

Project Human Resources Management

Project Skills

Team FME

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Preface

There are many reasons why managing people in a project environment are different from managing them in a departmental setting. These differences make the this aspect of the project manager's job more complex than his or her departmental equivalent even though they may be responsible for similar numbers of people.

This means that a good project manager requires all of the people skills of a line manger together with an appreciation of the additional issues that exist in the project environment.

You will learn:

- Why human resource (HR) management is such an essential component of project management
- How to identify and document project roles and creating an HR management plan
- The importance of improving the overall team environment to enhance project performance
- How to assess performance, provide feedback, resolve issues, and manage changes effectively

The Free Management eBooks 'Project Skills' series are structured around the ten key knowledge areas of project management detailed in the 'Project Management Institute, A Guide to the Project Management Body of Knowledge, (PMBOK® Guide)—Fifth Edition, Project Management Institute Inc., 2013'. ISBN-13: 978-1935589679.

The eBooks in this series follow the structure of the PMBOK® Guide because it represents a tried and tested framework. We have tried to ensure full alignment of our eBooks with the Guide by using the numbering convention as well as the naming convention.

If you need more detailed explanation of a particular subject then you can simply refer to the related chapter and paragraph number in the PMBOK® Guide. Remember, many of the generic project management methodologies available refer to the PMBOK® Guide as a basic framework.

A knowledge of the PMBOK® processes will go a long way towards giving you an understanding of almost any project management methodology that your organization may use.

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About this Knowledge Area

The purpose of Project Human Resource Management is to ensure that the project has sufficient human resources, with the correct skill sets and experience, for the project to be successfully completed.

The Project Human Resources (HR) Management knowledge area includes 4 of the 47 process groups recognized by the PMBOK®.

Process	Project Phase	Key Deliverables
9.1 Develop (HR) Plan	Planning	Human Resource (HR) Plan
9.2 Acquire Project Team	Execution	Project Staff Assignments
9.3 Develop Project Team		Team Performance Assessments
9.4 Manage Project Team		Change Requests

Projects require specialized resources with the skills, competencies and experience to fill a variety of critical roles. Equally important to determining which skills and how much experience is needed for project roles is the requirement to fill those roles with resources that actually possess those skills and competencies.

Examples of specialized and dedicated resources on large projects are:

- Risk Manager
- Communications Manager,

These individuals must have a background and experience in their expertise. In some cases, where appropriate, project-specific training and development will take place to ensure that the project is not impacted by performance gaps.

Introduction

This knowledge area is right at the heart of successful project management because project work is actually done by people, not by project management methodologies, frameworks or software. Obviously, all of these things can help but ultimately project management is about managing the people who are going to do the work of the project.



This knowledge area deals with getting people on board the project and then, leading and managing them effectively. In this eBook we use the terms:

- 'Project team' or 'Team members' to refer to those people doing the actual work of the project.
- 'Project management team' to refer to anyone involved with managing the project.

The project management team is usually 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.

The number of people assigned to the project may change as the project progresses, particularly when people are needed for their particular technical expertise. This can be related to either the production of the end products of the project or for project management support skills like scheduling, quality or risk management expertise.

The project team should be assigned to the project as early as possible so that they can take some part in the planning process. Even though team members are not responsible for planning as such, many of them will have specific expertise that can help to make the initial estimates more accurate.

Another reason for involving team members in the early stages of planning is that it strengthens commitment to the project, something that is vital for success but which is often overlooked because it cannot be measured objectively and because its importance only becomes apparent when the project hits problems.

The PMBOK® Project Human Resources Management Processes



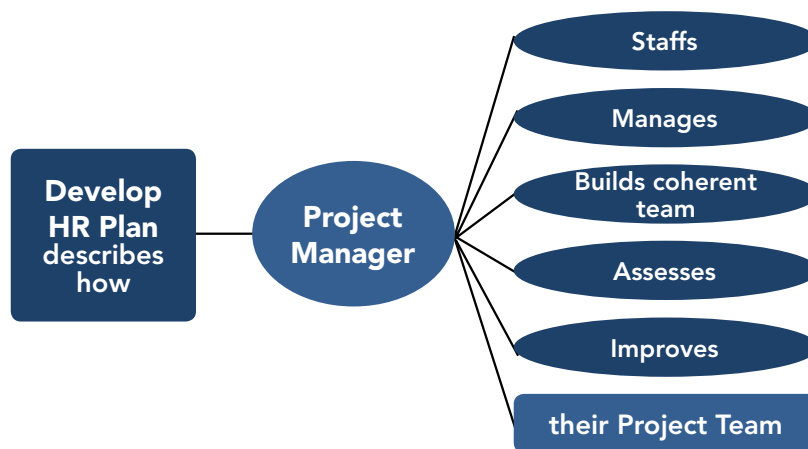
There are four Project Human Resources Management processes:

- 9.1 Develop Human Resource (HR) Plan
- 9.2 Acquire Project Team
- 9.3 Develop Project Team
- 9.4 Manage Project Team

These are dealt with in detail in the following chapters of this eBook.

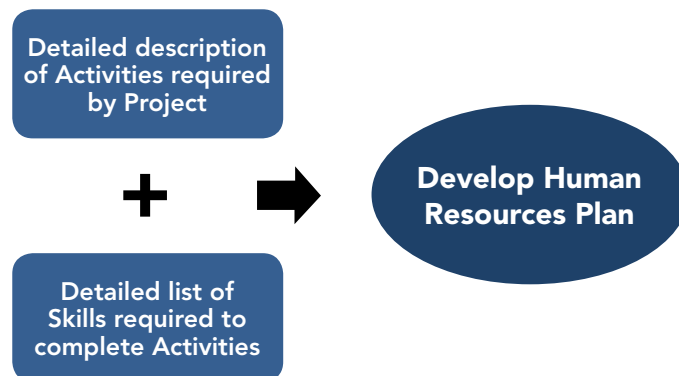
9.1 Develop Human Resource Plan

All project team members must have a role and associated responsibilities, and it is the project manager's job to define these roles. The Develop Human Resource (HR) plan process describes how the project manager will staff, manage, team build, assess and improve the project team. Therefore this process is executed early within the project and is performed iteratively and interactively with other aspects of planning such as time, cost and scope.



The develop HR plan details the project roles, responsibilities, required skills and reporting relationships required for project success. It includes project organization charts and the timetable for staff acquisition and release, and may also include identification of training needs, team-building strategies, recognition programs, compliance considerations and safety issues.

A necessary prerequisite for developing this plan is a detailed description of the activities required by the project and the skills required to complete them. The plan will need to take into account the availability of, or competition for, scarce or limited human resources because other projects may be competing for resources with the same competencies or skill sets.

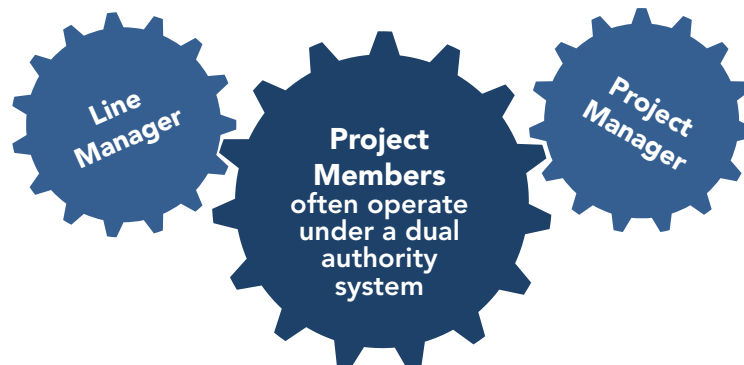


Many project managers find themselves operating in a 'Matrix Management Environment.' Matrix or Cross-Functional management is a technique of managing people through a series of dual-reporting relationships instead of a more traditional linear management structure.

This style of management is popular in highly collaborative projects that bring individuals from functional departments (e.g. marketing, customer services, finance, etc.) into the project team. This means that most of the project members operate under a dual authority system—they report to their own line manager as well as the project manager.

For you as the project manager this means that you will have to ensure your communication channels between you and the line managers are effective. In addition, appreciating that the line managers' priorities are often going to be different to those of your project will help you when discussing the availability of resources. If not handled properly, this has the potential for conflict and confusion, which will inevitably lead to a decrease in performance.

One key aspect of maintaining your team's performance in this matrix structure is getting the 'right' resources at the time required by the plan. If your team members are willing but lack the necessary skills to perform their project role then the whole team's performance will decline.



The success of the matrix team structure is reliant on senior management's support for the project and for establishing the correct procedures and processes that support this type of environment.

The inputs, tools and techniques, and outputs of this process are summarized in the table below.

Inputs	Tools & Techniques	Outputs
Project Management Plan	Organization Charts & Position Descriptions	HR Management Plan
Activity Resource Requirements	Networking	
Enterprise Environmental Factors	Organizational Theory	
Organizational Process Assets	Expert Judgment	
	Meetings	

9.1.1 Develop Human Resource Plan: Inputs

This process requires the following inputs:

9.1.1.1 Project Management Plan

The information used 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

These are used to determine the human resource needs for the project. It is the main input to this process as it provides information on what resources will be needed to complete the work on each of the activities within the project.

General estimates were created for human resource needs in the time management planning processes, and these can now be more thoroughly evaluated and estimated.

9.1.1.3 Enterprise Environmental Factors

These include the:

- Organizational culture and structure,
- Existing human resources,
- Personnel administration policies, and
- Marketplace conditions.

They can also provide useful marketplace information such as the provision of human resource skills, for example from approved staffing agencies.

9.1.1.4 Organizational Process Assets

These include:

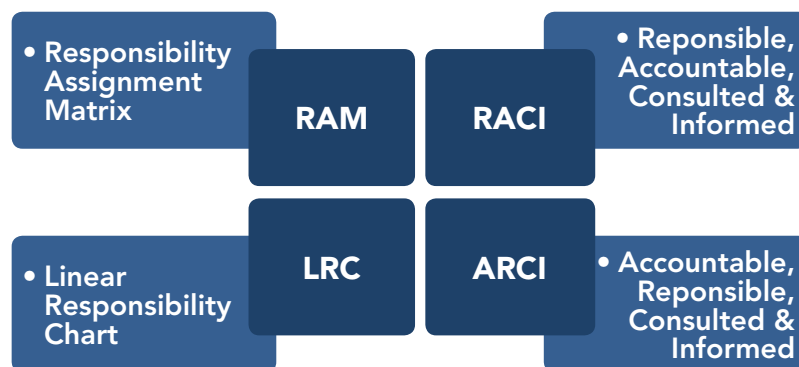
- Organizational standard processes
- Organizational policies and standardized role descriptions,
- Templates for organizational charts and position descriptions,
- Historical information on organizational structures that have worked in previous projects.

9.1.2 Develop Human Resource Plan: Tools and Techniques

There are five tools and techniques that can be used.

9.1.2.1 Organization Charts and Position Descriptions

There are several ways of documenting team member roles, but regardless of the method utilized, the objective is to ensure that each work package has an unambiguous owner and that everyone involved in the project has a clear understanding of their responsibilities.



One of the most useful formats is the responsibility assignment matrix (RAM). This is used to illustrate the connections between work packages or activities and project team members. Other names for this type of matrix are:

- RAM—Responsibility Assignment Matrix
- RACI—Responsible, Accountable, Consulted & Informed
- ARCI—Accountable, Responsible, Consulted & Informed
- LRC—Linear Responsibility Chart

These can be developed at various levels, for example a high-level RAM can define which particular team is responsible each component of the WBS. This can then be decomposed within the group to designate roles, responsibilities, and levels of authority for specific activities.

The benefit of the matrix format is that it shows all of the activities associated with each team member and all team members associated with each activity. This also ensures that there is only one person accountable for any one task to avoid confusion.

Function	Project Sponsor	Project Manager	Developer	Analyst
Project Initiation		R		
Establish Project Plan		R		
Collate User Requirement				R
Define Technical Requirements				R
Develop Software Tools			R	
Test Software				R
Install Software				R

At it's simplest the RAM diagram can indicate who is responsible for what (as above), or it can be produced in a format referred to as RACI as shown below.

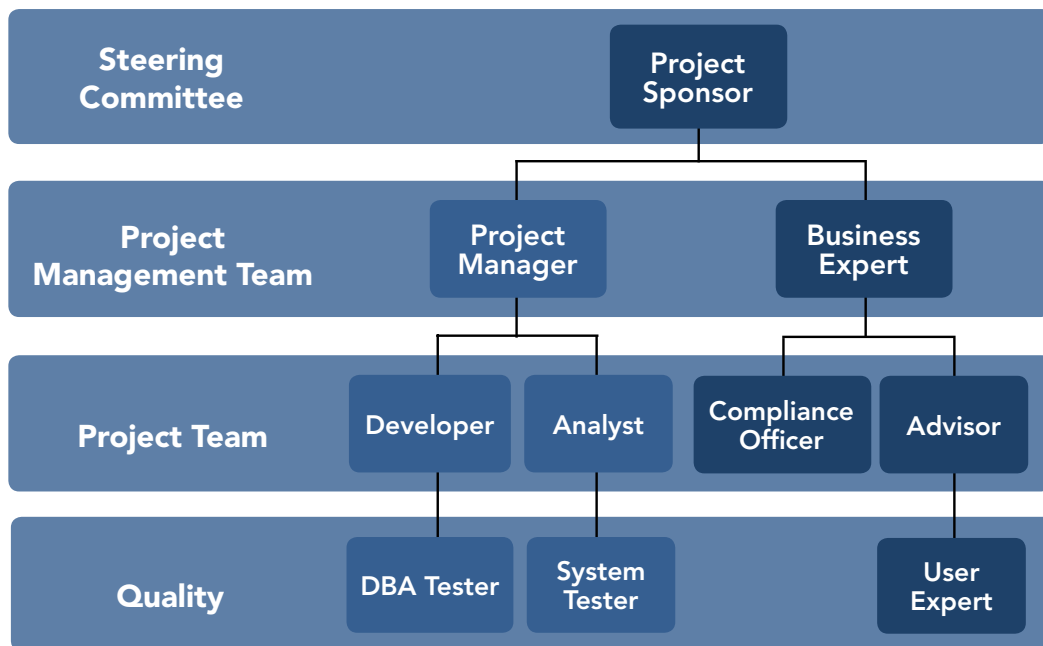
Function	Project Sponsor	Project Manager	Developer	Analyst
Project Initiation	C	A R		
Establish Project Plan	I	A R	C	C
Collate User Requirement	I	A	I	R
Define Technical Requirements	I	A	I	R
Develop Software Tools	I	A	R	C
Test Software	I	A	C	R
Install Software	C	A	C	R

These designations are used to indicate who in the team has which specific function for each deliverable.

- *R—Responsible for doing the work*
- *A—Accountable for the work being done*
- *C—Must be consulted for input*
- *I—Must be kept informed of progress and results*

This example chart shows the work to be done in the left column as activities with the assigned resources along the top. The RACI is useful when the team consists of internal and external resources to ensure clear divisions of roles and expectations.

Traditional organization charts like the one shown below can be used to show positions and relationships in a graphical, top-down format.



It is usually a good idea to draw up an organizational chart specifically for each individual project and to show only those departments and functions that are relevant. This will help to make responsibilities and reporting structures clear to everyone involved particularly outside contractors who may have no previous experience of dealing with the organization.

A project organization diagram should clearly show the reporting structure for the project with as many levels as needed to express the project organization clearly. At the very least it needs to show whom the project manager reports to and who reports to the project manager for their respective project activities.

Detailed descriptions of team member responsibilities should be specified in position descriptions and role-responsibility-authority forms. These documents detail responsibilities, authority, competencies, and qualifications and can be used as templates for future projects, especially when the information is updated throughout the current project by applying lessons learned.

Some responsibilities are usually detailed in the relevant sections of the project management plan. For example,

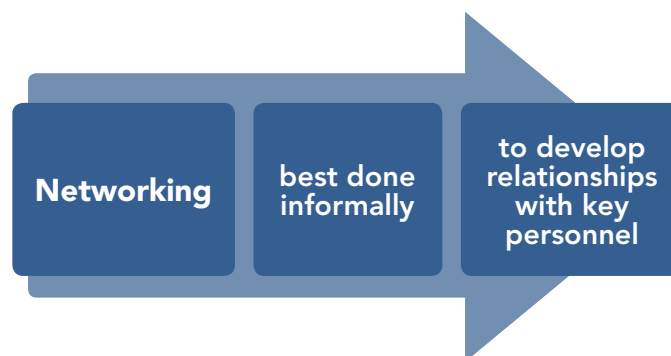
- Risk register lists risk owners,
- Quality plan designates those responsible for carrying out quality assurance and quality control activities.

9.1.2.2 Networking

The PMBOK® defines networking as:

'Developing relationships with persons who may be able to assist in the achievement of objectives and responsibilities'.

This involves talking to people in the project environment in order to understand them in terms of their personalities, professionalism, competency, and perhaps most importantly their 'interest' in the project. Networking is best done informally, for example by taking someone for lunch or simply chatting over a coffee.



It can be tempting not to bother with this because it can seem less important than producing charts and all of the other more tangible outputs of the project management process. This is invariably a big mistake to make, because people deliver a project and understanding their interest and motivation is critical if you want to minimize conflict and get things done.

9.1.2.3 Organizational Theory

The PMBOK® describes this as:

'Providing information regarding the way in which people, teams, and organizational units behave. Effective use of this information can shorten the amount of time, cost, and effort needed to create the human resource planning outputs and improve the likelihood that the planning will be effective.'

The same can be said about this topic as about networking and it can be tempting to ignore it in favor of getting on with 'real work'. However, as a project manager you do not need to become an expert and in a couple of hours of Internet research you could find out enough about the tools and techniques available to help you to do your job.

9.1.2.4 Expert Judgment

When developing the human resource management plan, expert judgment is used to:

- List the preliminary requirements for the required skills
- Assess the roles required for the project based on standardized role descriptions within the organization
- Determine the preliminary effort level and number of resources needed to meet project objectives
- Determine reporting relationships needed based on the organizational culture
- Provide guidelines on lead time required for staffing, based on lessons learned and market conditions
- Identify risks associated with staff acquisition, retention, and release plans
- Identify and recommend programs for complying with applicable government and union contracts

9.1.2.5 Meetings

These enable project team members to agree how the human resource management plan will be implemented.

9.1.3 Develop Human Resource Plan: Outputs

This process will create the following output:

9.1.3.1 Human Resource Plan

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

The structure of this important document consists of:

- Roles and responsibilities
- Organization charts
- The staffing management plan

The roles and responsibilities section will define each role that is needed on the project, provide their title, and describe their level of authority, responsibilities, and their knowledge, skills and level of competency needed in order to carry out their role within this project.



The human resource plan should include:

Role—Describes the portion of a project for which a person is accountable as well as their authority, responsibilities, and boundaries. Examples include: engineer, business analyst, expert user, etc.

Responsibility—Describes the work that a project team member is expected to perform in order to complete the project's activities.

Authority—Levels of authority should match role responsibilities and include the right to assign project resources, make decisions, and sign approvals.

Competency—Describes the skills required to complete specific activities.

Project Organization Charts—This is a graphic display of project team members and their reporting relationships.

Staffing Management Plan—This is a part of the human resources plan within the project management plan and describes when and how human resource requirements will be met. It includes:

- The staff acquisition processes
- A timetable for staffing requirements
- A description of how and when staff will be released from the project
- Staff training and development needs
- Health and safety policies

This plan can be formal or informal, highly detailed or broadly framed, depending upon the needs of the project. The plan is updated continually during the project to direct ongoing team member acquisition and development actions.

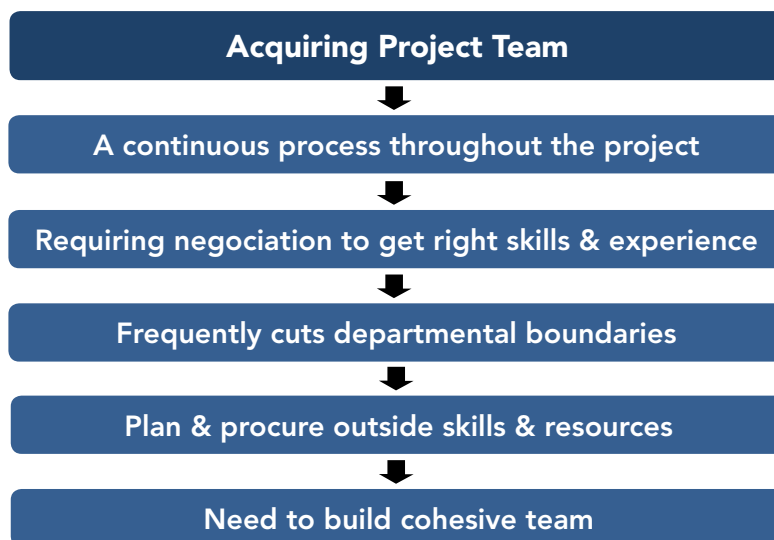
9.2 Acquire Project Team

The process of acquiring a project team takes place within the executing process group and is concerned with confirming human resource availability and obtaining the personnel needed to complete project assignments. It is complicated by the fact that individuals with different skills sets will be required at different points throughout the project. For example,

A software project may be two-thirds completed before specialist testing personnel are needed.

Consequently, acquiring members for a project team continues throughout the executing process group.

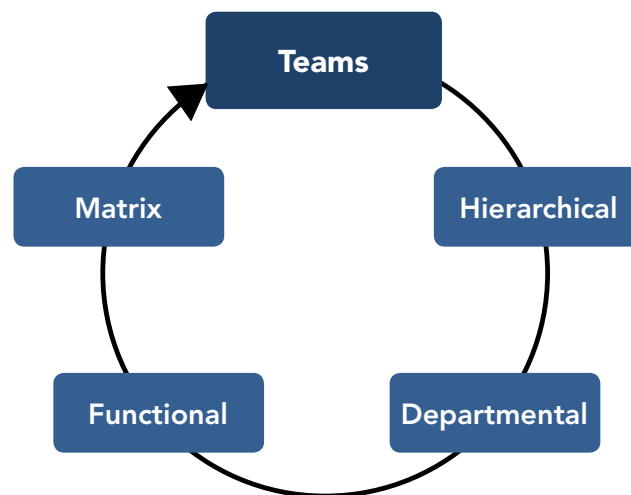
Acquiring the project team is often complicated by the fact that the project management team will not usually have direct control over everyone they would like to have involved in the project. They may need to negotiate with others who are in a position to provide the right number of individuals with the appropriate level of knowledge skills and experience.



This situation is very common in projects that cut across departmental boundaries and failure to secure the necessary human resources can affect project schedules, budgets, customer satisfaction and quality, as well as increasing the risk that the project will simply fail to deliver on time and within budget. The impact of any unavailability of required human resources needs to be considered in the planning stages of the project.

If people are being brought in from outside of the organization, then the procurement management plan should be referenced to ensure such external resources are obtained in accordance with organizational policy.

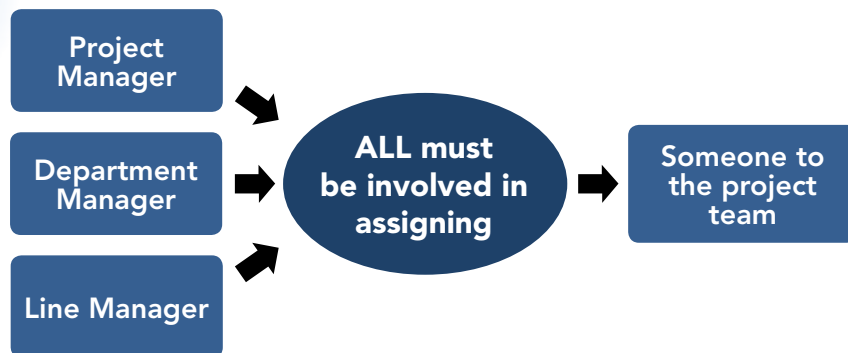
Team working has been an important organizational issue for many years. However, the concept has historically described work within permanent functional teams such as sales, production and design. The rapid growth of project-based work has given rise to the creation of multi-disciplinary teams capable of rapidly accomplishing tasks that span the traditional internal boundaries present in many organizations.



Successful team working requires careful consideration and design. Generally, the more that an organization has tended towards a traditional hierarchical structure, the greater will be the challenge of implementing effective inter-departmental project teams.

Project teams can take on a variety of forms depending on the size of the project and the way in which it is staffed. Project environments range from dedicated and full-time project teams, through to instances where projects have little or no full time resource and operate by using only the resources from existing functional departments.

Organizations that are project oriented tend to maintain a full-time dedicated project resource, which is generically termed a project office. Project office staff will tend to specialize in areas such as: planning and the monitoring of time, cost and performance against the plans. These staff will usually report to a single boss, who may be either a project manager or a project office manager.



Departmental staff will be recruited on the basis of the skills and expertise that they can bring to the project. However, the appropriate technical or business skills need to be complemented by an ability and willingness to function effectively in the project environment. They will report to the project manager but remain under the overall control of their own departmental, or line manager—they are therefore working in what is called a matrix management environment.

The appointment of departmental staff to projects should be a decision made jointly by the relevant project and departmental, or line, managers. The involvement of line managers in these appointments is important as they have the necessary experience to highlight critical areas of the project from a technical viewpoint. Furthermore, by involving line managers in the early stages of project planning they are more likely to develop a positive attitude to the project.

Disagreements may result in the negotiations between the project and the line manager on both the level of staffing required by the project and possibly over the individuals to be assigned. However, only in situations where an impasse has been reached should senior management be asked to arbitrate.

Inputs	Tools & Techniques	Outputs
Human Resource Management Plan	Pre-assignment	Project Staff Assignments
Enterprise Environmental Factors	Negotiation	Resource Calendars
Organizational Process Assets	Acquisition	Project Management Plan Updates
	Virtual Teams	
	Multi-criteria Decision Analysis	

The inputs, tools and techniques, and outputs of this process are summarized in the table above.

9.2.1 Acquire Project Team: Inputs

This process requires the following inputs:



9.2.1.1 Human Resource Management Plan

The human resource management plan is an output from the previous process and provides guidance on how project human resources should be identified, staffed, managed, controlled, and eventually released.

The main components are:

- *Roles and responsibilities*—this describes each role, authority, responsibility, and relevant competency for each individual or role on the project team.
- *Project organization charts*—describe the reporting relationships within the same and is often represented as a responsibility assignment matrix (RAM).
- *Staff acquisition*—describes how new team members will be introduced both internally and externally.
- *Resource calendars*—identify where each role is planned to be used as well as the individual's availability.
- *Staff release plan*—describes how the members will be released from the team.
- *Training needs*—identifies segments of the work that will require some form of training.
- *Recognition and rewards*—defines the criteria for such reward and recognition.
- *Compliance*—lays down any licensing or regulatory requirements.
- *Safety*—describes any applicable safety policies or rules.

9.2.1.2 Enterprise Environmental Factors

These include:

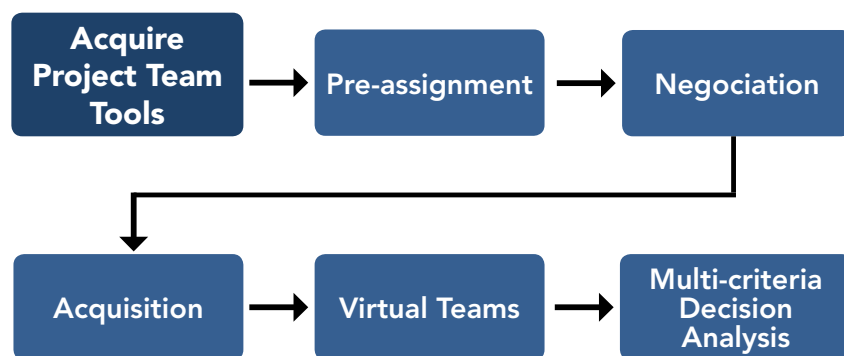
- Existing information for human resources including:
 - Who is available with their:
 - Competency levels
 - Prior experience
 - Interest in working on the project
 - Cost rate
 - Personnel administration policies such as those that affect outsourcing.
- The organizational structure as previously described is also useful.

9.2.1.3 Organizational Process Assets

These include any applicable organization standard policies, processes, and procedures.

9.2.2 Acquire Project Team: Tools and Techniques

There are five tools and techniques that can be used.



9.2.2.1 Pre-assignment

This is where project team members know in advance that they are going to work on the project. This can happen if the project is the result of specific people being promised 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

It is often the case that the project manager will need to negotiate with other project managers or line managers to get key personnel. The project management team's ability to influence others plays an important role in negotiating staff assignments. A line manager will weigh the benefits and visibility of competing projects when determining where to assign key personnel.

9.2.2.3 Acquisition

If resources are needed that are not available within the organization then they may also need to deal with outside agencies or other suppliers. Many organizations will have a list of preferred suppliers and may also have previously agreed terms and conditions for dealing with them. The procurement management plan should be referenced to ensure that all external resources are obtained in accordance with organizational policy.

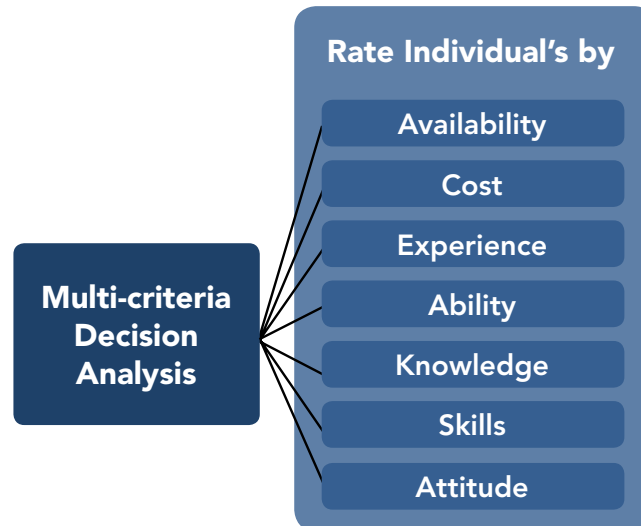
9.2.2.4 Virtual Teams

The PMBOK® describes virtual teams as:

'Groups of people with a shared goal who fulfill their roles with little or no time spent meeting face to face. The availability of electronic communication such as e-mail, audio conferencing, web-based meetings and video conferencing has made such teams feasible.'

The virtual team format makes it possible to form teams of people from the same company who live in widespread geographic areas, use employees who work from home, and include people with mobility limitations or disabilities. It can also cut down on the expense of having the whole team in one place and in travel expenses.

9.2.2.5 Multi-criteria Decision Analysis



This involves rating the potential team members by the following criteria; availability, cost, experience, ability, knowledge, skills and attitude.

9.2.3 Acquire Project Team: Outputs

This process will create the following outputs:



9.2.3.1 Project Staff Assignments

The project is staffed when appropriate people have been assigned through the previously described methods. These assignments may happen many times throughout the project, and it should be remembered that assigning a role to a task might not be necessary early on.

The documentation of these assignments can include a project team directory, memos to team members, and names inserted into other parts of the project management plan, such as project organization charts and schedules.

9.2.3.2 Resource Calendars

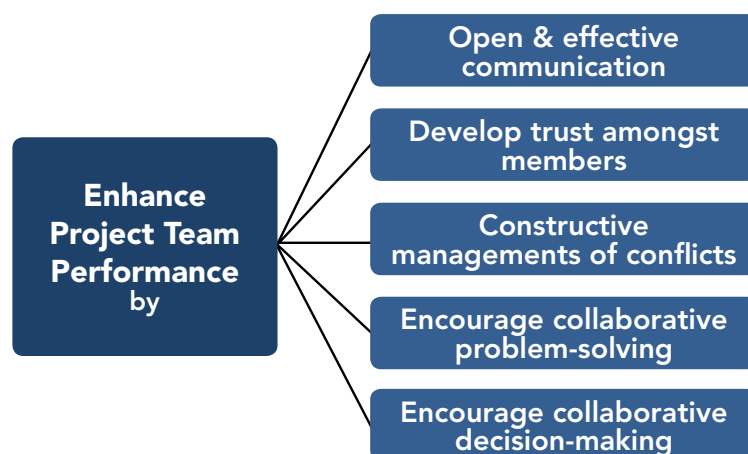
These document the time periods that each project team member can work on the project. Creating a reliable schedule depends on having a good understanding of each person's schedule, including vacation time and commitments to other projects. This may need to be negotiated and agreed with their relevant functional or operational manager.

9.2.3.3 Project Management Plan Updates

This includes updates to the human resources plan to take account of the fact that there may not be an exact fit between the staffing requirements indicated in the original plan and those that are actually available. The resource plan will normally be updated many times throughout a project.

9.3 Develop Project Team

This is an executing process whose objective is to build a team that can work well together. This process should be started early on in the project because team building takes time and a team that works well together will have a major influence on project success.



Team performance can be developed by using open and effective communication, developing trust among team members, managing conflicts in a constructive manner, and encouraging collaborative problem-solving and decision-making.

Team building is an important complex topic and the whilst PMBOK® acknowledges this, in as much as it specifies some tools and techniques, an aspiring project manager should take the time to study other material on this subject.

There are four free eBooks available from our online library www.free-management-ebooks.com website that deal with leadership and team building and you may find them useful in developing your team leadership skills and competencies. For the purpose of project management there are some general points you should take into account when executing this process. These are:

- Addressing team member's concerns about joining the project
- Encouraging ownership of project tasks

Try to arrange a one-to-one discussion with each team member in order to welcome him or her to the team and establish personal contact. A short and informal discussion represents an opportunity to motivate people from the very beginning of their involvement with the project. This opportunity should not be wasted because a positive attitude to the project will deliver numerous benefits in terms of enthusiasm and performance.

Remember, projects have the potential to be seen as dynamic working environments, providing an opportunity to work with personnel from other areas of the organization and enabling staff to gain new skills and enhance their career prospects.

This discussion is also important because it can help reduce anxiety and stress by addressing any concerns that new team members may have. Anxiety among members of a new project team is almost inevitable. Personnel will be working with unfamiliar faces often in an environment that is still taking shape. This anxiety is typically focused on five key issues.

- *Lack of familiarity with other members of team*

If the project manager, or their assistants are unfamiliar to the team members then the team members will naturally be concerned about the manager's leadership style and how it will affect their everyday work.

- *Correlation of project needs to their skills and interests*

They may be concerned about the nature of the project and whether or not it will match their own level of expertise and professional interests.

- *Technical viability and likelihood of success*

Furthermore they might have private worries about the technical viability of the project and how its failure may reflect on them.

- *Probability of relocation*

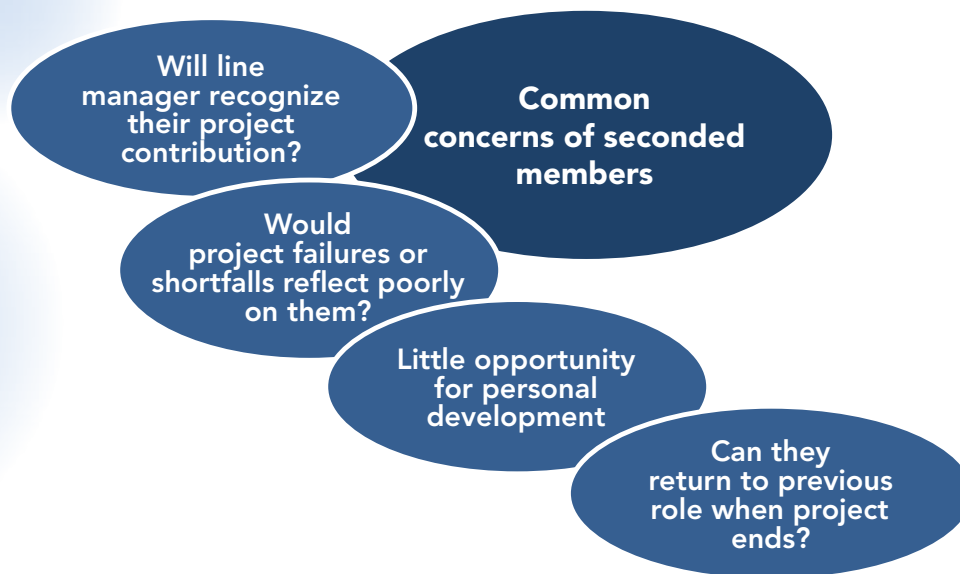
If involvement with the project involves relocation, either within a building or more remotely, then management should bear in mind that this often causes heightened anxiety and stress amongst project team members.

- *Fair allocation of work*

The fair distribution of the workload may be an area of concern, as may the perceived level of proficiency and dedication of some of their new colleagues.

The following concerns are often felt by staff seconded to projects from other departments who may feel increasingly isolated and left behind in relation to their long time colleagues and the departmental practices with which they are familiar. They may be concerned:

- About the extent to which the efforts they expend on project related work would be recognized and may feel that undertaking project related work might jeopardize their career prospects. They may believe that however hard they work on the project it will not affect their chances of advancement within their own department.
- That the project itself may not be an outstanding success and that any perceived failure on its part will reflect badly on them as individuals.



- About what happens to them at the end of the project. Perhaps their department will learn to cope without them develop new procedures whilst they are away.
- Projects are not seen as training oriented environments in which to develop personal skills.

One of the great challenges of project management is to bring together an effective team and bring it up to speed quickly. Anxiety among team members is natural and this needs to be addressed as early as possible so that project staff can focus on the needs of the project rather than on their own anxieties.

One way to do this is to encourage their ownership of project tasks. This can be achieved by involving all team members in the planning and scheduling of the activities that they will work on. In smaller teams it may be realistic to involve all members in the planning process whilst in larger teams it may be necessary to restrict the involvement to team or section leaders.

Developing a climate of open and frank communication will lead to an increased sharing of ideas between team members. They are then more likely to collectively develop more effective decision-making and project control processes.

The inputs, tools and techniques, and outputs of this process are summarized in the table below.

Inputs	Tools & Techniques	Outputs
Human Resource Management Plan	Interpersonal Skills	Team Performance Assessments
Project Staff Assignments	Training	Enterprise Environmental Factors Updates
Resource Calendars	Team-Building Activities	
	Ground Rules	
	Co-location	
	Recognition and Rewards	
	Personnel Assessment Tools	

9.3.1 Develop Project Team: Inputs

This process requires the following inputs:

9.3.1.1 Project Staff Assignments

These are output from the previous process and include a project team directory, memos to team members, and names inserted into other parts of the project management plan, such as project organization charts and schedules.

9.3.1.2 Human Resource Management Plan

This plan provides the relevant information for the develop project team process as it outlines how each member of the project team is to be trained, and also how the project team development will be carried out.

9.3.1.3 Resource Calendars

These are output from the previous process and identify times when the project team members can participate in team development activities.

9.3.2 Develop Project Team: Tools and Techniques

There are seven tools and techniques that can be used.



9.3.2.1 Interpersonal Skills

These include communication and leadership skills among others. They are by no means specific to project management and anyone in a general management role would be expected to have these skills and to be continuously working to improve them as part of their continuing professional development.

There are some key behaviors that a project manager should demonstrate:

- Firstly, the project manager should present a clear vision of what must be accomplished and how the team can contribute to realizing it. This needs to be done in a way that makes the benefits of success clear to everyone.
- Secondly, they must create an environment that promotes trust as well as offering support to team members when and where needed.
- Thirdly, that they have the appropriate leadership skills and abilities to make the project a success, and also that team members will be empowered to perform to the best of their ability.

9.3.2.2 Training

Whether formal or informal, this includes all activities designed to enhance the competencies of the project team. Even if a project does not have any budget for external

training it can be worthwhile to organize informal on-the-job coaching to bring people up to the same level and share expertise. In many cases project managers do not have the authority or the means to reward staff by paying them more. So they motivate individuals by showing how the training needed for the project will increase their long-term earnings.

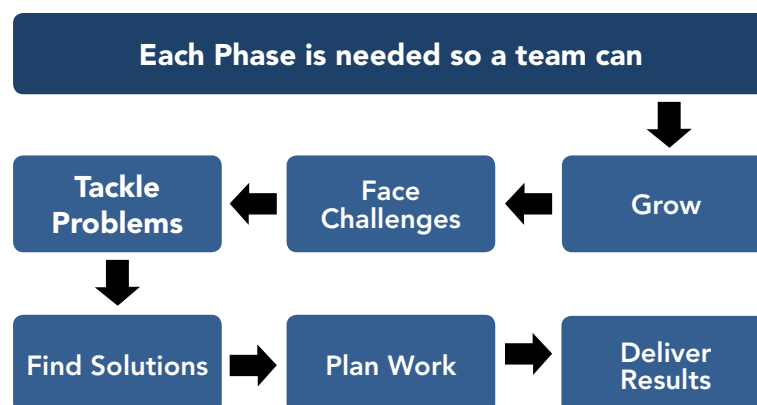
9.3.2.3 Team-Building Activities

These include any activities that are designed to help individual team members' work together more effectively and can vary from zero cost informal activities to a professionally facilitated experience run by a specialist company.

One of the most influential studies in this area is Bruce Tuckman's (1965). He proposed the four-stage model called 'Tuckman's Stages for a Group,' which states that the ideal group decision-making process should occur in four stages:

1. Forming
2. Storming
3. Norming
4. Performing

Tuckman maintained that these phases are all necessary and inevitable in order for the team to grow, to face up to challenges, to tackle problems, to find solutions, to plan work, and to deliver results.



This model has become the basis for subsequent models and it is important to understand the process of each stage and its concepts so that you can apply it to your workplace.

Stage 1—Forming

This first stage involves the bringing together of a group of individuals to form a team. At this stage, members usually have positive expectations about the venture, although they may harbor some anxiety about other members, such as who they are and what they are like.

At this point it is about building relationships within the group and clarifying the team's mission. Initially individuals behave independently of each other, but as they gather information and impressions about:

- Each other,
- The scope of the task,
- Its challenges and opportunities, and
- How to approach it

Each individual's behavior is driven by a desire to be accepted by the other team members and to avoid conflict. This results in serious issues being avoided, or put off, as team members concentrate on non-contentious or routine issues.

This reluctance to engage in and resolve areas of conflict means that the team accomplishes very little and the underlying differences which have been brushed aside will eventually surface and have to be addressed.

The length of this first stage will depend on how clearly the task is defined and on how much experience the individuals have of working in a team. Groups with simple tasks will move through orientation quickly, but groups with complex goals and tasks may spend much longer in this stage.

Teams made up of people who are used to being autonomous will take longer to build the necessary relationships for a successful team than those used to working in a group. Many individuals may be reluctant to contribute at this stage and their support of the leader is given cautiously.

Project Managers Role— Team Forming

Hands-on approach

Clear communication

Structure & Guidance

As a project manager you need to be very 'hands on' at this stage, giving clear directions and structure to make sure that your team build strong relationships. You can facilitate this by making sure your communications dispel any misunderstandings that could arise about roles and responsibilities.

With decisions being made in the majority of cases by the nominated leader you also need to ensure that no team member is committing themselves to do too much, or too little, of the planned work.

By paying attention from the outset to building good relationships, as well as focusing on a clearly defined task, your team will perform better than teams whose project managers rush through or skip over the relationship-building stage.

Stage 2—Storming

During this second stage, where team members feel more able to express and question opinions, you will see more evidence of internal conflict. Your role as project manager is to contain and direct this energy into a productive channel. You need to be aware that some level of internal conflict will cause a simultaneous dip in team morale.

Your management role will have to become more supportive, guiding the team in their decision-making and offering explanations of how these decisions came about. You need to define what you and the organization expect of the team in terms of professional behavior.

This more instructional approach will enable you, as project manager, to prevent any conflict from getting out of control and poisoning relationships between team members.

You will be able to recognize when your team moves into the 'storming' stage because you will observe them beginning to address the differences between their initial perceptions and the reality of the situation that they have been formed to address. This will cover issues such as:

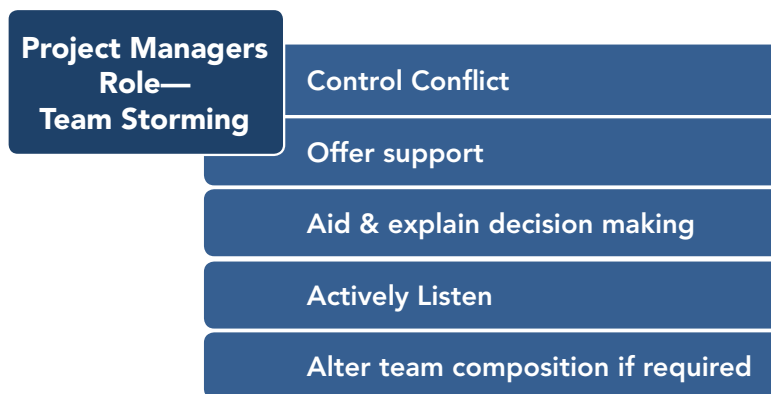
- What problems they are really supposed to solve
- How they will function independently and together
- What leadership model they will accept.

As your team members begin to negotiate the work assignments and express their views on the best way to achieve the task outcome disagreements will arise. Through your active listening skills you will mediate and help decisions to be made through compromise

as the most efficient way to attain the necessary outcomes. To learn more about this communications skill, visit our online library and download the 'Active Listening' eBook.

While your team members confront each other's ideas, test differing perspectives, discuss what the group needs to do, and how best to accomplish it, your role becomes one of a facilitator building trust within sub-groups of the team.

Team storming, whilst it may be contentious and unpleasant, will be resolved relatively quickly with your guidance and support. You must view this as a necessary step for your team to become a cohesive whole, not as an enormous irritation to be dismissed.



As a manager you need to be mindful of how this 'conflict' affects your team members and coach them in developing their own coping strategies. For example, some individuals may:

- Find this stage painful because they are averse to conflict.
- Feel anger or frustration with the task or with other members.
- Resent the presence of formal leadership.
- Focus on minutiae to avoid the real issues confronting the team.

The maturity in terms of attitude and approach to problem resolution of some team members can be significant in determining whether your team will ever move out of this stage.

If you try to bulldoze through this stage in your team's development you may find it becomes a permanent state, resulting in low morale and lack of productivity. If you fear this is happening to your team you will need to see how much flexibility you have in altering the composition of your team within the constraints of your organization.

You may choose to break the team into smaller subsets of cohesive individuals within your team so that morale and productivity are raised.

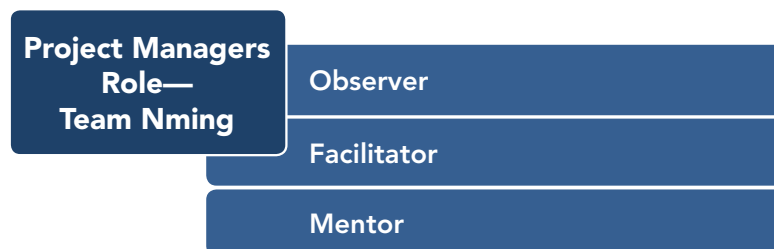
Stage 3—Norming

Once your team has reached the third stage of its development the members focus on resolving differences so that the mission and goals can be clearly defined. Your role within the team transfers from that of leader to that of team member.

Team members are learning more about each other and how they will work together and are developing tools such as a:

- Problem-solving process
- Code of conduct
- Set of team values
- Measurement indicators.

The team has now established core processes, and as manager you need to ensure the team avoids spending unnecessary time on issues related to the smaller processes.



During this period of negotiation and discussion, your role becomes one of observer and facilitator in order to assist your team in establishing the ground rules of behavior as they learn to work together. Their attitudes are characterized by:

- Decreasing animosities toward other members
- Feelings of cohesion, mutual respect, harmony, and trust
- A feeling of pleasure in accomplishing tasks.

Your team is truly developing a sense of team pride, and you will see evidence of increased productivity as skills develop. The team arrive at decisions that are more in line with their purpose rather than from a position of compromise.

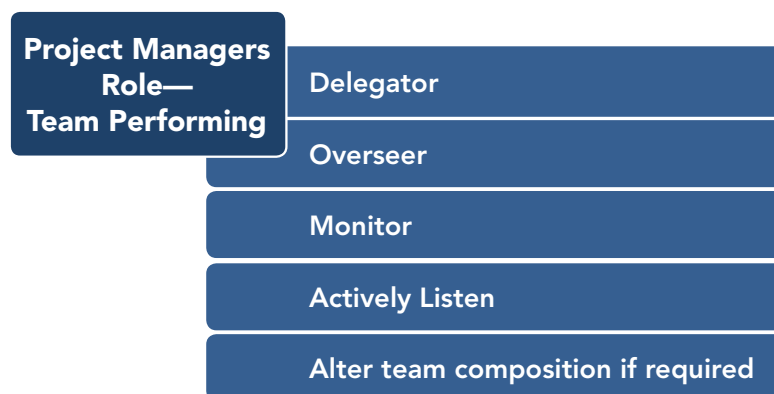
You can begin to transform your role as coach to one of a mentor and delegator, offering your team greater opportunities to raise their levels of expertise.

Stage 4—Performing

Now your team has reached the final stage of its development and can now bring real benefits to you and the organization. Your team members are now competent, autonomous, and able to handle the decision-making process without supervision.

Your team has been accomplishing work at every stage, but it is at this 'performing' stage that work is accomplished most effectively. Morale is high and the general atmosphere is positive. Team members' attitudes are characterized by positive feelings and eagerness to be part of the team.

Members are confident about the outcome, enjoy open communication, exhibit high energy, and disagreement is expected and allowed as long as it is channeled through means acceptable to the team. Leadership within the team is often shared and tasks are delegated within the team, which makes the overall decision-making process operate more easily than at earlier stages.



As a project manager, once your team is operating at this level then your role becomes one of overseer and delegator. You are no longer involved in day-to-day activities and the team's relationships with each other emulate the high degree of trust and loyalty you show in your relationship with the team.

Another key task you will perform at this stage is one of monitoring your team's relationships and performance to ensure that the group dynamics remain positive and productive. This is because changes in the dynamics of the group can result in high-performing teams reverting to earlier team-building stages.

For example,

A change in leadership may cause the team to revert to 'storming' as the new people challenge the existing norms and dynamics of the team.

To read more about other team development models go to our free online library and download the Team Development eBook <http://www.free-management-ebooks.com/dldebk/dlId-development.htm>

9.3.2.4 Ground Rules

These establish clear expectations regarding acceptable behavior by project team members. Generally speaking behavioral guidelines are more important when the project team is being drawn from diverse backgrounds that have different behavioral norms.

Early commitment to clear guidelines decreases misunderstandings and increases productivity. All project team members share responsibility for enforcing the rules once they are established.

9.3.2.5 Co-location

This refers to locating as many of the project team members as possible in the same place. The benefits of this are twofold,

- Firstly it makes communication easier in terms of face-to-face meetings.
- Secondly it engenders a sense of team identity that is difficult to develop when people cannot socially interact with each other.

9.3.2.6 Recognition and Rewards

Recognizing and rewarding desirable behavior is an important part of successful team building. For example, working overtime to meet tight deadlines or helping another team members to develop their skills are things that should not be taken for granted by the project manager. People are motivated if they feel they are valued in the organization and this value is demonstrated by the rewards given to them.

In most cases, the project manager will not have the authority or funding to give out monetary rewards. In today's rapidly changing business environment people are more aware than ever of their market value and this means that there are rewards that can enhance a team member's professional reputation and their future prospects for promotion.

The opportunity to gain new skills can add long-term earning potential and in many cases will represent a more significant reward in monetary terms than a one-off cash bonus. Where a training course has already been commissioned it is usually possible to offer additional places on it at minimal cost to the project and this can represent a high-value reward particularly to freelancers who tend to be more aware of their future marketability than permanent staff.

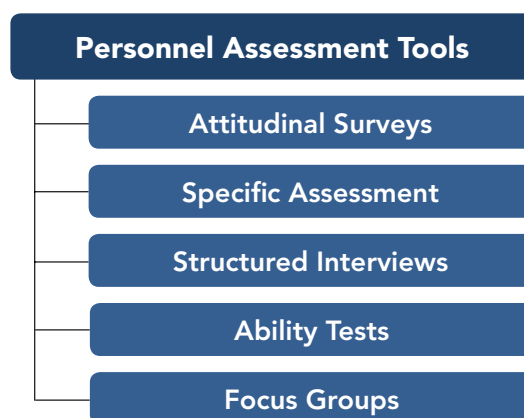
Similarly, giving someone more responsibility can be seen as a reward provided that it is done in a way that will benefit him or her in the longer term. For example,

Changing someone's role description from 'Expert User' to 'Senior Expert User'

explicitly acknowledges that they have taken on more responsibility and is something that they can use to enhance their resume.

9.3.2.7 Personnel Assessment Tools

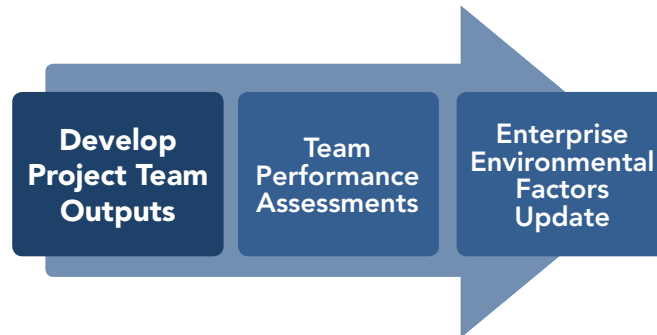
Various tools are available such as attitudinal surveys, specific assessments, structured interviews, ability tests, and focus groups. These tools give the project manager and the project team insight into areas of strength and weakness.



They 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

This process will create the following outputs:



9.3.3.1 Team Performance Assessments

The criteria by which performance will be assessed should be incorporated in the Develop Project Team inputs. These criteria should be objective and based on agreed project objectives wherever possible. However, this needs to be tempered with a certain amount of subjective judgment. For example, in hindsight were the objectives realistic?

Another point worth making is that the project team must be encouraged to take a wider view of things. They must not become target focused at the expense of alienating people outside of their immediate group, whether this is other in-project groups, departments within the organization or third parties like customers and suppliers.

The evaluation of a team's effectiveness may include indicators such as:

- Improvements in skills that allow individuals to perform assignments more effectively,
- Improvements in competencies that help the team perform better as a team,
- Reduced staff turnover rate, and
- Increased team cohesiveness where team members share information and experiences openly and help each other to improve the overall project performance.

These performance assessments may suggest specific training is needed or that changes are required within the project organization.

9.3.3.2 Enterprise Environmental Factors Updates

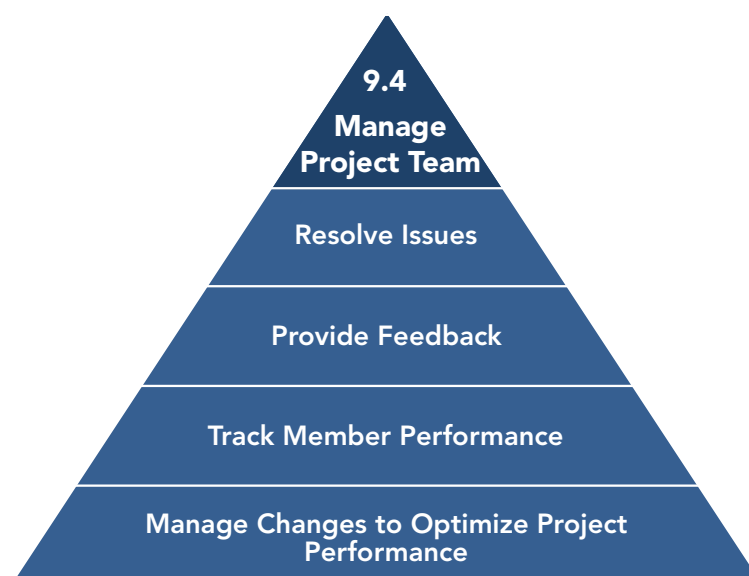
These include updates to employee training records and skill assessments as a result of the project team developing new knowledge, skills, and experience.



This information needs to be reflected back into the organization so that these new enhanced skills can provide increased benefits for future projects or operational work by the individuals concerned.

9.4 Manage Project Team

This is another complex process that requires a wide range of interpersonal skills to do well. It involves tracking team member performance, providing feedback, resolving issues, and managing changes to optimize project performance.



Managing human resources is probably one of the most complex areas as people can be unpredictable, can give rise to an expected conflict, the level of their morale can go up or down, and also of course for either personal or professional reasons, some may leave the project in an unplanned manner.

The result of any or all of the above mentioned aspects of human resources will have a direct affect on the:

- Project objectives—
 - Schedule
 - Budget, or
 - Quality
- While implementing the manage project team process.

Taking all the above points into consideration, the project manager must factor these in while attempting to keep the team working at their optimal performance levels via the manage project team process.

The skills required include:

- Communication
- Conflict management
- Negotiation
- Leadership,

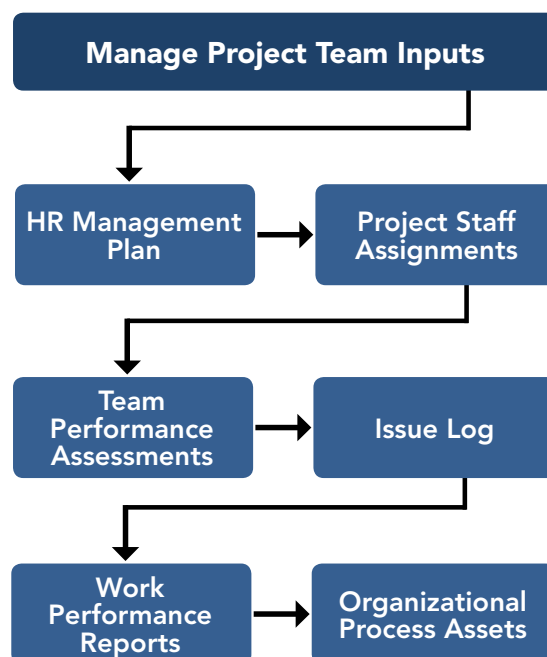
All of which are outside of the scope of a project management eBook. Our online library has free eBooks, checklists and templates that will help you develop your leadership, communications, appraisal, coaching and people skills.

The inputs, tools and techniques, and outputs of this process are summarized in the table below.

Inputs	Tools & Techniques	Outputs
Human Resource Management Plan	Observation and Conversation	Change Requests
Project Staff Assignments	Project Performance Appraisals	Project Management Plan Updates
Team Performance Assessments	Conflict Management	Enterprise Environmental Factors Updates
Issue Log	Interpersonal Skills	Organizational Process Assets Updates
Work Performance Reports		
Organizational Process Assets		

9.4.1 Manage Project Team: Inputs

This process requires the following inputs:



9.4.1.1 Human Resources Management Plan

This plan is output from the previous processes. It provides information for managing human resource assignments, the staffing of tasks, along with the roles and responsibilities of the concerned.

9.4.1.2 Project Staff Assignments

These are output from the process '9.2 Acquire Project Team' and include a list of the project team members.

9.4.1.3 Team Performance Assessments

These are outputs from the previous process described above. It is important that the project manager regularly assesses the performance of the team so that any performance issues can be acted on swiftly and managed so that the issue is resolved.

9.4.1.4 Issue Log

This documents and helps monitor who is responsible for resolving specific issues by a target date. It is the project manager's day-to-day job to resolve issues in particular any issues surrounding team performance.

An issue could be anything that threatens the project progress and would be defined as some aspect of the project that is already happening.

Unlike risk which is something that may or may not happen at some point in the future. Such issues may be technical, business, environmental, or just about any aspect of the project.

Where issues cannot be resolved informally, then raising it and documenting it on the issue log is a way to bring this to management attention to assist in resolving the problem. Among other information for each item raised on the issue log, it should state the individual or group who is responsible for resolving the issue, and the log should be updated until such time that the issue has been resolved.

9.4.1.5 Work Performance Reports

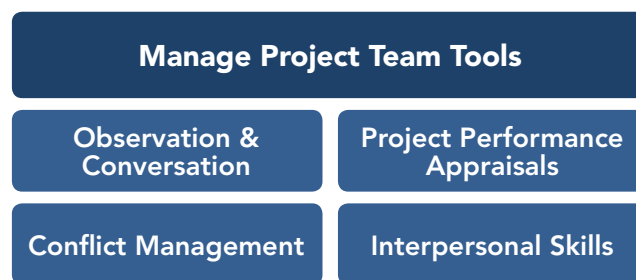
These compare current project status to the plans and help to determine future human resource strategy. These are the actual value of these metrics must be measured to determine any difference of variance from the baseline plan. This information is collected within the performance reports.

9.4.1.6 Organizational Process Assets

These include the organization's policies, procedures, and system for rewarding people as well as historical information and lessons learned from previous similar projects, and information on special corporate or competences.

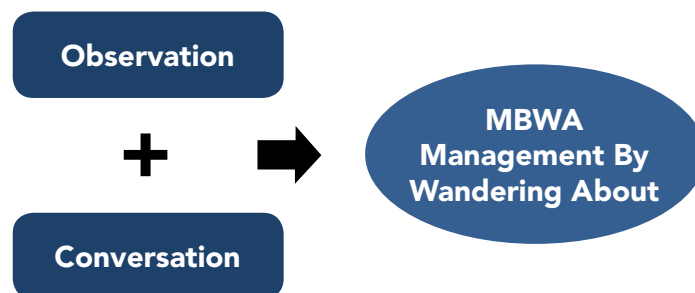
9.4.2 Manage Project Team: Tools and Techniques

There are four tools and techniques that can be used.



9.4.2.1 Observation and Conversation

Many developing problems can be addressed before they get out of hand by a project manager who 'knows instinctively' when something is up rather than waiting for it to be formally reported. If you take the time to talk briefly and informally with team members (on your way to get a coffee for example) you will develop a feel for the normal atmosphere of the project.



Human beings are very sensitive to changes in non-verbal behavior. So, if you feel that something is not quite right then asking people if they have any problems or concerns can often bring issues to light that would have serious consequences if you remained unaware of them until they were formally reported.

This approach to management is sometimes referred to as 'management by wandering around' (MBWA). The emphasis is on the word wandering as an impromptu movement within a workplace, rather than a plan where employees expect a visit from managers at more systematic, pre-approved or scheduled times.

There are several other benefits to MBWA:

- It doesn't take up much time (maybe 15 minutes a day)
- You get to learn more about individual team members and you may find them making suggestions for improvements that they wouldn't make through formal channels
- Generally speaking people like to see their managers mixing with them, which is good for morale.

9.4.2.2 Project Performance Appraisals

These appraisals can clarify roles and responsibilities, provide constructive feedback to team members and discover unknown or unresolved issues. In addition, they can serve to set future goals and establish training requirements.

Whether or not appraisals are appropriate will depend on the nature of the project. Generally speaking they would be appropriate in the case of a long-term project staffed by permanent employees of the organization but would not be used in a short-term project or one that was staffed by outside contractors.

9.4.2.3 Conflict Management

Conflict is an inevitable consequence of project work; where there is constant pressure to achieve targets within strict time and resource constraints.

This remains true no matter how well planned a project may be, it will always be subject to unforeseen demands and the direction of the project may need to change as it progresses. Conflict often arises from decisions that inconvenience people, but are nevertheless essential to the success of the project.

In a pure project environment, the human resources decision-making authority rests with the project manager. However, in a matrix environment where resources are being borrowed from other departments, all major decisions will be reached by agreement between the project manager and the relevant line manager.

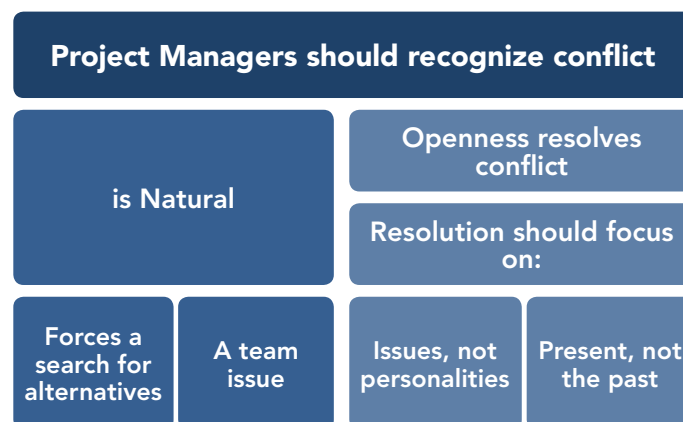
Conflict arises because project managers tend to view their own project as taking priority whereas departmental managers will tend to view things from a departmental perspective. This becomes especially evident when a project falls behind schedule and external departments are then expected to extend their commitment of personnel to it.

Another issue is that it is in the project manager's interest to minimize each external department's billing to the project but departmental managers often try to secure as much of the project's budget as possible.

In addition, technical conflicts are common where a department is supporting the project in a technical capacity and project manager rejects the solution preferred by the department on technical, cost or scheduling grounds.

As well as conflicts between the project management team and people outside of the project, there are often internal conflicts to deal with. In these cases the project manager will usually have the final say. The aim should always be to resolve things in a way that everyone involved can live with rather than coming down too firmly on one side at the expense of the other. The effect of doing the latter may be to alienate one of the protagonists to such an extent that they leave resulting in valuable time and effort being wasted replacing them.

There are many more examples of why conflict is an inevitable part of project management and all successful project managers need to be aware of how best to deal with it. Generally speaking conflict should be addressed early and usually in private, using a direct, collaborative approach.



When handling conflict in a team environment, project managers should recognize that:

- Conflict is natural and forces a search for alternatives,
- Conflict is a team issue,
- Openness resolves conflict,
- Conflict resolution should focus on issues, not personalities, and
- Conflict resolution should focus on the present, not the past.

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 have different conflict resolution styles. Factors that influence conflict resolution methods include:

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

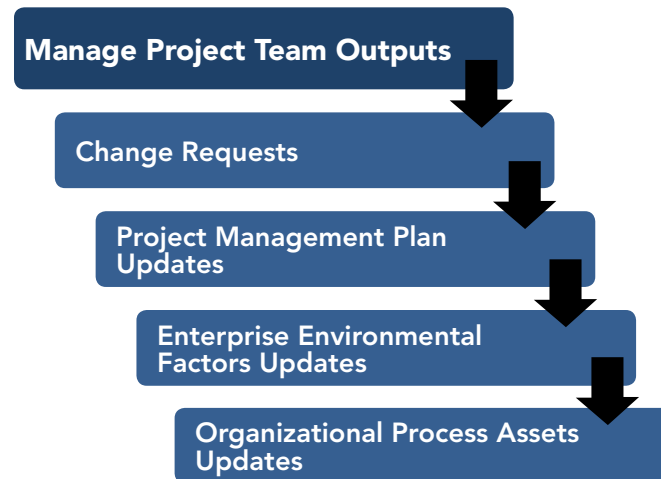
9.4.2.4 Interpersonal Skills

The PMBOK® specifies leadership, influencing and effective decision-making skills as essential tools in this process. As previously mentioned, there are many other so-called 'soft' skills that a successful project manager needs to master.

Whilst these are outside of the scope of this eBook, you can download free eBooks from our online library on these skills from our website www.free-management-ebooks.com.

9.4.3 Manage Project Team: Outputs

This process will create the following outputs:



9.4.3.1 Change Requests

These result from disruption caused by personnel issues including moving people to different assignments, outsourcing work, and replacing team members who leave. The complex interplay between the team members themselves may cause problems and make it necessary to disband the team entirely or to replace people with others whose personalities, knowledge and skills are better suited.

Any of the above situations would cause changes to the human resource plan, and because this plan forms part of the project baseline, such actions should be in the form of a documented change request and processed through the change control system.

9.4.3.2 Project Management Plan Updates

These include any changes to the staffing management plan described earlier.

However, the project management plan contains fifteen sections in total, and any of these may also need to be updated.

9.4.3.3 Project Document Updates

These include the issue log, roles description, and project staff assignments.

9.4.3.4 Enterprise Environmental Factors Updates

These include updates to organizational performance appraisals and personnel skills.

9.4.3.5 Organizational Process Assets Updates

These include updates to lessons learned documentation, templates, and organizational standard processes, which should be fed back to become part of the organizational process assets for future similar projects.

Summary

There are two principal conflicts that this knowledge area seeks to address.

The first is the conflict between getting the work of the project done as quickly as possible and the need to develop the skills and competencies of the project team members.

The second conflict is between selecting and managing people according to the skills required by the project and recognizing them and managing them as individuals with their own personal and career requirements.

This knowledge area contains the tools and techniques needed to resolve these conflicts as much as possible.



There are four Project Human Resources Management Processes:

9.1 Develop Human Resource Plan

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

The output from this process is the Human Resources Plan and the component of that plan that deals the most with the acquisition of the team is the staffing management plan.

This describes when and how team members will be acquired and for how long they will be needed. It includes the following elements, which are important for the next process '9.2 Acquire Project Team'.

- Staff acquisition plan
- Staff release plan
- Resource calendars
- Training needs
- Recognition and rewards
- Regulatory compliance
- Safety issues

The reporting relationships and other interactions on the team that are illustrated in the project organizational charts are important for the process '9.3 Develop Project Team'.

Finally, the roles and responsibilities that the members will fulfill are important for the process '9.4 Manage Project Team'.

9.2 Acquire Project Team

This process is in the executing process group, and is where the project manager acquires his or her project team. It involves confirming human resource availability and obtaining the team necessary to complete project assignments.

Once the team has been selected, this is detailed in the project staff assignment, and the timing of when people are available is contained in the resource calendars. At this stage,

there may need to be some modifications to the Human Resource Management Plan, which may need to be updated to reflect actual resource availability.

9.3 Develop Project Team

This process is in the executing process group, and it is used to develop the group of individuals assembled as the team members for your project and to get them to work together as a team. It involves improving the competencies, team interaction, and the overall team environment to enhance project performance.

Developing a cohesive team is key to the success of any project. A project team must be clear on common project goals. A common understanding and acceptance of goals within the team helps build a sense of ownership leading up to the Implementation Phase.

So, in addition to creating an effective HR Management Plan, or acquiring and managing project human resource, a project manager needs to consider the human factor. A group is not the same as a team.

Groups are not cohesive and have not yet formed effective internal bonds.

Teams go through a maturity cycle: "forming, storming, norming, performing and adjourning".

Some conflict is normal before the optimal performance stage can be attained. Teams need to gel and develop a team identity or chemistry.

Getting together as a team outside the project environment and participating in social activities or group challenges has many benefits in terms of building team cohesion. Teams that like each other and have more common positive reference points and experiences are more productive in the long run.

9.4 Manage Project Team

The Project Manager must create a common vision, motivate and lead the team. There are a variety of workable leadership styles but you will need to take into account the team makeup, skills and background. For example, an effective leader often seeks input from the team and to the degree possible, builds consensus with the aim of enhancing project development and implementation. At the end of the day though, the Project Manager is accountable and must take necessary decisions.

This process involves tracking team member performance, providing feedback, resolving issues, and managing changes to optimize project performance. This may involve staffing changes, which should be treated as change requests, and as such, need to be sent through the Perform Integrated Change Control process, especially since they may necessitate a change in the budget, the schedule, or both.

The HR management plan, may need to be updated as a result of the activities in this process, as well as some of the project documents relating to human resources management, such as the issue log or the responsibilities matrix.

No matter what tools, techniques and methodologies are used; projects are actually done by people. It could be argued that this human resource management is the one function that a project manager cannot delegate to others, something that can be done with costing, scheduling, quality control or risk assessment for example. Consequently, the administration of people is probably the most important responsibility of the project manager.

If you want to know more about project management the eBooks in this skill set available from <http://www.free-management-ebooks.com/skills-project.htm> are:

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- Process Groups
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