

1

Introduction to Project Management Leadership

Learning Outcomes

After reading this chapter you should be able to:

Understand the range of management and leadership skills the project manager needs to manage the project

Understand the project environment

Understand which PMBOK knowledge areas apply to project management leadership

Project Management Leadership focuses on the human side of project management, and the leadership skills the project manager needs to manage the project team and other stakeholders. There is a growing recognition that leadership and personal skills are an essential component of the project manager's portfolio of management skills, together with team building and communication skills.

This book will set out the key project management leadership topics and show how they relate to the project management body of knowledge. This chapter will also outline how the project environment and the project participants are changing to reflect this change, and how the project manager's leadership styles must also change.

To put project management leadership into context, if we were all hard working robots we would not need leadership skills. As robots we would work as programmed, we would work as hard as required and finish everything on time, and to the required quality. But, because we are human beings, there are also personal factors and interpersonal issues to consider, because if you try and programme people like a machine it will obviously be counter productive. This is the reason why, besides project management skills, the project manager also needs leadership skills to negotiate, motivate and inspire the project team members, both individually and collectively. This confirms the saying; *'...you manage things but lead people...'*



'...I want you all to finish the scope of work on time, within budget and quality...'

But the project manager's challenges do not end there. The project manager also has to manage and lead all the other project stakeholders. Consider the following:

- The client and senior managers (who authorize and pay for the work)
- Functional managers and contractors (who own the workforce and machinery)
- Vendors (who supply all the equipment and materials)
- Government agencies and lobby groups (who impose rules and regulations).

1. Traditional Projects

Traditionally projects were run within a department where the functional manager would have full line authority over the workforce, and when their part of the project was finished they would hand it over to the next department which, in turn, would pass it on to the next department. Although the projects were multi-disciplined, the work was carried out sequentially and the client would have to deal with each department separately.

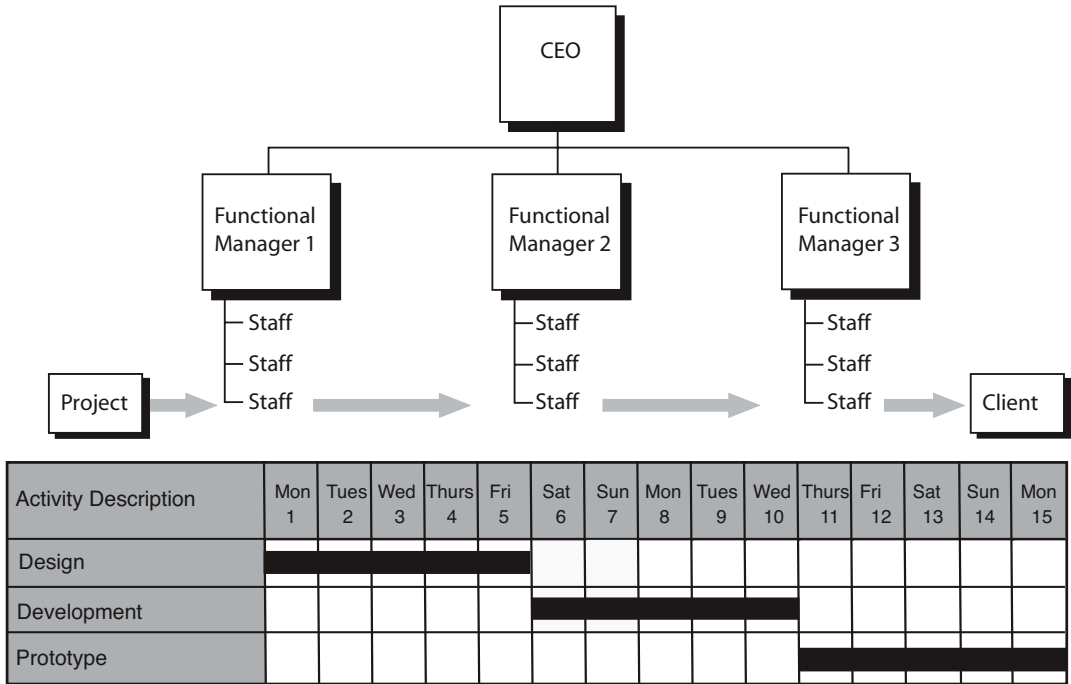


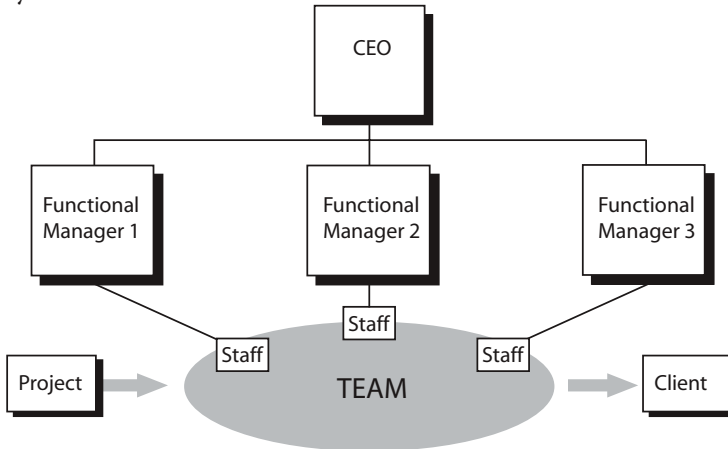
Figure 1.1: Traditional Project – shows the work being passed sequentially from department to department

This method of managing projects worked well while everyone else was using a similar structure but, with deregulation, privatization and the removal of tariff barriers, companies now compete internationally. And there is nothing like competition to focus a company’s attention on their productivity.

For example, Philips used the functional structure to produce the first VCR. Initially Philips had the VCR market to themselves but, by the time Philips had produced the MK2 version some seven years later, a number of Japanese companies had already produced a MK1 and a MK2 version using the project team approach. The Japanese companies clearly showed that project teams are a more efficient way of designing new products.

2. Team Projects

The project team approach for managing multi-disciplined projects is to select a member from each discipline or department to join the project team or product development team. Each discipline then has an input into the design, and the client and the whole project is be the team's main focus. Using the project approach, much of the work is carried out in parallel, which is a much quicker method than working sequentially.



Activity Description	Mon 1	Tues 2	Wed 3	Thurs 4	Fri 5	Sat 6	Sun 7	Mon 8	Tues 9	Wed 10	Thurs 11	Fri 12	Sat 13	Sun 14	Mon 15
Design	█														
Development		█													
Prototype			█												

Figure 1.2: Team Project – shows a member from each department joining the project team - the work is done in parallel and the client is the main focus

To incorporate the changes in the project environment the project manager needs to consider the following:

- Competition has forced companies to move from sequential department product design to concurrent product design using multi-disciplined teams to fast track the process and improve the speed to market.
- To improve multi-department project co-ordination companies have moved to matrix organization breakdown structures (OBS), but now project managers do not have line authority over the resources they need. In this situation project managers have to develop a more participative, negotiation and collaborative style of management.
- Today's workforce are now better educated with greater social expectations and want to be more involved and have a greater say in the running of the project. Gone are the days of command and control!

The purpose of this book is to outline how the project manager's leadership style can be developed to manage today's projects.

3. History of Project Management

The history of modern day project management can be dated back to World War 1 when Henry Gantt developed the barchart as a visual aid for planning and controlling his shipbuilding projects. In recognition, planning barcharts are often named after him - Gantt charts. Some of the key project management developments were:

1950s	In the 50s the project manager's position was established as the 'single point of responsibility' with autonomous authority over a pool of resources. This change enabled complex projects in remote locations to be managed by the person on the ground.
1960s	In the 60s nearly all of the special planning and control techniques and project management processes we use today were developed on military and aerospace projects. This included PERT, CPM, matrix OBS, scope management, configuration management and earned value. The PMI (Project Management Institute) was established and the PMBOK (Project Management Body of Knowledge) was published to help quantify the scope of project management.
1970s	In the 70s the emphasis of the project lifecycle progressively moved from the implementation phase (where most of the resources are used) to the front end design and development phase which have the greatest potential to add value, and the least cost to make changes.
1980s	In the 80s the development of the PC and project management software revolutionized the planning and control calculations. And, because they used a common data base it forced the functional departments to share information. This sharing of information was one of the most significant changes because it integrated the departments and moved the planning and control of information into the project management office (PMO).
1990s	In the 90s large companies started to adopt a management-by-projects approach through a project management office (PMO). This enabled the PMO to act as a centre of excellence for project management.
2000s	With each decade the emphasis and focus of project management has been influenced by the project environment (facilities, types of projects and education). Today the emphasis and focus is expanding to include the management topics of ' <i>Project Management Leadership</i> ' and ' <i>Project Management Entrepreneurship</i> ' – hence the purpose of the book is to develop the latest project leadership tools and techniques used to manage projects.

Table 1.1: History of Project Management – shows the emphasis is now focusing on project management leadership

4. Project Environment

Projects are not performed in a vacuum, they are influenced by a wide range of internal and external factors and stakeholders. As project manager you need to consider the wider aspects of the project environment to fully appreciate what topics are included and how they are inter-related and, just as importantly, what topics are excluded and why. Managing projects requires a diverse range of skills and abilities, consider the following breakdown:

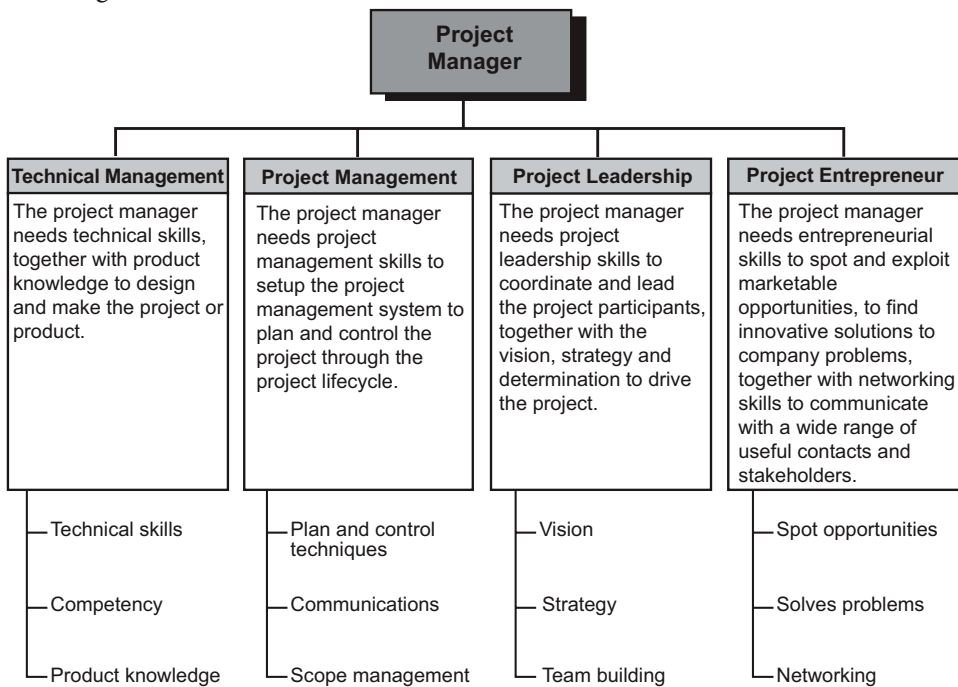


Figure 1.3: Project Manager's Portfolio of Skills – shows the project management portfolio of skills subdivided into technical management, project management, project leadership and project entrepreneurship

DEFINITION

A **skill** may be defined as the ability to translate knowledge into an action that results in the desired performance.

Figure 1.3 shows the project manager's portfolio of skills subdivided into four separate management skills. You may have noticed that project manager and project management are used in two different contexts:

- Firstly as the project manager's position responsible for the whole project (the single point of responsibility).
- Secondly as a project management system used to plan and control the project.

Intersecting Management Skills: The four management skills outlined in the previous section can also be presented as intersecting circles (figure 1.4) to imply an inter-relationship. This means that all four management areas must be effective for the project to be successful. Further, in figure 1.4, all four management topics are surrounded by the project environment which includes the external stakeholders, together with an awareness of the latest technology, the market and the competition.

To help define leadership it is often compared with management as a table of opposites (see *Leadership vs Management* chapter). John Kotter of Harvard Business School produced the following table:

What managers do	What leaders do
Prepare project plans and budgets, set targets for the future, to manage complexity	Set a direction, develop a vision of where the organization should be going and the strategy for change to achieve that vision
Ensure the organization has the capacity to achieve the targets and goals by organizing (deciding on structures and roles) and staffing (filling roles with the right people)	Align people to the direction being set, communicate it to people and build commitment to it
Make sure that the plan is fulfilled by controlling what is done and solving problems	Motivate and inspire people so that they work to achieve the vision, drawing on their needs, values and emotions

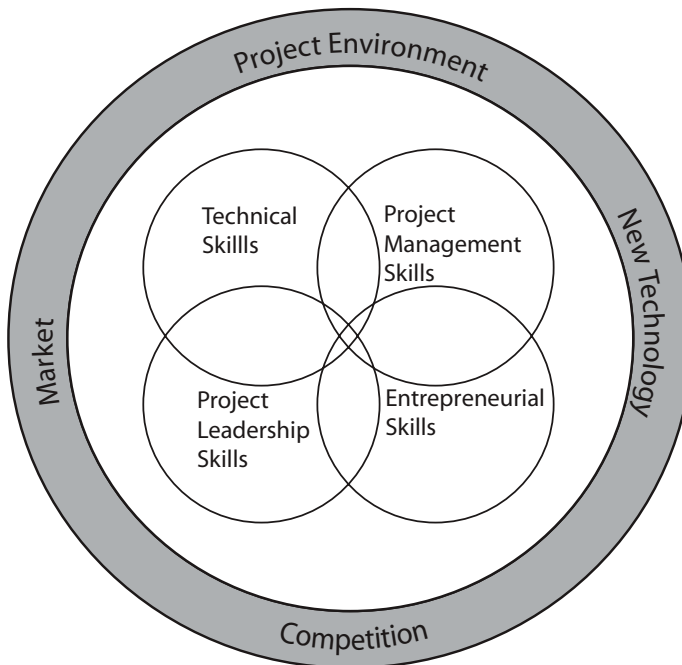


Figure 1.4: Intersecting Management Skills – shows the project manager needs technical skills, project management skills, project leadership skills and entrepreneurial skills to be effective – the intersecting circles are drawn of equal size implying that they are of equal importance

Technical Management Skills: The technical management skills include the technical skills and product knowledge required to design and manufacture the product or project. Every profession has its unique range of technical skills and competencies which are required to perform the work.

Technical management skills are responsible for the functionality of the product and, therefore, have a key input into configuration management and scope management which includes the project feasibility study, build-method and scope changes.

On smaller projects the project manager may be expected to be the technical expert as well as the manager of the project. In fact, early on in a person's career they will probably not be appointed as project manager unless they are a technical expert in their field. But as projects increase in size so will the size of the project team and project organisation structure. In which case, the project manager will become progressively less involved in technical issues and more involved in managing and leading the project's participants.

Project Management Skills: Project management skills are required to setup and run a project management system to plan and control the scope of work. The project management system is the back bone of the planning and control process, which might need to be tailored to the needs of the client, the needs of the project and the needs of the stakeholders (particularly the project team, contractors and suppliers).

As projects grow in size so the information and communication flows will grow exponentially. The project, therefore, needs a fully integrated system to issue instructions, monitor progress, process progress data, forecast and report performance. Without an effective system the information overload will lead to chaos.

The project manager will also benefit from; having conceptual skills and the ability to think analytically and breakdown problems into smaller parts (WBS); having the skills to recognise the logical relationships between the activities (CPM) and the implications between one task and another (interfaces); being able to deal with ambiguous situations (risks) and changes in the scope of work.

The project management body of knowledge subdivides project management into nine knowledge areas – these are developed later in this chapter.

Project Leadership Skills: The project manager's leadership skills are the driving force behind the project where the project leader is enthusiastically communicating the vision, outlining the strategy, empowering and inspiring the project participants. As the single point of responsibility the project leader is responsible for co-ordinating the input from all the stakeholders and addressing their needs and expectations.

DEFINITION

The PMBOK defines **leadership** as; *'...developing a vision and strategy, and motivating people to achieve that vision and strategy ...'*

DEFINITION

The APM bok defines **leadership** as; ‘...*the ability to establish vision and direction, to influence and align others towards a common purpose, and to empower and inspire people to achieve project success. It enables the project to proceed in an environment of change and uncertainty...*’

These two definitions of leadership very simply and very succinctly focus on the key topics of project management leadership. These topics will be developed in detail in the *Project Management Leadership* chapter.

It is the project management leader who is responsible to make sure the project has the right people to do the job, that everyone **CAN** do their job, and then make sure everyone **IS** doing their job. To ensure everyone can do their job will involve team selection, team building, training, coaching and mentoring. And, to ensure everyone is doing their job will involve delegation, motivation and performance monitoring and evaluation.

As the project management leader may not have formal authority over the project resources and the stakeholders, the project management leader needs to develop interpersonal skills to negotiate the best deals with the resource providers.

The project management leader will need to develop communication skills and networking skills (inside and outside the company) to find useful contacts. The project management leadership skills in some respects are a catch-all situation, where the leader is also responsible for the other three management skills, technical, managerial and entrepreneurial.

Project Entrepreneurship Skills: It is important to include the project manager’s entrepreneurship skills of spotting marketable opportunities, inventing new products, solving challenging problems, making decisions and accepting the associated risks, because these are the **triggers** which initiate new ventures and new projects. One could argue that without entrepreneurial skills there would be no new projects!!!

The project manager can also benefit from entrepreneurial skills during the implementation of the project because, as the project moves forward, there will be better information on the latest technology, better information on the market conditions and most importantly the latest information on the competition’s products and pricing strategy. The project manager also needs entrepreneurial skills to solve technical problems associated with the design and implementation of the project, and an entrepreneurial approach to cut corners to fast track the project to beat the competition to market. (See *Project Management Entrepreneur*).

5. What is a Project?

To understand the meaning of project management and the project manager's leadership skills, we first need to define what we mean by a project.

DEFINITION

The PMBOK defines a **project** as; '*... a temporary endeavour undertaken to create a unique product or service (outcome or result). Temporary means that every project has a definite end. Unique means that the product or service is different in some distinguishing way from all similar products or services...*'

Some of the special features of a project include:

Start and Finish	A project has a clear start and finish.
Lifecycle	A project passes through a number of distinct phases (initiation, design, implementation and handover).
Schedule and Timeline	Projects are often time-limited. This means they must finish by a certain date.
Budget	Projects have a clear budget which is usually broken down to a budget per work package.
Non Repetitive	Activities are essentially unique and non-repetitive – you only get one opportunity to get it right.
Resources	Resources may be sourced from different functional departments and contractors, and need to be co-ordinated.
Single Point of Responsibility	The project manager as project leader is responsible for the successful completion of the whole project.
Teams	Multi-disciplined project teams are formed to manage the project. In large companies the project team would probably work within a matrix organization structure.

Traditionally projects were associated with construction, petro-chemical and defence type projects, but in recent years most proactive industries, businesses and government departments have re-structured their work as projects.

6. What is Project Management?

DEFINITION

The PMBOK defines **project management** as; ‘..... the application of knowledge, skills, tools and techniques to project activities in order to meet stakeholders needs and expectations from a project....’

This definition clearly identifies that the purpose of the project is to meet the stakeholders’ needs and expectations. It is, therefore, a fundamental requirement for the project manager to establish who are the stakeholders (besides the client) and analyse their needs and expectations to define, at the outset, the project’s scope of work and objectives (this will be developed in the *Working With Stakeholders* chapter).

DEFINITION

The PMBOK states that project management is accomplished through **processes** which are defined as; ‘....a set of interrelated actions and activities that are performed to achieve a pre-specified set of products, results or services....’

The project management process can be subdivided into five key processes which are linked by the results they produce - the outcome from one process is often the input to the next process.

Initiating Process	The initiating process starts the project – this would usually include the project charter and feasibility study.
Planning Process	The planning process selects and develops the best course of action to attain the objectives that the project was undertaken to achieve.
Execution Process	The execution processes integrates, instructs and co-ordinates people and resources to implement and carry out the management plan and make-it-happen.
Controlling Process	The controlling process ensures the project objectives are met by monitoring and measuring progress regularly to identify any variances from the management plan so that corrective action can be taken as necessary.
Closing process	The closing process formally accepts the project and brings it to an orderly end. This involves commissioning the product, handing it over to the client for operation, and producing a closeout report.

Table 1.2: Project Management Processes – shows the five key project management processes

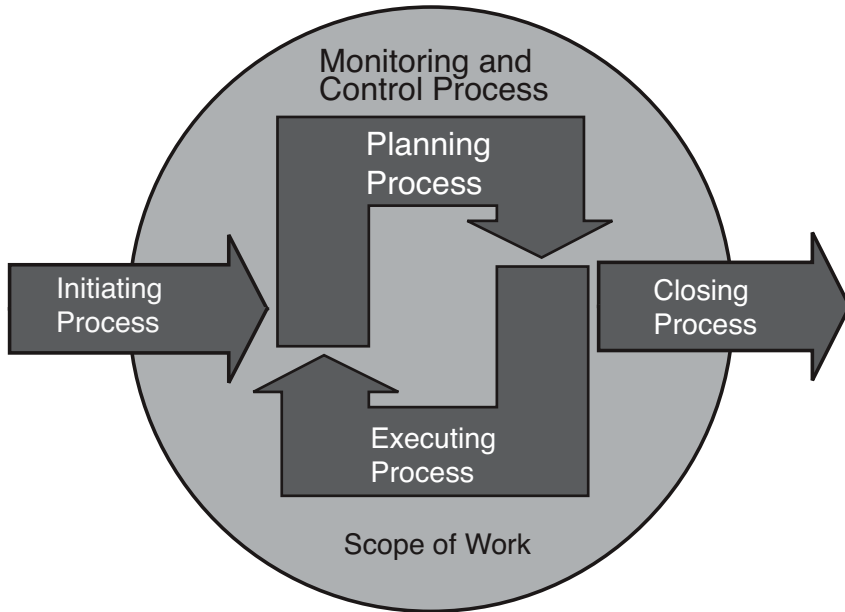


Figure 1.5: Project Management Process (developed from PMBOK 3ed 2004, page 40) – shows the relationship between the five project management processes

Project Lifecycle: The project lifecycle subdivides the project into four sequential phases – concept and initiation, design and development, construction and implementation, commissioning and handover. By subdividing the project into smaller phases of work the project manager is able to achieve better control over the scope of work.

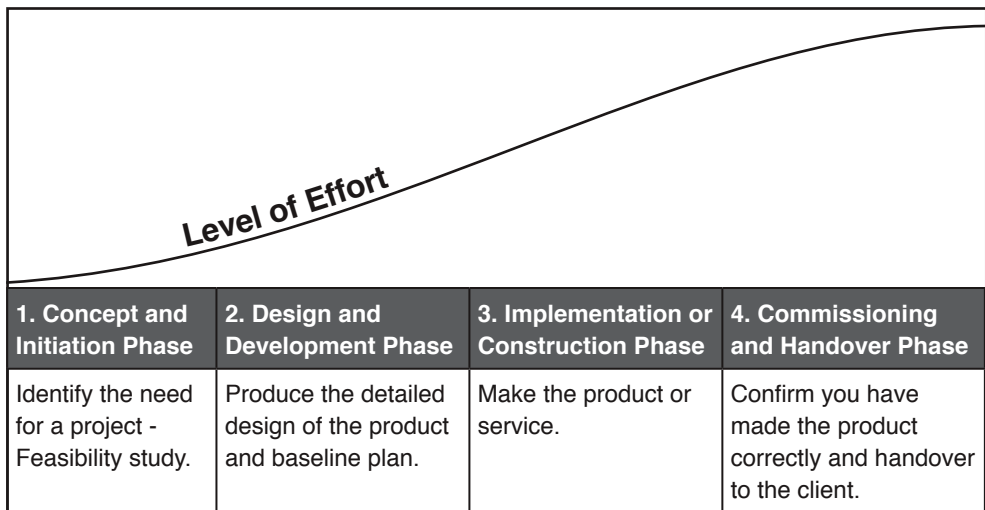


Figure 1.6: Project Lifecycle - shows the four phases of the project lifecycle and the level of effort

7. Project Management Body of Knowledge

The purpose of the body of knowledge is to identify and describe best practices that are applicable to most projects most of the time, for which there is widespread consensus about their value and usefulness. The body of knowledge is also intended to provide a common lexicon and terminology within the profession of project management – nationally and internationally. As a developing international profession there is still a need to converge on a common set of terms. The PMBOK subdivides project management into nine knowledge areas see table 1.3.

DEFINITION

The PMBOK defines a **body of knowledge** as; ‘... *an inclusive term that describes the sum of knowledge within the profession and rests with the practitioners and academics that apply and advance it...*’

Historically, as the discipline of project management grew and became established, so a number of institutions and associations were formed to represent the project management practitioners with respect to education, professional accreditation, ethics and a body of knowledge.

There are a number of institutions, associations and government bodies around the world which have produced a body of knowledge, unit standards and competency standards – they all have a presence on the Internet:

- Project Management Institute (PMI) [PMBOK], www.pmi.org
- Association for Project Management (APM) [bok], www.apm.org.uk
- Australian Institute of Project Management (AIPM) [Competency Standards], www.aipm.com.au
- Project Management South Africa (PMSA), www.pmsa.org.za
- International Project Management Association (IPMA), www.ipma.ch
- Global Alliance for Project Performance Standards (GAPPS), www.globalpmstandards.org

The Project Management Body of Knowledge (PMBOK) is one of the corner stones of project management so it is important to look at the body of knowledge to ring fence the knowledge areas included in project management and project management leadership – and, just as importantly, ringfence the topics that are excluded.

Project Scope Management	Project scope management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. It is primarily concerned with defining and controlling what is or what is not included in the project, to meet the sponsors' and stakeholders' goals and objectives. It consists of authorisation, scope planning, scope definition, scope change management and scope verification.
Project Time Management	Project time management includes the process required to ensure timely performance of the project. It consists of activity definition, activity sequencing, duration estimating, establishing the calendar, schedule development and time control.
Project Cost Management	Project cost management includes the process required to ensure that the project is completed within the approved budget. It consists of resource planning, cost estimating, cost budgeting, cashflow and cost control.
Project Quality Management	Project quality management includes the process required to ensure that the project will satisfy the needs for which it was undertaken. It consists of determining the required condition, quality planning, quality assurance and quality control.
Human Resource Management	Human resource management includes the process required to make the most effective use of the people involved with the project. It consists of organisation planning, staff acquisition and team development.
Project Communications Management	Project communications management includes the process required to ensure proper collection and dissemination of project information. It consists of communication planning, information distribution, project meetings, progress reporting and administrative closure.
Project Risk Management	Project risk management includes the process concerned with identifying, analysing, and responding to project risk. It consists of risk identification, risk quantification and impact, response development and risk control.
Project Procurement Management	Project procurement management includes the process required to acquire goods and services from outside the performing project team or organization. It consists of procurement planning, solicitation planning, solicitation, source selection, contract administration and contract closeout.
Project Integration Management	Project integration management integrates the three main project management processes of planning, execution and control - where inputs from several knowledge areas are brought together.

Table 1.3: PMBOK Knowledge Areas – shows the body of knowledge subdivided into nine knowledge areas

8. Human Resource Management

The PMBOK and APM bok do not include a knowledge area entitled ‘project leadership’, but of the PMBOK’s nine knowledge areas, there are two knowledge areas which focus on the human factors of project management, namely, Human Resource Management and Project Communication Management.

DEFINITION

The PMBOK defines project **human resource management** as; ‘... *the process required to make the most effective use of the people involved with the project. It consists of organisation planning, staff acquisition and team development...*’

The PMBOK subdivides human resource management into four sections. The right hand column indicates the chapters where the topics are discussed.

	Topics	Chapters
Human Resource Planning	Identifying and documenting project roles, responsibilities, and reporting relationships, as well as creating the staffing management plan	<i>Matrix OBS Job Descriptions Project Teams</i>
Acquire Project Team	Obtaining the human resources needed to complete the project	<i>Team Recruitment Team Roles</i>
Develop Project Team	Improving the competencies and interaction of team members to enhance project performance	<i>Team Development Phases Team Building Techniques</i>
Manage Project Team	Tracking team member performance, providing feedback, resolving issues, and coordinating changes to enhance project performance	<i>Project Teams Resistance to Change Conflict Resolution</i>

The human resource management knowledge area focuses on the roles, responsibilities and reporting structures within the project organization structure and the project team. It also includes creating the project team, designing the team, team roles and recruitment. The next area focuses on team development which will be discussed in this book as; forming, storming, norming and performing, together with team building techniques. The last section focuses on managing and leading the team together with resistance to change and conflict resolution.

9. Project Communication Management

Project communication and networking skills are the life blood of project management leadership and, therefore, a key knowledge area to understand.

DEFINITION

The PMBOK defines **project communication management** as; ‘...the process required to ensure proper collection and dissemination of project information. It consists of communication planning, information distribution, project meetings, progress reporting and administrative closure...’

The PMBOK subdivides project communication management into four sections. The right hand column indicates the chapters where the topics are discussed.

	Topics	Chapters
Communication Planning	Determining the information and communication needs of the project stakeholders	<i>Working with Stakeholders</i>
Information Distribution	Making needed information available to project stakeholders in a timely manner	<i>Burke 2006</i>
Performance Reporting	Collecting and distributing performance information. This includes status reports, progress measurements, and forecasting	<i>Burke 2006</i>
Managing Stakeholders	Managing communication to satisfy the requirements of and resolve issues with project stakeholders	<i>Working with Stakeholders</i>

The communication knowledge area, firstly, focuses on developing the project's lines of communication and content (who, what and when). It then considers how to communicate the information (document control). The next areas discuss methods of reporting project progress and forecasting. And, the last area, focuses on keeping the stakeholders informed and resolving any conflicting issues.

10. Project Management Leadership

It needs to be stressed in this first chapter that the project manager needs a portfolio of managerial and technical skills – it is not a case of one skill being more important than the others. It is essential that the project manager is competent in all the four areas identified in figure 1.3; technical skills, project management skills, project leadership skills and project entrepreneurial skills to make the project.

Right from the start it should be recognised that project management skills and project leadership skills go hand-in-hand – you cannot have one without the other – they are like links in a chain. It may be argued that one skill is more important than another at certain times in the project, but for a project to be successfully managed from start to finish, then the project manager must be proficient in all the skills.

A person does not suddenly become a project manager, it is likely their career path will be through a technical field, and with experience and technical ability they will be appointed to manage the project team and manage the project. The transition from a project manager to a project leader requires the ability to understand the past, attend to the present, and look to the future. The project environment is often chaotic, the leader needs to have a clear vision of where they want to go, and a clear strategy of how to get there.

Project management training used to focus mostly on the tools and techniques associated with planning and controlling a project. Today the focus is on building high-performance teams, managing the client's expectations and managing the project's business plan. This book will focus on the project manager's **people skills** and **leadership skills**.

Key Points:

1. Project management skills can be subdivided into technical skills, project management systems, leadership skills and entrepreneurial skills.
2. Companies use project teams because they integrate the different departments and the work can be fast tracked.
3. The PMBOK subdivides project management into nine knowledge areas - of the nine two apply to project management leadership: human resource management and project communication management.

Exercises:

1. Define a project and define project management and discuss how they relate to your company's work.
2. Identify the technical skills, project management systems, leadership skills and entrepreneurial skills you use to manage your projects.
3. Discuss why your company uses project teams.

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