Project Human Resource Management

- **Introduction**
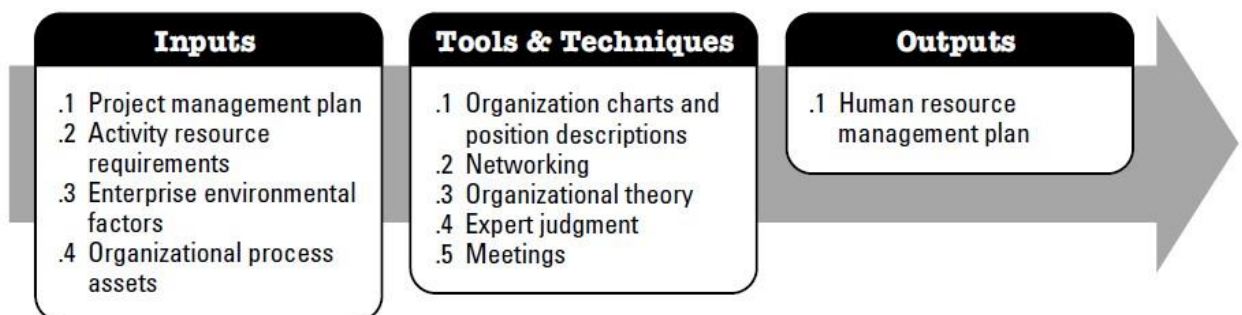- Project Human Resource Management includes the processes that **organize, manage,** and **lead** the project team.
- The project team is comprised of the people with assigned roles and responsibilities for completing the project.
- Although specific roles and responsibilities for the project team members are assigned, the involvement of all team members in project planning and decision making is beneficial.
- Participation of team members during planning adds their expertise to the process and strengthens their commitment to the project.
- The project management team is a subset of the project team and is responsible for the project management and leadership activities such as initiating, planning, executing, monitoring, controlling, and closing the various project phases.
- Managing and leading the project team includes I**nfluencing the project team and Professional and ethical behavior.**
- **Project Human Resource Management Process**

1. **Plan Human Resource Management**: The process of identifying and documenting project roles, responsibilities, required skills, reporting relationships, and creating a staffing management plan.

2. **Acquire Project Team**: The process of confirming human resource availability and obtaining the team necessary to complete project activities.

3. **Develop Project Team**: The process of improving competencies, team member interaction, and overall team environment to enhance project performance.

4. **Manage Project Team**: The process of tracking team member performance, providing feedback, resolving issues, and managing changes to optimize project performance.


- **Plan Human Resource Management**

It establishes project roles and responsibilities, project organization charts, and the staffing management plan including the timetable for staff acquisition and release.

Inputs	Tools & Techniques	Outputs
.1 Project management plan .2 Activity resource requirements .3 Enterprise environmental factors .4 Organizational process assets	.1 Organization charts and position descriptions .2 Networking .3 Organizational theory .4 Expert judgment .5 Meetings	.1 Human resource management plan

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

- **Organization Charts and Position Descriptions**
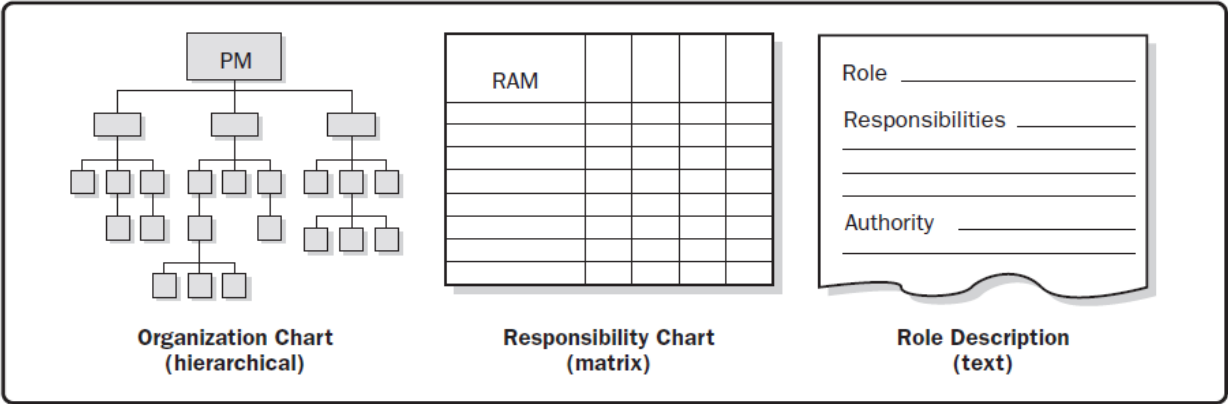
Figure 9-4. Roles and Responsibility Definition Formats

RACI Chart	Person				
Activity	Ann	Ben	Carlos	Dina	Ed
Create charter	A	R	I	I	I
Collect requirements	I	A	R	C	C
Submit change request	I	A	R	R	C
Develop test plan	A	C	I	I	R

R = Responsible   A = Accountable   C = Consult   I = Inform

Figure 9-5. RACI Matrix

- **Networking and Organizational Theory**
- Networking is the formal and informal interaction with others in an organization, industry, or professional environment.
- Organizational theory provides information regarding the way in which people, teams, and organizational units behave.

- **Human Resource Management Plan (key points)**

- A part of the project management plan, provides guidance on how project human resources should be defined, staffed, managed, and eventually released.

- It includes the _Roles and responsibilities_

- _Role_. The function assumed by or assigned to a person in the project e.g. civil engineer, business analyst, and testing coordinator.

- _Authority_. The right to apply project resources, make decisions, sign approvals, accept deliverables, and influence others to carry out the work of the project.

- _Responsibility_. The assigned duties and work that a project team member is expected to perform in order to complete the project's activities.

- _Competency_. The skill and capacity required to complete assigned activities within the project constraints.

- **Project organization charts:** a graphic display of project team members and their reporting relationships. It can be formal or informal, highly detailed or broadly framed, based on the needs of the project.

- **Staffing management plan:** describes when and how project team members will be acquired and how long they will be needed.
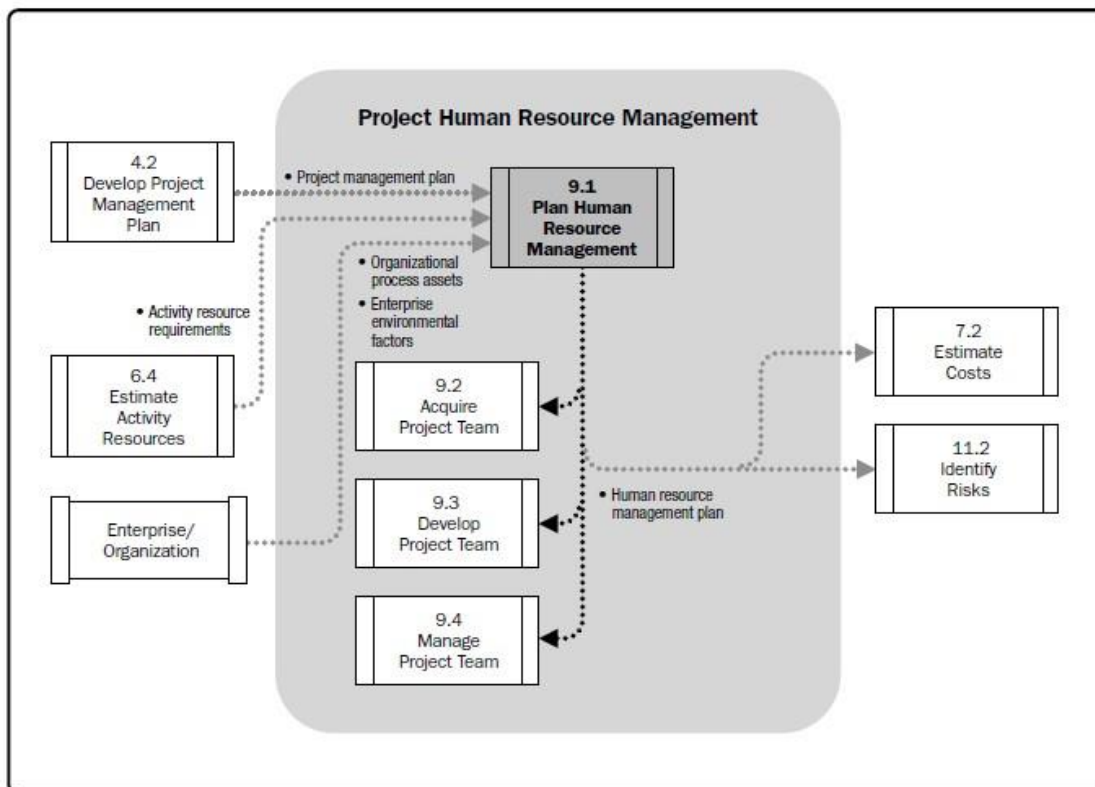
✓ _Staff acquisition_

✓ _Resource calendars_

✓ _Staff release plan_

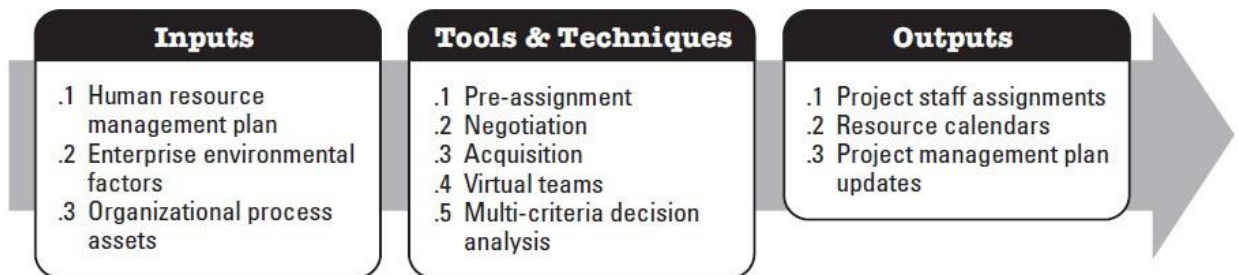✓ _Training needs_

✓ _Recognition and rewards Compliance_

✓ _Safety_

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

- **Acquire Project Team**
- 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	Tools & Techniques	Outputs
.1 Human resource management plan .2 Enterprise environmental factors .3 Organizational process assets	.1 Pre-assignment .2 Negotiation .3 Acquisition .4 Virtual teams .5 Multi-criteria decision analysis	.1 Project staff assignments .2 Resource calendars .3 Project management plan updates

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

- **Multi-Criteria Decision Analysis**
- Selection criteria are often used as a part of acquiring the project team. By use of a multi-criteria decision analysis tool, criteria are developed and used to rate or score potential team members.
- ✓ **Availability.** Identify whether the team member is available to work on the project within the time period needed.
- ✓ **Cost.** Verify if the cost of adding the team member is within the prescribed budget.
- ✓ **Experience.** Verify that the team member has the relevant experience that will contribute to the project success.
- ✓ **Ability.** Verify that the team member has the competencies needed by the project.
- ✓ **Knowledge.** Consider if the team member has relevant knowledge of the customer, similar implemented projects, and nuances of the project environment.
- ✓ **Skills.** Determine whether the member has the relevant skills to use a project tool, implementation, or training.
- ✓ **Attitude.** Determine whether the member has the ability to work with others as a cohesive team.
- ✓ **International factors.** Consider team member location, time zone and communication capabilities.
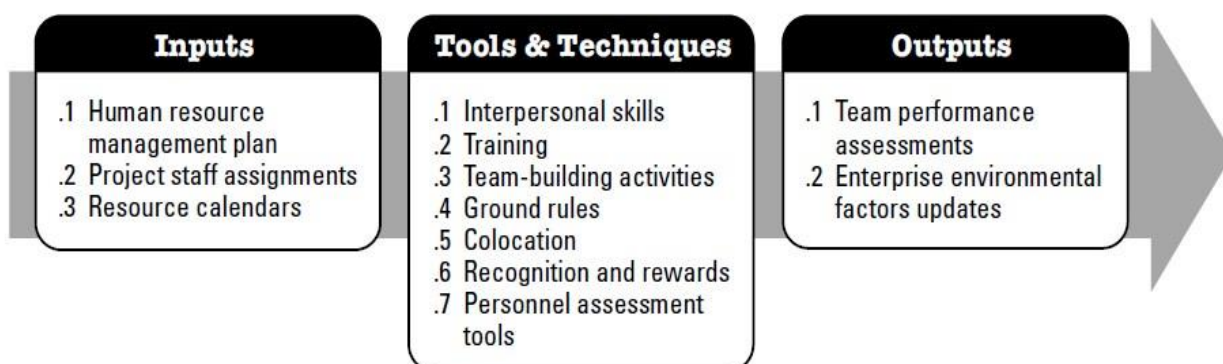
- **Outputs: Acquire Project Team**
- Project Staff Assignments: The project is staffed when appropriate people have been assigned to the team.
- Resource Calendars: Resource calendars document the time periods that each project team member is available to work on the project. Creating a reliable schedule 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.
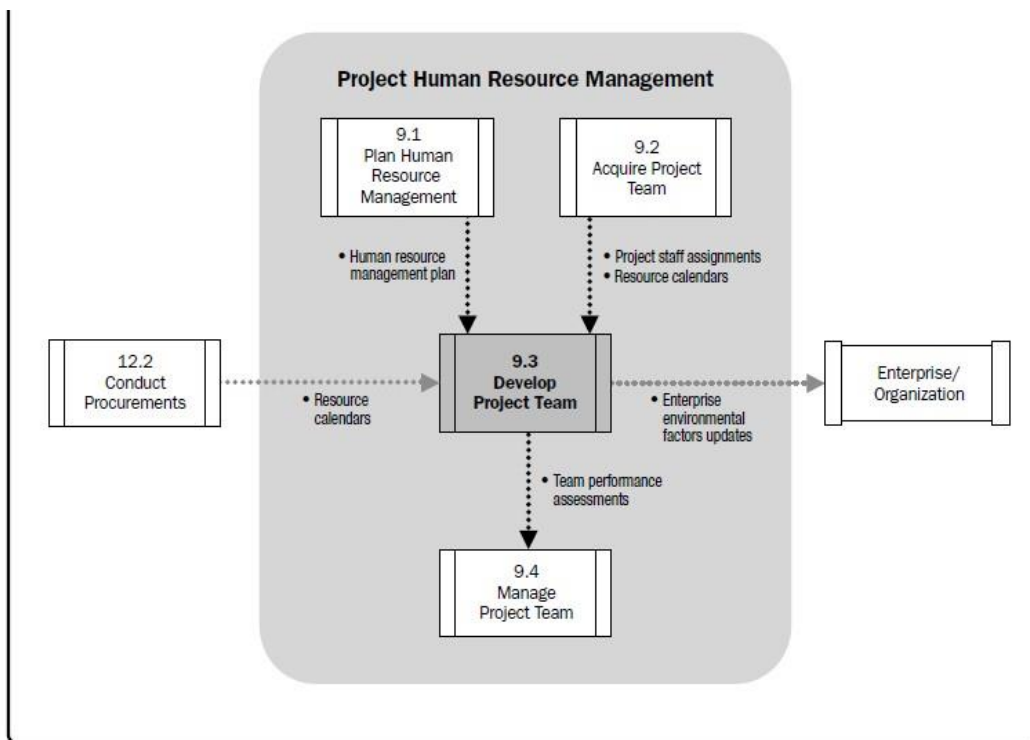- Project Management Plan Updates
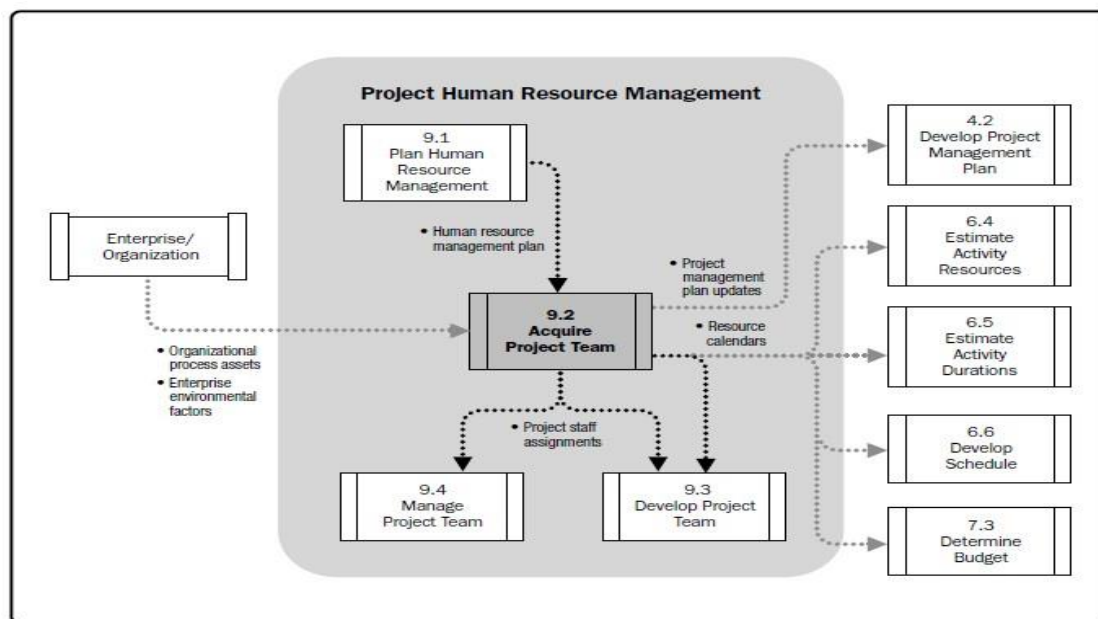
Figure 9-8. Acquire Project Team Data Flow Diagram

- **Develop Project Team**

- Process of improving competencies, team member interaction, and overall team envt to enhance project performance.

- It results in improved teamwork, enhanced people skills and competencies, motivated employees, reduced staff turnover rates, and improved overall project performance.

- The project team improves the people skills, technical competencies, and overall team environment and project performance. It requires clear, timely, effective, and efficient communication between team members throughout the life of the project.

- Objectives of developing a project team are:

✓Improving knowledge and skills of team members to increase their ability to complete project deliverables, while lowering costs, reducing schedules, and improving quality;

✓Improving feelings of trust and agreement among team members to raise moral, lower conflict, and increase team work;

✓Creating a dynamic, cohesive, and collaborative team culture to (1) improve individual and team productivity, team spirit, and cooperation and (2) allow cross training and mentoring between team members to share knowledge and expertise.

Inputs	Tools & Techniques	Outputs
.1 Human resource management plan .2 Project staff assignments .3 Resource calendars	.1 Interpersonal skills .2 Training .3 Team-building activities .4 Ground rules .5 Colocation .6 Recognition and rewards .7 Personnel assessment tools	.1 Team performance assessments .2 Enterprise environmental factors updates

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

Figure 9-10. Develop Project Team Data Flow Diagram

- **Team-Building Activities**

- One of the models used to describe team development is the Tuckman ladder (Tuckman, 1965; Tuckman & Jensen, 1977), which includes five stages of development that teams may go through forming, storming, norming, performing and adjourning.

1. Forming: This phase is where the team meets and learns about the project and their formal roles and responsibilities. Team members tend to be independent and not as open in this phase.

2. Storming: During this phase, the team begins to address the project work, technical decisions, and the project management approach.

3. Norming: In the norming phase, team members begin to work together and adjust their work habits and behaviors to support the team. The team learns to trust each other.

4. Performing: Teams that reach the performing stage function as a well-organized unit. They are interdependent and work through issues smoothly and effectively.

5. Adjourning: In the adjourning phase, the team completes the work and moves on from the project. This typically occurs when staff is released from the project as deliverables are completed or as part of carrying out the Close Project or Phase process.
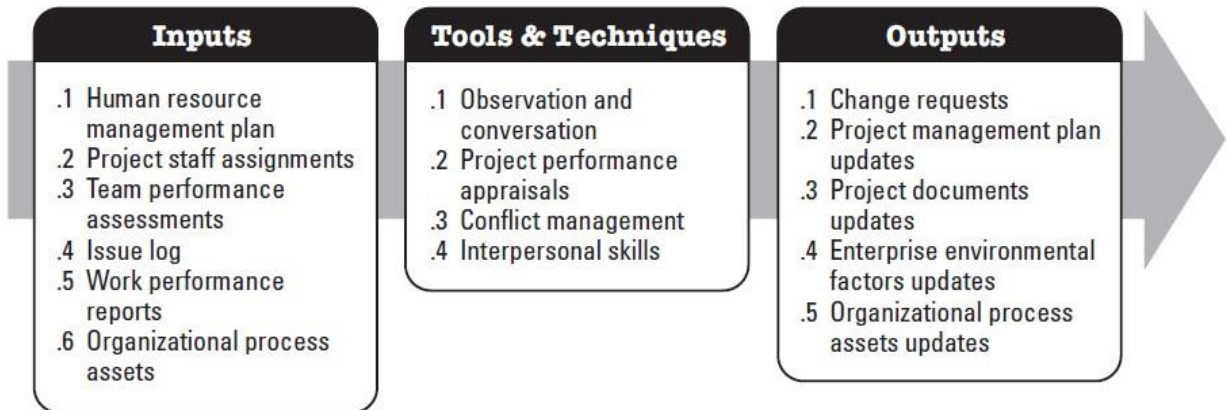
- Some other considerations are:

1. Ground Rules: Ground rules establish clear expectations regarding acceptable behavior by project team members. Early commitment to clear guidelines decreases misunderstandings and increases productivity.

2. 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.

3. Recognition and Rewards: Part of the team development process involves recognizing and rewarding desirable behavior.

4. Personnel Assessment Tools: give the project manager and the project team insight into areas of strength and weakness. Various tools are available such as attitudinal surveys, specific assessments, structured interviews, ability tests, and focus groups.

- **Manage Project Team**
- A process of tracking team member performance, providing feedback, resolving issues, and managing team changes to optimize project performance.
- It influences team behavior, manages conflict, resolves issues, and appraises team member performance.

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

- **Observation and conversation (TT-1)**
- These 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.
- **Project Performance Appraisals (TT-2)**
- 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.
- **Conflict Management (TT-3)**
- 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.

- **Factors that influence conflict resolution methods**
- Different project managers may utilize different conflict resolution methods.
- ✓ 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.
- Five general techniques for resolving conflict

1. **Withdraw/Avoid.** Retreating from an actual or potential conflict situation; postponing the issue to be better prepared or to be resolved by others.

2. **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.

3. **Compromise/Reconcile.** Searching for solutions that bring some degree of satisfaction to all parties in order to temporarily or partially resolve the conflict.

4. **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.

5. **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.
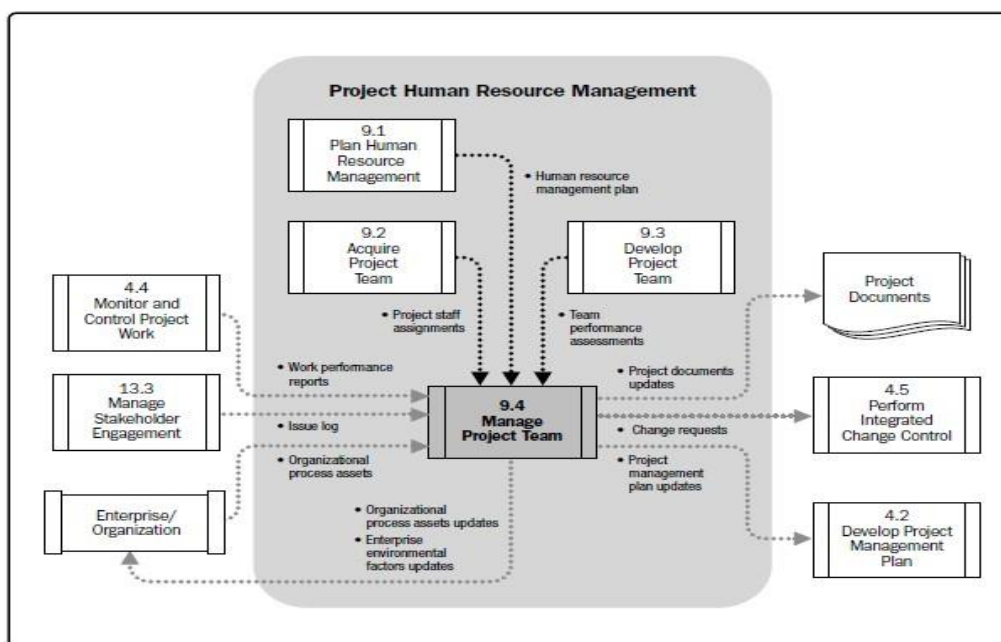
- **Interpersonal Skills (TT-4)**
- Project managers use a combination of technical, personal, and conceptual skills to analyze situations and interact appropriately with team members.
- ✓ Leadership
- ✓ Influencing
- ✓ Effective decision making

Figure 9-12. Manage Project Team Data Flow Diagram