Project Management Professional (PMP)

Section (9)
Project Human Resource Management



Project Human Resource Management

- Project Human Resource Management includes the processes that organize, manage, and lead the project team.
 - The project team is
 - Comprised of the people with assigned roles and responsibilities
 - May have varied skill sets.
 - May be assigned <u>full or part-time</u>.
 - May be <u>added or removed from the team as the project progresses</u>.
 - May also be <u>referred to as the project's staff</u>.
 - Specific <u>roles & responsibilities</u> for the project team members are assigned.
 - The involvement of all team members in project planning and decision making is beneficial.

Project Human Resource Management

- The Project Human Resource Management processes:
 - 9.1 Plan Human Resource Management
 - 9.2 Acquire Project Team
 - 9.3 Develop Project Team
 - 9.4 Manage Project Team



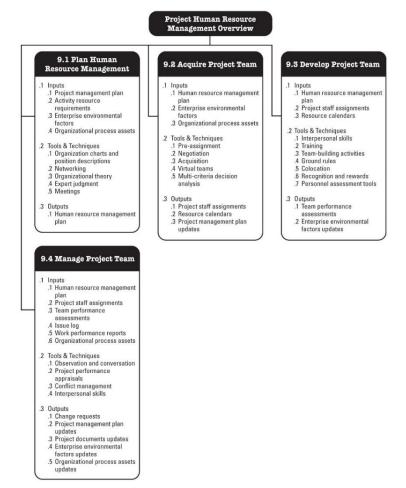


Figure 9-1. Project Human Resource Management Overview

9.1 Plan Human Resource Management (PG: Planning)

The process of identifying and documenting project roles, responsibilities, required skills, reporting relationships, and creating a staffing management plan.

- The key benefit of this process is:
 - It establishes project roles and responsibilities, project organization charts, and the staffing management plan including the timetable for staff acquisition and release.



Inputs

- .1 Project management plan
- .2 Activity resource requirements
- .3 Enterprise environmental factors
- .4 Organizational process assets

Tools & Techniques

- .1 Organization charts and position descriptions
- .2 Networking
- .3 Organizational theory
- .4 Expert judgment
- .5 Meetings

Outputs

.1 Human resource management plan

Figure 9-2. Plan Human Resource Management: Inputs, Tools & Techniques, and Outputs



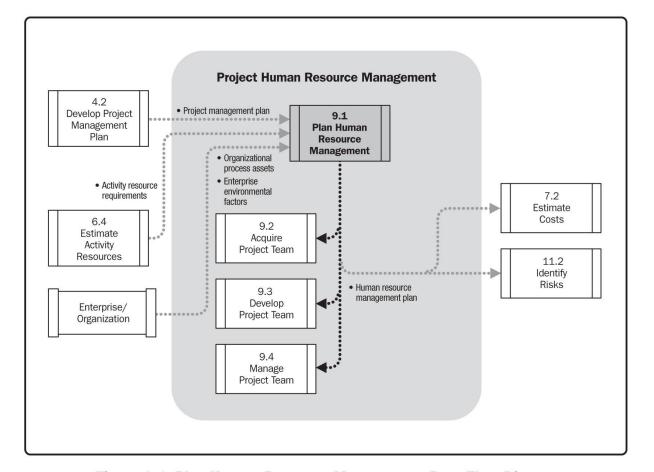




Figure 9-3. Plan Human Resource Management Data Flow Diagram

- 9.1.1.1 Project Management Plan (Out: 4.2)
- □ 9.1.1.2 Activity Resource Requirements (Out: 6.4)
- 9.1.1.3 Enterprise Environmental Factors (Out: 2.1.5)
- □ 9.1.1.4 Organizational Process Assets (Out: 2.1.4)



- 9.1.1.1 Project Management Plan (Out: 4.2)
 - The project management plan is used to develop the human resource management plan, includes:
 - The project life cycle and the processes that will be applied to each phase.
 - How work will be executed to accomplish the project objectives.
 - A change management plan that documents how changes will be monitored and controlled.
 - A configuration management plan that documents how configuration management will be performed.
 - How integrity of the project baselines will be maintained.
 - Needs and methods of communication among stakeholders.

- □ 9.1.1.2 Activity Resource Requirements (Out: 6.4)
 - Human resource planning uses activity resource requirements to determine the human resource needs for the project.
 - The preliminary requirements regarding the required project team members and their competencies are progressively elaborated as part of the Plan Human Resource Management process.



- 9.1.1.3 Enterprise Environmental Factors (Out: 2.1.5)
 - The enterprise environmental factors that can influence the Plan Human Resource Management process include:
 - Organizational culture and structure.
 - Existing human resources.
 - Geographical dispersion of team members.
 - Personnel administration policies.
 - Marketplace conditions.



- 9.1.1.4 Organizational Process Assets (Out: 2.1.4)
 - The organizational process assets that can influence the Plan Human Resource Management process include:
 - Organizational standard processes, policies, and role descriptions.
 - Templates for organizational charts and position descriptions.
 - Lessons learned on organizational structures that have worked in previous projects.
 - Escalation procedures for handling issues within the team and within the performing organization.



- 9.1.2.1 Organization Charts and Position Descriptions
- □ 9.1.2.2 Networking
- 9.1.2.3 Organizational Theory
- 9.1.2.4 Expert Judgment
- □ 9.1.2.5 Meetings



- 9.1.2.1 Organization Charts and Position Descriptions
 - Various formats exist to document team member roles & responsibilities.

- Most of the formats fall into one of three types:
 - Hierarchical-type charts
 - Matrix-based charts
 - Text-oriented formats



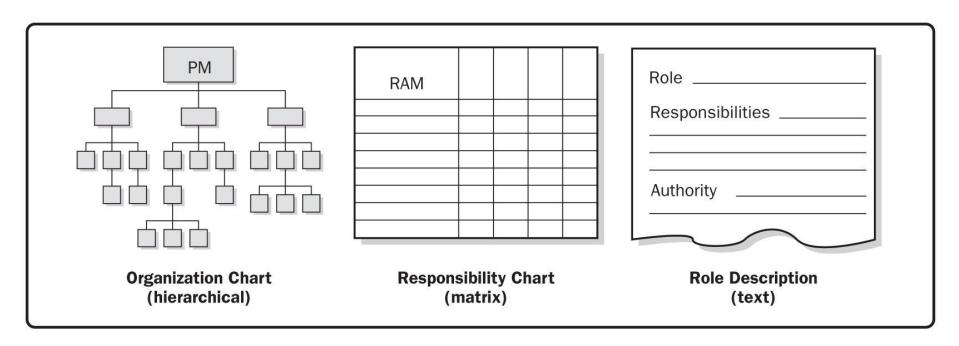


Figure 9-4. Roles and Responsibility Definition Formats



- □ 9.1.2.2 Networking
 - The formal and informal interaction with others in an organization, industry, or professional environment.

It is a constructive way to understand political and interpersonal factors that will impact the effectiveness of various staffing management options.



- □ 9.1.2.3 Organizational Theory
 - Organizational theory provides information regarding the way in which people, teams, and organizational units behave.
 - Effective use of common themes identified in organizational theory can shorten the amount of time, cost, and effort needed to create the Plan Human Resource Management process outputs and improve planning efficiency.
 - Organizational Behavior



- □ 9.1.2.5 Meetings
 - When planning human resource management of the project, the project management team will hold planning meetings.

■ These meetings leverage a combination of other tools and techniques to allow for all project management team members to reach consensus on the human resource management plan.



- 9.1.3.1 Human Resource Management Plan
 - The human resource management plan, a part of the project management plan
 - Provides guidance on how project human resources should be defined, staffed, managed, and eventually released.
 - The human resource management plan includes:
 - Roles and responsibilities
 - Project organization charts
 - Staffing management plan

9.2 Acquire Project Team (PG: Executing)

The process of confirming human resource availability and obtaining the team necessary to complete project activities.

- □ The key benefit of this process consists of:
 - Outlining and guiding the team selection and responsibility assignment to obtain a successful team.



Inputs

- .1 Human resource management plan
- .2 Enterprise environmental factors
- .3 Organizational process assets

Tools & Techniques

- .1 Pre-assignment
- .2 Negotiation
- .3 Acquisition
- .4 Virtual teams
- .5 Multi-criteria decision analysis

Outputs

- .1 Project staff assignments
- .2 Resource calendars
- .3 Project management plan updates

Figure 9-7. Acquire Project Team: Inputs, Tools & Techniques, and Outputs



- □ 9.2.1.1 Human Resource Management Plan
- □ 9.2.1.2 Enterprise Environmental Factors
- 9.2.1.3 Organizational Process Assets



- 9.2.1.1 Human Resource Management Plan (Out: 9.1)
 - Provides guidance on how project human resources should be identified, staffed, managed and eventually released. It includes:
 - Roles and responsibilities defining the positions, skills, and competencies that the project demands.
 - Project organization charts indicating the number of people needed for the project.
 - Staffing management plan delineating the time periods each project team member will be needed and other information important to engage the project team.



- 9.2.1.2 Enterprise Environmental Factors
 - The EEFs that influence the Acquire Project Team process include:
 - Existing information on human resources including availability, competency levels, prior experience
 - interest in working on the project and their cost rate
 - Personnel administration policies such as those that affect outsourcing
 - Organizational structure
 - Colocation or multiple locations.



- 9.2.1.3 Organizational Process Assets
 - The organizational process assets that influence the Acquire Project Team process include:
 - Standard policies.
 - Processes.
 - Procedures.



- 9.2.2.1 Pre-assignment
 - When project team members are selected in advance, they are considered pre-assigned.
 - This situation can occur if the project is the result of specific people being identified as part of a competitive proposal, if the project is dependent upon the expertise of particular persons, or if some staff assignments are defined within the project charter.



- 9.2.2.2 Negotiation
 - Staff assignments are negotiated on many projects.
 - □ For example, the project management team may need to negotiate with:
 - Functional managers
 - Other project management teams within the performing organization, to appropriately assign scarce or specialized human resources
 - External organizations, vendors, suppliers, contractors, etc.



- 9.2.2.3 Acquisition
 - When the performing organization is unable to provide the staff needed to complete a project, the required services may be <u>acquired from</u> <u>outside sources</u>.
 - This can involve <u>hiring individual consultants</u> or <u>subcontracting work to another organization</u>.



- 9.2.2.4 Virtual Teams
 - The virtual team model makes it possible to:
 - Form teams of people from the same organization who live in widespread geographic areas
 - Add special expertise to a project team even though the expert is not in the same geographic area.
 - Incorporate employees who work from home offices.
 - Form teams of people who work different shifts, hours, or days.
 - Include people with mobility limitations or disabilities.
 - Move forward with projects that would have been ignored due to travel expenses.

- 9.2.2.5 Multi-Criteria Decision Analysis
 - Selection criteria are often used as a part of acquiring the project team.

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- Some examples of selection criteria that can be used to score team members are shown as follows:
 - Availability
 - Experience
 - Ability
 - Knowledge
 - Skills
 - Attitude
 - International factors

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9.2.3 Acquire Project Team: Outputs

- 9.2.3.1 Project Staff Assignments
 - The project is staffed when appropriate people have been assigned to the team.
 - The documentation of these assignments can include:
 - a project team directory
 - memos to team members
 - names inserted into other parts of the project management plan, such as project organization charts and schedules.



9.2.3 Acquire Project Team: Outputs

- 9.2.3.2 Resource Calendars
 - Resource calendars document the time periods that each project team member is available to work on the project.
 - Creating a reliable schedule depends on having a good understanding of each person's availability and schedule constraints, including time zones, work hours, vacation time, local holidays, and commitments to other projects.



9.2.3 Acquire Project Team: Outputs

- 9.2.3.3 Project Management Plan Updates
 - Elements of the project management plan that may be updated include:
 - <u>The human resource management plan</u>

Example:

- The person assigned to a predefined role may not fulfill all staffing requirements outlined in the human resource management plan.
- When gaps occur, the project management plan needs to be updated to change the team structure, roles, or responsibilities.



9.3 Develop Project Team (PG: Executing)

The process of improving competencies, team member interaction, and overall team environment to enhance project performance.

- The key benefit of this process is:
 - It results in improved teamwork, enhanced people skills and competencies, motivated employees, reduced staff turnover rates, and improved overall project performance.



Inputs

- .1 Human resource management plan
- .2 Project staff assignments
- .3 Resource calendars

Tools & Techniques

- .1 Interpersonal skills
- .2 Training
- .3 Team-building activities
- .4 Ground rules
- .5 Colocation
- .6 Recognition and rewards
- .7 Personnel assessment tools

Outputs

- .1 Team performance assessments
- .2 Enterprise environmental factors updates

Figure 9-9. Develop Project Team: Inputs, Tools & Techniques, and Outputs



9.3.1 Develop Project Team: Inputs

- 9.3.1.1 Human Resource Management Plan (Out: 9.1)
 - The human resource management plan provides guidance on how project human resources should be defined, staffed, managed, controlled, and eventually released.
 - It identifies training strategies and plans for developing the project team.



9.3.1 Develop Project Team: Inputs

- 9.3.1.2 Project Staff Assignments (Out: 9.2)
 - Team development starts with a list of the project team members.
 - Project staff assignment documents identify the people who are on the team.



9.3.1 Develop Project Team: Inputs

- □ 9.3.1.3 Resource Calendars (Out: 9.2)
 - Resource calendars identify times when the project team members can participate in team development activities.



- 9.3.2.1 Interpersonal Skills
 - Interpersonal skills, sometimes known as "soft skills," are:
 - Behavioral competencies that include proficiencies such as:
 - Communication skills Emotional intelligence
 - Conflict resolution negotiation
 - Influence
 Team building
 - Group facilitation.
 - These soft skills are valuable assets when developing the project team.



- 9.3.2.2 Training
 - Training includes all activities designed to enhance the competencies of the project team members.
 - Training can be formal or informal.



- 9.3.2.3 Team-Building Activities
 - Team-building activities can vary from a 5-minute agenda item in a status review meeting to an off-site, professionally facilitated experience designed to improve <u>interpersonal relationships</u>.
 - The objective of team-building activities is to <u>help individual team</u> members work together effectively.
 - Informal communication and activities can help in building trust and establishing good working relationships.



- 9.3.2.4 Ground Rules
 - Ground rules establish clear expectations regarding acceptable behavior by project team members.

Early commitment to clear guidelines decreases misunderstandings and increases productivity.



- 9.3.2.5 Colocation
 - Colocation, also referred to as "tight matrix"
 - Involves placing many or all of the most active project team members in the same physical location to enhance their ability to perform as a team.
 - Colocation can be temporary.
 - Colocation strategies can include:
 - A team meeting room (sometimes called "war room")
 - Places to post schedules
 - Other conveniences that enhance communication and a sense of community.



- 9.3.2.6 Recognition and Rewards
 - Part of the team development process involves recognizing and rewarding desirable behavior.

The original plans concerning ways in which to reward people are developed during the Plan Human Resource Management process.



- 9.3.2.7 Personnel Assessment Tools
 - Personnel assessment tools give the project manager and the project team insight into areas of strength and weakness.

■ These tools help project managers assess the team preferences, aspirations, how they process and organize information, how they tend to make decisions, and how they prefer to interact with people.



9.3.3 Develop Project Team: Outputs

- 9.3.3.1 Team Performance Assessments
 - As project team development efforts such as training, team building, and colocation are implemented, the project management team makes formal or informal assessments of the project team's effectiveness.

Effective team development strategies and activities are expected to increase the team's performance, which increases the likelihood of meeting project objectives.



9.3.3 Develop Project Team: Outputs

- 9.3.3.2 Enterprise Environmental Factors Updates
 - The EEFs that may be updated as a result of the Develop Project Team process include:
 - Personnel administration.
 - Employee training records.
 - Skill assessments.



9.4 Manage Project Team (PG: Executing)

The process of tracking team member performance, providing feedback, resolving issues, and managing team changes to optimize project performance.

- The key benefit of this process is
 - It influences team behavior, manages conflict, resolves issues, and appraises team member performance.



Inputs

- .1 Human resource management plan
- .2 Project staff assignments
- .3 Team performance assessments
- .4 Issue log
- .5 Work performance reports
- .6 Organizational process assets

Tools & Techniques

- .1 Observation and conversation
- .2 Project performance appraisals
- .3 Conflict management
- .4 Interpersonal skills

Outputs

- .1 Change requests
- .2 Project management plan updates
- .3 Project documents updates
- .4 Enterprise environmental factors updates
- .5 Organizational process assets updates

Figure 9-11. Manage Project Team: Inputs, Tools & Techniques, and Outputs



- 9.4.1.1 Human Resource Management Plan (9.1)
 - The human resource management plan provides guidance on how project human resources should be defined, staffed, managed, controlled, and eventually released. It includes:
 - Roles and responsibilities.
 - Project organization.
 - Staffing management plan.



- 9.4.1.2 Project Staff Assignments (Out: 9.2)
 - Project staff assignments provide documentation, which includes the list of project team members.

- □ 9.4.1.3 Team Performance Assessments (Out: 9.3)
 - The project management team makes ongoing formal or informal assessments of the project team's performance.
 - By continually assessing the project team's performance, actions can be taken to resolve issues, modify communication, address conflict, and
 Aimprove team interaction.

- 9.4.1.4 Issue Log
 - Issues arise in the course of managing the project team.
 - An issue log can be used to document and monitor who is responsible for resolving specific issues by a target date.

- □ 9.4.1.5 Work Performance Reports (Out: 4.4)
 - Work performance reports provide documentation about the current project status compared to project forecasts.



- 9.4.1.6 Organizational Process Assets (Out: 2.1.4)
 - The OPAs that can influence the Manage Project Team process include:
 - Certificates of appreciation.
 - Newsletters.
 - Websites.
 - Bonus structures.
 - Corporate apparel.
 - Other organizational perquisites.



- 9.4.2.1 Observation and Conversation
 - Observation and conversation are used to stay in touch with the work and attitudes of project team members.

The project management team monitors progress toward project deliverables, accomplishments that are a source of pride for team members, and interpersonal issues.



- 9.4.2.2 Project Performance Appraisals
 - Objectives for conducting performance appraisals during the course of a project can include clarification of roles and responsibilities, constructive feedback to team members, discovery of unknown or unresolved issues, development of individual training plans, and the establishment of specific goals for future time periods.



- □ 9.4.2.3 Conflict Management
 - Conflict is inevitable in a project environment.
 - Sources of conflict include scarce resources, scheduling priorities, and personal work styles.
 - □ There are <u>five general techniques for resolving conflict</u>:
 - Withdraw/Avoid
 - Smooth/Accommodate
 - Compromise/Reconcile
 - Force/Direct
 - Collaborate/Problem Solve

- 9.4.2.4 Interpersonal Skills
 - Project managers use a combination of technical, personal, and conceptual skills to analyze situations and interact appropriately with team members.

Using appropriate interpersonal skills allows project managers to capitalize on the strengths of all team members.



- 9.4.3.1 Change Requests
 - Staffing changes, whether by choice or by uncontrollable events, can affect the rest of the project management plan.

Staffing changes may include moving people to different assignments, outsourcing some of the work, and replacing team members who leave.



- 9.4.3.2 Project Management Plan Updates
 - Elements of the project management plan that may be updated include, but are not limited to, the human resource management plan.

- 9.4.3.3 Project Documents Updates
 - Project documents that may indirectly be updated include:
 - Issue log.
 - Roles description.
 - Project staff assignments.



- 9.4.3.4 Enterprise Environmental Factors Updates
 - Enterprise environmental factors that may require updates as a result of the Manage Project Team process include:
 - Input to organizational performance appraisals.
 - Personnel skill updates.



- 9.4.3.5 Organizational Process Assets Updates
 - Organizational process assets that may require updates as a result of the Manage Project Team process include:
 - Historical information and lessons learned documentation,
 - Templates.
 - Organizational standard processes.



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