N)
- Thinking/Feeling (T/F)
- Judgment/Perception (J/P)

NTs or rationals are attracted to technology fields. IT people vary most from the general population in not being extroverted or sensing.

The goal of project managers is to enable project team members to deliver their best work. Project managers must treat people with consideration and respect, understand what motivates them and communicate carefully with them.

