Rory Burke and Steve Barron

PROJECT MANAGEMENT LEADERSHIP

building **CREATIVE** teams

second edition

WILEY

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Contents

Foreword

Project management and project leadership are two sides of the same coin. They are inter-linked, and need to be if a project is to be delivered on time, to budget and of the desired quality. Many project managers pay too much attention to managing and spend too little time leading. As with everything in life, finding the right balance is key.

The right balance between managing and leading comes with experience, and often a painful experience due to lack of awareness or desire to find the right balance. For sure, both are necessary, but alone each is not sufficient. To be clear I am not speaking about management and leadership; these are roles with specific activities. Such roles are occupied by people who seek to be seen as project managers or project leaders respectively. This attribution by others gives emphasis to followers, and the importance of how others perceive their behaviors and identities. Warren Bennis (*On Becoming a Leader* (1989:2) Perseus Books, Cambridge, MA) usefully captured this attribution process thus: 'leadership, like beauty, is hard to define but you know it when you see it'. To be seen as a 'beautiful' project leader or project manager requires that the individual pay attention to leading and managing. How the leading, or managing, is done shapes the attribution of how beautiful someone is seen to be. But here's the thing . . . both managing and leading are processes, and such processes are learnt. Everyone has the potential to become better at leading and managing. As such, the born versus made debate is simply irrelevant. We are what we are and we can all be better. To be better requires us to think and learn about becoming better and applying such learning to test and develop such processes.

To help us further we need to clarify the difference between managing and leading. In a simple way, managing could be considered as the process of **'sense-making'**: understanding the situation and appreciating the necessity of organizing resources to achieve objectives. Leading is more oriented toward **'sense-giving'**: helping people to understand objectives, inspiring them to achieve a higher performance through commitment to a vision and guiding them along the journey to overcoming obstacles.

It should be clear that one without the other will simply not get the desired results. This book has been written with this balance clearly in mind. It is a clear and straightforward structure, which will help guide the reader toward becoming better at both project management and project leadership. The number of useful texts that try to achieve this much-needed balance, and pay clear attention to the process perspectives of project management and project leadership, are too few.

Dr Steve Kempster
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Authors' Notes

Rory Burke

Project Management Leadership focuses on key project management leadership principles and theories, and explains how they are used in the project environment. This book has been updated to enable the project management leader to lead the project team, and the project participants to achieve the project objectives, as outlined in the project charter and business case.

Project success is usually expressed as having completed the project deliverables on time, within budget and to the required quality, but, from a leadership perspective, project success might be expressed as having motivated and inspired the project team members into giving their best performance toward completing the project objectives. It is, therefore, essential that project managers understand the features and characteristics of project leadership techniques so that they can manage the process effectively.

There have been two major changes to the project environment in recent years, which have motivated significant changes in the project manager's leadership style, namely: the introduction of project teams working within a matrix-type project organization structure; and a general increase in the workforce's level of education, ability and expectations.

These organizational changes mean that project managers might not have full line authority over the resources they need to carry out the work. Project managers must, therefore, develop negotiation and networking skills to enable them to obtain labor and equipment from the resource providers.

The other factor motivating a change in leadership style is the improved ability of the workforce, which is now better educated, more experienced, more competent and more articulate. This improved competency has led to higher expectations and increasing demands, the workforce having a greater say in their working environment, and being more prepared to question their project management leader's instructions.

These two factors alone have encouraged a dramatic shift from the command and control leadership style of yester-year to a more participative and collaborative approach.

Project Management Leadership has been written to support courses and modules in project management and project leadership. The text is structured in line with the PMBOK and APM BoK, and includes plenty of examples and exercises, together with PowerPoint presentation slides for lecturers.

Writing this book has been a joint effort with my co-author Steve Barron. Steve has done an amazing job writing his chapters while holding down a full-time job at Lancaster University. A special thank you goes to Sandra Burke and Jan Hamon for proofreading the text.

Rory Burke

Steve Barron

In the years that have elapsed since the first edition of *Project Management Leadership*, the need for an effective understanding of leadership within project contexts seems to have increased. There is even more talk about leadership having an important role for project managers, who are recognizing the need to develop leadership skills. Indeed, the nature of projects as transient, unique and requiring change-related activities, demands a high level of leadership practice.

It has been wonderful to receive such positive feedback from the first edition. It seems to provide a useful resource for teachers who want a single source for leadership-related ideas and methods. For many students it accomplishes the same purpose, though it is also presented as an accessible introductory text that can lead to more advanced material where necessary.

In the first half of my career I worked in industry and was privileged to work with inspirational leaders such as Dr Carl Loller, Peter Beckett and Steve Wilkinson, and I want to thank them here

for their support and guidance; it is still very much appreciated. I was able to learn from them (and others) about leadership and adapt their style and behaviors into my own leadership style. I hope this book provides a good starting point for those embarking on this journey.

Often, when I am in a difficult situation, I think about what one of those inspirational people would do or say at this point. This always helps me to see the situation in a different way and gives me a new approach. It is wonderful to hear their voices in my head as I imagine how they would deal with my difficult situation. I continue to thank Stephen Doughty, Martin Wells and Steve Kempster for providing some of those enduring voices.

Also, I need to thank Rory and Sandra Burke, my co-conspirators in this renewed endeavor. I have been delighted to work with them again and have learnt so much from both of them. Once again, I must thank Rory for his expertise, persistence and patience while we have revisited the content of this book from opposite sides of the globe.

Finally, as a teacher, I note that much of my continual learning comes from students of project management with whom I have had the honor and privilege of working over the last fifteen years at Lancaster. I wish you all well in your future careers.

Therefore, I want to dedicate this edition to past, present and future students of project management who recognize the need for leadership skills within this challenging and rewarding vocation.

Steve Barron
Lancaster, August 2013

Introduction to Project Management Leadership

Learning Outcomes

After reading this chapter you should be able to:

- Recognize the portfolio of skills a project manager needs to complete projects successfully.

- Understand the leadership content of the project management body of knowledge.

Project management leadership is one of the special project management techniques that enable the project manager to lead and manage the project team, project stakeholders and other project participants. Project management leadership is a process by which a project manager can direct, guide and influence the behavior and work of the project team towards accomplishing the project objectives. It is, therefore, essential that the project manager understands the characteristics and features of project management leadership to be able to apply the process effectively.

This chapter will introduce the project environment, and the relationship between project management leadership and the other project management disciplines and techniques. It will indicate how the project lifecycle can be used to show where project leadership and its associated

techniques can be used effectively as the project progresses along the lifecycle. This chapter will also introduce key bodies of knowledge and identify the knowledge areas relating to project management leadership and project teamwork.

The project manager's challenge is to strike a balance between the appropriate type of leadership skills and styles, and the level of project management systems – both are required for project success.

How to Use This Book

This book will subdivide **Project Management Leadership** into a number of sections for ease of presentation and understanding.

The first part introduces the leadership skills and styles that form the backbone of project leadership:

- Project governance and ethics.
- Project leadership BoK.
- Project organization structures.
- Leadership behavior.
- Leadership styles.
- Power to influence.
- Resistance to change.
- Emotional intelligence.
- Leadership vs. management.
- Working with stakeholders.

The second part introduces project teams and shows how to select, build and lead a project team:

- Project teams.
- Teams vs. groups.
- Team roles.
- Team development phases.
- Team-building techniques.
- Coaching and mentoring.

The third part groups a number of key related topics that underpin the project leader's competence:

- Negotiation skills.
- Motivation.

- Delegation.
- Communication.
- Conflict resolution.
- Problem solving.
- Decision making.
- Facilitation for project leaders.
- Knowledge management.

1. History of Project Management

The history of modern-day project management leadership can be dated back to the 1950s when a number of companies started appointing one person to manage their projects (see Table 1.1). This particularly applied to multi-disciplined projects in remote locations.

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

1950s	In the 50s the project management leader'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 led and managed by a person on the ground.
1960s	In the 60s nearly all of the special planning, control techniques and project management processes we use today were developed on military and aerospace projects. This included PERT, CPM, matrix organization structures, scope management, configuration management and earned value. The matrix organization structure was found to be particularly suited to managing multi-disciplined projects.
1970s	In the 70s the emphasis of the project lifecycle progressively moved from the implementation phase (where most of the resources were used) to the front-end design and development phase, which had the greatest potential for adding value and the least amount of cost for making changes.
1980s	In the 80s the development of the PC and project management software revolutionized planning and control calculations. Because a common database was used, it forced 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 office.
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 center of excellence for project management leadership.
2000s	With each passing decade the emphasis and focus on project management leadership has been influenced by the project environment (facilities, types of projects and education). The focus is on understanding how people are involved in projects and how issues such as uncertainty and ambiguity make projects into complex situations. As a result, there is a growing need for project management leadership skills – hence the purpose of this book is to introduce the latest project leadership tools and techniques used to manage successful projects.

2. Project Manager's Portfolio of Skills

Projects are not performed in a vacuum; they are influenced by a wide range of internal and external factors, constraints and stakeholders. The project management leader will 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 and refer to Table 1.2.

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

Table 1.2: Project Management Leader's Portfolio of Skills – shows the project management leader's portfolio of skills subdivided into technical management, project entrepreneurship, project management and project leadership

Project Management Leadership			
Technical Management	**Project Entrepreneurship**	**Project Management**	**Project Leadership**
The project manager needs **technical skills,** together with product knowledge, to design and make the project or product. The focus is on solving technical problems, design solutions and design configuration arrangements.	The project manager needs **entrepreneurial skills** to spot and exploit marketable opportunities, to find innovative solutions to company problems, together with networking skills, to communicate with a wide range of useful contacts and stakeholders.	The project manager needs **project management skills** to set up the project management system, which will help plan and control the project throughout the project's lifecycle. The focus is on achieving the objectives outlined in the project charter.	The project manager needs **project leadership skills** to influence and lead the project participants, together with a vision, strategy and determination to drive the project. The focus is on facilitation, negotiation, influencing, networking and communication.
Technical skills Competency Product knowledge	Spot opportunities Solve problems Networking	Project charter Scope management Planning and control system	Vision Values Strategy

Technical management skills are responsible for the functioning of a project and, therefore, are a key part of configuration management and scope management, which includes the project feasibility study, build method and scope changes.

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

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

The project management leader can also benefit from entrepreneurial skills during the execution 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. With entrepreneurial skills the project management leader will be able to incorporate the latest technology into the project's configuration, tailor the project to appeal to the target market and enhance the project to maintain the company's competitive advantage.

Project Management Skills: The project management leader's project management skills are required to set up and run a project management system, which will help plan and control the project. The project management system is the backbone of the planning and control process, which might need to be tailored to meet the needs of the project sponsor, 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 an 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 conceptual skills and the ability to think analytically, break down problems into smaller parts (WBS), recognize the logical relationships between activities (CPM) and the implications between any one problem and another (interfaces), deal with ambiguous situations (risks) and change management skills.

Project Leadership Skills: The project management leader's project leadership skills are the driving force behind the project, where the project leader is enthusiastically communicating the vision, outlining the strategy and empowering and inspiring the project participants. As the single point of responsibility, the project leader is responsible for coordinating the input from all stakeholders and addressing their needs and expectations. The sources of the following definitions are explained in the next section.

PMBOK (PMI) defines **Leadership** as: *Developing a vision and strategy, and motivating people towards achieving that vision and strategy.*

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 towards achieving project success. It enables the project to proceed in an environment of change and uncertainty.*

If the project is using a matrix-type organization structure, the project leader might not have formal authority over the resources required to complete the project. In this situation, the project leader needs to develop influencing and negotiation skills to secure the best deals with the resource providers.

It is the project leader who needs to ensure that the project has the **RIGHT** people to do the job, that everyone **CAN** do their job, and then ensure that everyone **IS** doing their job. To achieve these leadership objectives the project leader will need a range of leadership skills: team selection, team building, training, coaching, mentoring, delegation, motivation and performance monitoring and evaluation.

The project leadership skills, in some respects, form a catch-all situation, where the project leader is responsible for ensuring all of the management skills work together (technical, entrepreneurial and managerial).

3. Project Management Body of Knowledge

As the discipline of project management has grown and become established, so a number of institutions and associations have been formed to represent the project management practitioners, with respect to education, professional accreditation, ethics and maintaining a body of knowledge.

The purpose of having a 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 regarding their value and usefulness. This 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.

There are a number of institutions, associations and government bodies that have produced, for example, a body of knowledge, unit standards and/or competency standards. The two that will be referred to in this book are the:

- Project Management Institute (PMI).
- Association for Project Management (APM).

> The PMBOK (PMI) 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.*

The PMI Project Management Body of Knowledge (PMBOK) is one of the cornerstones of project management, so it is important to look at this body of knowledge in order to investigate the knowledge areas included within project management. The PMBOK (PMI) subdivides project management into ten knowledge areas (see Table 1.3).

Table 1.3:   (PMI) PMBOK Knowledge Areas – shows the body of knowledge subdivided into ten knowledge areas

Project Scope Management	Project scope management includes the processes required to ensure that the project includes all of the work, and only the work, needed to complete the project successfully. It is primarily concerned with defining and controlling what is and what is not included in the project, thus meeting the project sponsors' and project stakeholders' goals and objectives. It consists of authorization, 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.

Table 1.3 (Continued)

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, cash flow 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, quality control and continuous improvement.
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 organization 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, document control and administrative closure.
Project Risk Management	Project risk management includes the process concerned with identifying, analyzing 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.
Project Stakeholder Management	Project stakeholder management includes the processes and activities that enable the project manager to ensure that the needs and expectations of the project stakeholders and interested parties are being addressed.

The (PMI) PMBOK does not include a special knowledge area for 'project leadership' but, of its ten knowledge areas, there are three knowledge areas that focus on the human factors of project management, namely: *human resource management*, *project communication management* and *project stakeholder management.*

3.1 Human Resource Management

The (PMI) 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 organization planning, staff acquisition and team development.*

Table 1.4: The Four Knowledge Areas Involved in Human Resource Management

Knowledge Area	Topics	Topic Covered in these Chapters
Plan Human Resource Management	Identifying and documenting project roles, responsibilities and reporting relationships, as well as creating the staffing management plan.	4 – Project Organization Structures 12 – Project Teams
Acquire Project Team	Obtaining the human resources needed to complete the project.	14 – Team Roles
Develop Project Team	Improving the competencies and interaction of team members to enhance project performance.	15 – Team Development Phases 16 – Team Building Techniques
Manage Project Team	Tracking team member performance, providing feedback, resolving issues and coordinating changes to enhance project performance.	12 – Project Teams 22 – Conflict Resolution

Human resource management is divided into four sections (see Table 1.4). The right-hand column of the table indicates the chapters where these topics are discussed.

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 (indoor and outdoor). The last section on managing and leading the team focuses on resistance to change and conflict resolution.

3.2 Project Communication Management

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

The (PMI) 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 (PMI) PMBOK subdivides project communication management into three sections (see Table 1.5). The right-hand column of the table indicates the chapters where these topics are discussed.

Table 1.5:   The Three Knowledge Areas Involved in Project Communication Management

Knowledge Area	Topics	Topic Covered in these Chapters
Plan Communications Management	Determining the information and communication needs of the project stakeholders.	11 – Working with Stakeholders
Manage Communications	Making necessary information available to project stakeholders in a timely manner.	21 – Communication
Control Communications	Collecting and distributing performance information. This includes status reports, progress measurements and forecasting.	21 – Communication

The communication knowledge area 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 area discusses methods of reporting project progress and forecasting. The last area focuses on keeping the stakeholders informed and resolving any conflicting issues.

3.3 Project Stakeholder Management

For a project to be successful it is critical that the project's stakeholders are identified and their needs and expectations assessed so that a leadership plan can be developed. Project stakeholder management is subdivided into four sections (see Table 1.6).

Table 1.6:   The Four Knowledge Areas Involved in Project Stakeholder Management

Knowledge Area	Topics	Topic Covered in these Chapters
Identify Stakeholders	Identify who is impacted by the project and who has an impact on the project.	11 – Working with Stakeholders
Plan Stakeholder Management	Plan how to determine and manage the stakeholders' needs and expectations.	11 – Working with Stakeholders
Manage Stakeholder Engagement	Engage with the stakeholders and encourage them to be involved in the project's decision-making process.	11 – Working with Stakeholders
Control Stakeholder Engagement	Monitor and control the stakeholder engagement.	11 – Working with Stakeholders

This new knowledge area recognizes that stakeholder management is more than just assessing needs and expectations – there must also be an appropriate level of engagement with the stakeholders so that they can be involved in the project activities and the decision-making process.

3.4 APM BoK

The APM BoK 6ed (2012) subdivides project management into four main sections to provide a flexible toolkit from which to select the most appropriate management approach:

Context
People
Delivery
Interfaces

This book focuses on the **'People'** section, which is ultimately about motivating and coordinating people into achieving the project objectives. To achieve the project objectives, as outlined in the project charter, the project management leader needs various interpersonal skills to be able to interact with other people. These are outlined in the knowledge areas shown in Table 1.7.

Table 1.7:   APM BoK 6ed – shows the APM BoK's people knowledge areas

Knowledge Areas	Topics	Topic Covered in these Chapters
Leadership 1	To establish a vision and direction for the project team to follow.	3 – Project Leadership BoK
Leadership 2	To align the project team to a common purpose.	12 – Project Teams
Leadership 3	To empower and inspire the project team to give its best performance.	3 – Project Leadership BoK
Leadership 4	To influence the stakeholders.	11 – Working with Stakeholders
Communication	To establish the lines of communication as the means by which project information and instructions are exchanged.	21 – Communication
Conflict	To identify and address the differences between two parties.	22 – Conflict Resolution
Delegation	To give a person the responsibility to act on behalf of the project manager.	20 – Delegation
Power to Influence	To influence the behavior and actions of others in order to achieve the project objectives.	7 – Power to Influence
Negotiation	To reach a mutual agreement between two parties.	18 – Negotiation
Teamwork	To guide the project team into working in collaboration and cooperation towards a common goal.	16 – Team-Building Techniques 15 – Team Development Phases
Ethics	To establish an ethical framework that sets recognized standards of conduct and behavior.	2 – Project Governance and Ethics

The APM BoK defines interpersonal skills as the means by which people relate to, and interact with, other people. Therefore, project sponsors, project management leaders and team members need to understand how to apply interpersonal skills. They must know the limits of their own ability and ensure that they are constantly reassessing their strengths and weaknesses so that they can strive to achieve their full potential.

The APM BoK encourages a broad understanding of the main leadership styles (certainly the styles covered in this book) together with the simple approach of understanding the differences between transactional leaders and transformational leaders (see Table 1.8).

Table 1.8: Differences between Transactional Leaders and Transformational Leaders

Project Leadership	
Transactional Leaders	**Transformational Leaders**
Transactional leaders ensure that requirements are agreed upon and that the rewards and penalties for achievement, or lack of it, are understood. Transactional leadership is an exchange process to do with setting objectives and plans: *'do this and you will be rewarded thus'.*	Transformational leaders do everything possible to help people succeed in their own right and become leaders themselves. They help those people to transform themselves and achieve more than was intended or even thought possible.
Transactional leaders use the traditional project management approach of motivating the project team members to achieve expected levels of performance by helping them to: • Recognize task responsibilities. • Identify goals. • Develop confidence in meeting desired performance levels. • Understand how their needs and the rewards they desire are linked to goal achievement.	Transformational leaders are visionary leaders who: • Have a vision for the future which excites and converts potential followers. • Try to convince others of their vision and direction. • Are always visible and act as a role model. • Are continually motivating and rallying their followers. • Are constantly doing the rounds, listening, smoothing and enthusing.
Transactional leaders develop structures that clarify what is required of the team members. These leaders reward team members who follow their instructions. However, when things go wrong the team members are considered to be personally at fault, and are punished for their failure. This approach emphasizes getting things done within the umbrella of the rules and doing everything as per the instructions. As such, this approach is more commonly seen in large, bureaucratic organizations where political considerations are part of daily life.	This participative approach enables project leaders to encourage the team members to be part of the process and inspire them to go beyond their task requirements.

4. Project Lifecycle

The project lifecycle (see Tables 1.9a and 1.9b) is introduced here in the first chapter because it will be used extensively throughout this book to show how different leadership parameters change over the different phases.

Table 1.9a: Project Lifecycle – shows the first part of a ten-phase lifecycle from corporate vision to project disposal

Corporate Vision and Values Phase	Corporate Requirements Phase	Business Case Phase	Project Feasibility Study Phase	Project Definition Phase
The corporate vision and values phase establishes the corporate vision and values, which outline the purpose and long-term aims of the company, together with details of the company's culture, philosophy and the way the company intends to do business.	The corporate requirements phase investigates what the company needs to do to maintain competitive advantage and stay in business, and what opportunities the company could exploit to help achieve its long-term corporate objectives.	The business case phase outlines corporate strategy, which includes how to solve corporate problems, requirements and opportunities, by setting forth a number of proposals. The business case seeks to justify the use of company resources when pursuing each course of action.	The feasibility study phase assesses the business case in order to confirm it is feasible to manufacture and implement within the identified constraints. It confirms how well the business case(s) addresses the client's requirements and aligns with the corporate vision.	The project definition phase uses the guidelines from the feasibility study to design the project, outline the build method and develop detailed schedules and plans (baseline plan) for all the knowledge area topics that are required to make the project.
Output: Corporate vision and values statement	**Output:** Corporate requirements	**Output:** Business case	**Output:** Feasibility study report	**Output:** Project design and project plan

The project lifecycle structure will be used in this book to subdivide project leadership and responsibility by project phase. This is a logical approach because, by definition, each phase produces a different set of deliverables and, therefore, one would assume each phase would require a different set of skills and a different type of team requiring a different style of leadership.

Table 1.9b: Project Lifecycle – shows the second part of a ten-phase lifecycle from corporate vision to project disposal

Project Execution Phase	Project Commissioning and Handover Phase	Operation Startup Phase	Project Upgrade Phase	Project Disposal Phase
The project execution phase uses the design and project plan from the definition phase to make the project. An execution strategy is developed to strike a balance between making the project, using corporate resources and outsourcing.	The project commissioning and handover phase inspects and confirms that the project has been made to the approved design, then hands over the project to the client for operation.	The operational startup phase implements the new facility, product or service into the operational environment. It is the project sponsor's responsibility to ensure that the operation of the project realizes benefits for the client organization. From the client's perspective this is the main purpose of the project.	The half-life upgrade phase incorporates the latest technology, systems and fashions to keep the project running efficiently and competitively.	The disposal phase brings the project to a formal closure by dismantling the facility and restoring the environment to its original state.
Output: Certificate of completion	**Output:** Project closeout report	**Output:** Business case closeout report	**Output:** Upgrade closeout report	**Output:** Disposal closeout

The project lifecycle structure interlinks the project phases by a common thread to ensure that all aspects of the project refer back to the corporate vision and requirements. This particularly applies to governance and ethics, which outline how the company intends to do business and ensure that the project risks are within the acceptable corporate level of risk.
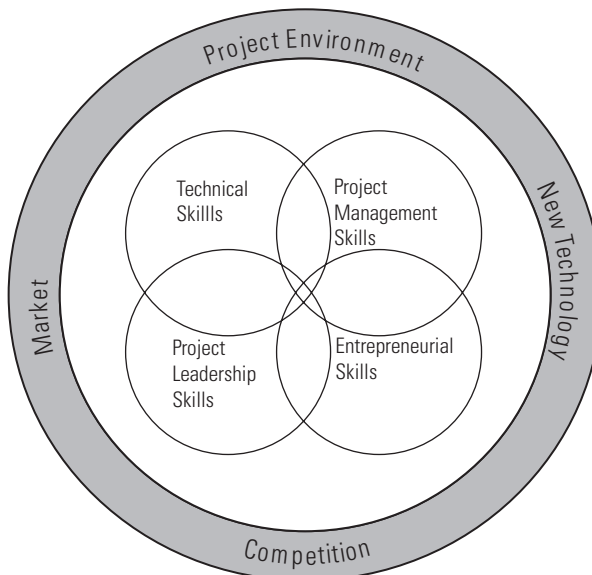
5. Project Management Leadership

This first chapter has made a point of highlighting that the project manager needs a portfolio of technical, managerial, leadership and entrepreneurial skills – it is not a case of one skill being more important than the others. Figure 1.1 shows it is essential that the project manager is competent in all four areas – technical skills, project management skills (including project systems), project leadership and project entrepreneurship – in order for the project to be a success.

Figure 1.1 shows that the project manager needs technical skills, project management skills, project leadership skills and entrepreneurship skills to be effective. The circles are drawn of equal size, implying that they are of equal importance.

From the start it should be recognized 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 might be argued that one skill is more important than another at certain times in the project but, for a project to be managed successfully from start to finish, the project manager must be proficient in both sets of skills.

A person does not suddenly become a project manager. It is likely that they will specialize in a technical field but, with experience and technical ability, they will be appointed to manage a project team and manage a project. The transition from project manager to project leader requires the

Figure 1.1:   Intersecting Skills