As a result of conducting an evaluation of the team's overall performance, the project management team can identify the specific training, coaching, mentoring, assistance, or changes required to improve the team's performance. This should also include identification of the appropriate or required resources necessary to achieve and implement the improvements identified in the assessment. These resources and recommendations for team improvement should be well documented and forwarded to the relevant parties.

9.3.3.2 Enterprise Environmental Factors Updates

The enterprise environmental factors that may be updated as a result of the Develop Project Team process include, but are not limited to, personnel administration, employee training records, and skill assessments.

9.4 Manage Project Team

Manage Project Team is 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 that it influences team behavior, manages conflict, resolves issues, and appraises team member performance. The inputs, tools and techniques, and outputs of this process are depicted in Figure 9-11. Figure 9-12 depicts the data flow diagram of the process.

Inputs Tools & Techniques **Outputs** .1 Observation and .1 Human resource .1 Change requests management plan conversation .2 Project management plan updates .2 Project staff assignments .2 Project performance .3 Team performance appraisals .3 Project documents assessments .3 Conflict management updates .4 Issue log .4 Interpersonal skills .4 Enterprise environmental .5 Work performance factors updates reports .5 Organizational process .6 Organizational process assets updates assets

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

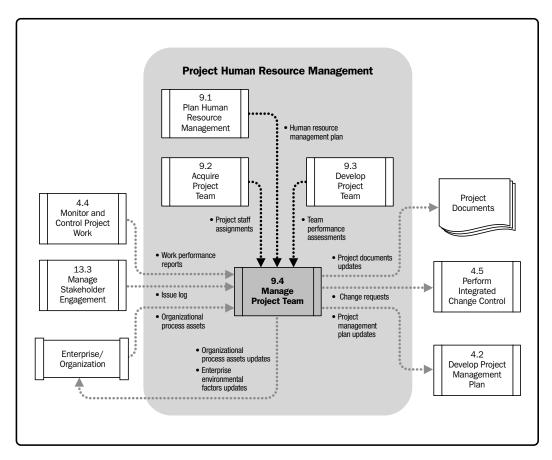


Figure 9-12. Manage Project Team Data Flow Diagram

As a result of managing the project team, change requests are submitted, the human resource management plan is updated, issues are resolved, input is provided for performance appraisals, and lessons learned are added to the organization's database.

Managing the project team requires a variety of management skills for fostering teamwork and integrating the efforts of team members to create high-performance teams. Team management involves a combination of skills with special emphasis on communication, conflict management, negotiation, and leadership. Project managers should provide challenging assignments to team members and provide recognition for high performance.

9

9.4.1 Manage Project Team: Inputs

9.4.1.1 Human Resource Management Plan

Described in Section 9.1.3.1. The human resource management plan provides guidance on how project human resources should be defined, staffed, managed, controlled, and eventually released. It includes, but is not limited to:

- Roles and responsibilities,
- Project organization, and
- Staffing management plan.

9.4.1.2 Project Staff Assignments

Described in Section 9.2.3.1. Project staff assignments provide documentation, which includes the list of project team members.

9.4.1.3 Team Performance Assessments

Described in Section 9.3.3.1. 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 improve 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

Described in Section 4.4.3.2. Work performance reports provide documentation about the current project status compared to project forecasts. Performance areas that can help with project team management include results from schedule control, cost control, quality control, and scope validation. The information from performance reports and related forecasts assists in determining future human resource requirements, recognition and rewards, and updates to the staffing management plan.

9.4.1.6 Organizational Process Assets

Described in Section 2.1.4. The organizational process assets that can influence the Manage Project Team process include, but are not limited to:

- Certificates of appreciation,
- Newsletters,
- · Websites.
- Bonus structures.
- Corporate apparel, and
- Other organizational perquisites.

9.4.2 Manage Project Team: Tools and Techniques

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.

The need for formal or informal project performance appraisals depends on the length of the project, complexity of the project, organizational policy, labor contract requirements, and the amount and quality of regular communication.

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. Team ground rules, group norms, and solid project management practices, like communication planning and role definition, reduce the amount of conflict.

Successful conflict management results in greater productivity and positive working relationships. When managed properly, differences of opinion can lead to increased creativity and better decision making. If the differences become a negative factor, project team members are initially responsible for their resolution. If conflict escalates, the project manager should help facilitate a satisfactory resolution. Conflict should be addressed early and usually in private, using a direct, collaborative approach. If disruptive conflict continues, formal procedures may be used, including disciplinary actions.

The success of project managers in managing their project teams often depends a great deal on their ability to resolve conflict. Different project managers may utilize different conflict resolution methods. Factors that influence conflict resolution methods include:

- · Relative importance and intensity of the conflict,
- Time pressure for resolving the conflict,
- · Position taken by persons involved, and
- Motivation to resolve conflict on a long-term or a short-term basis.

There are five general techniques for resolving conflict. As each one has its place and use, these are not given in any particular order:

- Withdraw/Avoid. Retreating from an actual or potential conflict situation; postponing the issue to be better prepared or to be resolved by others.
- **Smooth/Accommodate.** Emphasizing areas of agreement rather than areas of difference; conceding one's position to the needs of others to maintain harmony and relationships.
- Compromise/Reconcile. Searching for solutions that bring some degree of satisfaction to all parties in
 order to temporarily or partially resolve the conflict.
- **Force/Direct.** Pushing one's viewpoint at the expense of others; offering only win-lose solutions, usually enforced through a power position to resolve an emergency.
- Collaborate/Problem Solve. Incorporating multiple viewpoints and insights from differing perspectives;
 requires a cooperative attitude and open dialogue that typically leads to consensus and commitment.

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.

Examples of interpersonal skills that a project manager uses most often include:

- **Leadership.** Successful projects require strong leadership skills. Leadership is important through all phases of the project life cycle. There are multiple leadership theories defining leadership styles that should be used as needed for each situation or team. It is especially important to communicate the vision and inspire the project team to achieve high performance.
- **Influencing.** Because project managers often have little or no direct authority over team members in a matrix environment, their ability to influence stakeholders on a timely basis is critical to project success. Key influencing skills include:
 - Ability to be persuasive and clearly articulate points and positions;
 - High levels of active and effective listening skills;
 - o Awareness of, and consideration for, the various perspectives in any situation; and
 - Gathering relevant and critical information to address important issues and reach agreements while maintaining mutual trust.
- **Effective decision making.** This involves the ability to negotiate and influence the organization and the project management team. Some guidelines for decision making include:
 - Focus on goals to be served,
 - Follow a decision-making process,
 - Study the environmental factors,
 - Analyze available information,
 - Develop personal qualities of the team members,
 - Stimulate team creativity, and
 - Manage risk.

9.4.3 Manage Project Team: Outputs

9.4.3.1 Change Requests

Staffing changes, whether by choice or by uncontrollable events, can affect the rest of the project management plan. When staffing issues disrupt the project team from adhering to the project management plan such as causing the schedule to be extended or the budget to be exceeded, a change request can be processed through the Perform Integrated Change Control process. Staffing changes may include moving people to different assignments, outsourcing some of the work, and replacing team members who leave.

Preventive actions are those actions that are developed to reduce the probability and/or impact of problems before they occur. These actions may include cross training to reduce problems during project team member absences and additional role clarification to ensure all responsibilities are fulfilled.

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, but are not limited to:

- Issue log,
- · Roles description, and
- 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, but are not limited to:

- Input to organizational performance appraisals, and
- 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, but are not limited to:

- Historical information and lessons learned documentation,
- Templates, and
- Organizational standard processes.