

Project leadership: skills, behaviours, knowledge and values



Executive summary

This research has sought to draw out project leadership competences from the perspective of practising project leaders, aspiring project leaders, heads of profession, project sponsors and clients. The aim of this research report is to help focus, develop and refine our understanding of project leadership so we can support continued capability building for project professionals and their organisations. Our literature review produced an exhaustive array of information and models regarding general leadership competences, and highlighted the relative lack of literature for project leadership. Against this background, this report seeks to progress and inform the area of leadership in projects.

We have focused on project leadership from the perspective of the project leader, rather than from the perspective of the organisation. In doing so we have identified skills, behaviours, knowledge and values that project leaders believe they need in order to deliver major, complex projects successfully. To compile this report, we conducted in-depth interviews with 38 individuals across five multinational organisations (BAE Systems, IQVIA, Jacobs, Shell and Siemens). These organisations were chosen because of their reliance on complex projects for the delivery of strategy and performance, and the individuals for their substantial knowledge and experience of project delivery, and their range of perspectives. The interviewees held and had experience of a wide variety of roles, from the aspiring leaders delivering smaller projects to the most experienced project leaders (responsible for £1bn+ budget major, complex projects), heads of profession, project sponsors and clients.

From our analysis of the interviews, we conceptualised project leadership under five distinct headings. We believe that project leadership is about:

1. the leader understanding themselves, including their strengths, weaknesses, capabilities and touchpoints, and how their experience can help them work with their team to deliver the project;
2. constructing the project organisation, from roles and responsibilities to the organisational culture, with the intent of enabling it to perform well and deliver outcomes and benefits;
3. establishing, building and developing the project team with two intents:
 - a. the delivery of the project
 - b. the creation of project delivery capability for future projects;
4. delivering the outcomes and benefits of the project by looking to the future, as opposed to managing the project schedule, resources and immediate deliverables; and
5. understanding the wider context in which the project is to be delivered, and the nuances and pitfalls facing the team in the wider environment. It is often about guiding the project through difficult, complex and turbulent environments from a technical, emergent and sociopolitical perspective.

From our synthesis of the interviews, we have developed eight project leadership survival skills:

1. **Anticipating** – being prepared for what could knock the project off course next.
2. **Judgement and decision-making** – making timely decisions with incomplete information.
3. **Seeing it all** – feeling the totality of what is going on inside and outside the project.
4. **Building credibility and confidence** – belief in the leadership and the team.
5. **Being organisationally intelligent** – knowing when and how to engage with the organisation.
6. **Learning** – being open-minded, and reflecting on and developing personal and team performance.
7. **Resolving conflicts and collaborating** – building a common purpose, despite the rules.
8. **Creating the project culture and environment** – deliberately defining and creating the culture and environment to succeed.

Finally, there are three major implications from this project:

1. The skills required of a project leader are very different to the skills developed for project management. Leadership is more about the future – setting direction, dealing with people and working outside the project with stakeholders – whereas many aspects of project management are inward- and backward-looking. Project leaders have to let go of many, if not all, of their project management activities. So, to become a project leader can be, for some, a difficult transition.
2. Project leadership is different to general leadership. Besides the pace of change, project leaders have to deal with creating, organising, developing and dispersing the project team and the project organisation. Project leaders have, in many respects, much greater autonomy than people realise. They operate in a much more unstable and volatile environment and have to make fast judgement calls in ambiguous situations. Although many project leadership skills overlap with general leadership skills, we have concluded that simply developing general leadership skills is insufficient preparation for developing the leadership needed for major, complex projects.
3. There has been an overemphasis on project management skills in many of the competency frameworks we have seen. Although this is changing, greater emphasis needs to be placed on developing our understanding of project leadership skills and competency frameworks.

“We hope that this report will help progress understanding of the leadership of projects”

We hope that this research and resulting report will help progress understanding of the leadership of projects. Further, we hope that it will be useful for existing and future project leaders to reflect on their personal skills, to inform organisations in the development of their future project leadership capability, and for project professional bodies to consider the competence range for their bodies of knowledge, competency frameworks and spectrum of accreditations and qualifications.

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BAE Systems: a global defence, aerospace and security company employing around 83,100 people worldwide. BAE Systems' wide-ranging products and services cover air, land and naval forces, as well as advanced electronics, security, information technology, and support services.



IQVIA: a leading global provider of advanced analytics, technology solutions and contract research services to the life sciences industry. Formed through the merger of IMS Health and Quintiles, IQVIA applies human data science – leveraging the analytic rigour and clarity of data science to the ever-expanding scope of human science – to enable companies to reimagine and develop new approaches to clinical development and commercialisation, speed innovation and accelerate improvements in healthcare outcomes.

JACOBS *Jacobs*: one of the largest and most diverse providers of technical, professional and construction services, including all aspects of architecture, engineering and construction, operations and maintenance, as well as scientific and specialty consulting. Its 77,000 employees in over 400 locations around the world serve a diverse range of companies and organisations, including industrial, commercial and government clients across multiple markets and geographies.



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APM research sponsor

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"Project leadership is more art than science"

1. Introduction

What is special about the leadership of projects, and why is it important? These were the key questions that drove this research. However, as we started a dialogue with those in the profession, a number of other questions emerged:

- What are the critical elements of project leadership that make the difference?
- Does project leadership differ from the more generic organisation leadership? If so, how?
- What are the implications for organisations that deliver complex and major projects?

These questions prompted this research and have implications for the project community, delivery organisations, and the process of delivering major and complex projects across industry and government, regardless of geography.

The aim of this report is to help focus, develop and refine our understanding of project leadership so we can inform capability building for project professionals and their organisations. It is set out in a number of sections:

- **1. Introduction:** why the topic of project leadership is important and urgent, and a review of mainstream literature that can help inform views of project leadership, and literature that covers the leadership of projects.
- **2. About the research:** the multinational private-sector organisations that volunteered interviewees to take part, and how we approached the research.
- **3. Findings:** the two sets of findings resulting from the interviews – the first, a distillation of the raw data into five broad categories; the second, a more nuanced analysis to highlight eight critical attributes of project leadership.
- **4. Comparing competency frameworks:** a comparative analysis of 15 competency frameworks covering project leadership competences, project management competences and general organisation leadership competences.
- **5. Implications:** what we can draw from the research for existing and aspiring project leaders, for their organisations, and for the wider project community.
- **6. Conclusions:** what we can conclude from this research, and thoughts on follow-on research.

1.1 Why this topic?

Organisations are increasingly using projects as a way to deliver high-value and complex strategic initiatives, services and products. At the same time, much of the experience and talent we've relied on to date has typically come from a technical science, technology, engineering and mathematics (STEM) background, or is reaching retirement age.

In today's context – think climate change, disruptive business models, refugees and economic migration, artificial intelligence, globalisation, extended supply chains, data harvesting, and exploitation of new energy sources – leadership is about change. And this is how it connects strongly with the project world. We recognise that projects introduce change, especially major, complex projects involving infrastructure, digitisation and organisational transformation. At the same time, we're moving away from a preoccupation with project planning and control tools as the keys to success and towards the management and leadership of people and their performance. This is not an 'either/or' scenario, but rather a rebalancing of the capabilities needed.

We wanted to identify, highlight and share those particular project leadership competences at a time when projects are becoming a strategic issue for organisations and for 'mega-projects' commissioned by governments and other clients. With projects representing high costs, becoming more complex and increasingly using extended supply chains and multi-geography virtual teams, they also represent high risk.

As the number of major projects increases around the world, the pool of individuals with the necessary experience, skills and behaviours seems to be getting smaller (Arnold, 2009). The UK government calculates that over 90 per cent of policy (and over £500bn of spend) is now delivered through major projects. But despite considerable investment and attention, the government's Public Accounts Committee (2016) identified that 30 per cent of major projects still report red or red/amber prospects for delivery. PMI (2017) estimates that, by 2027, "employers will need 87.7 million individuals working in project management-oriented roles" worldwide and across sectors, showing a dramatic upswing in demand for project professionals and providing a substantial opportunity. Its ideal skill set for project professionals highlights technical project management, strategic and business management, and leadership.

Projectification studies conducted in Germany, Norway and Iceland have suggested that the national projectification level is around 33 per cent of each country's GDP, with national and sectoral variations. Despite a growing body of literature, very little data and evidence exist on projectification in the UK. To meet this challenge, APM is working with PwC to design a methodology to measure the contribution and impact of projects and project management to the UK economy in terms of gross value added and numbers employed. This study, to be published in late autumn 2018, should provide invaluable insight into the contribution of project management and the size of the project profession.

Simcock (2011) recognised that leadership is a required part of projects: "... the demand for leadership within the profession becomes more pressing as projects become more complex". This focus on the human factors underpinning success comes at a time when project leadership is becoming a strategic issue for businesses and government, and at a time when the pool of people with the necessary experience and behaviours needed to successfully run complex, multifaceted and interconnected projects isn't expanding at the rate required to keep up with demand. The demonstration of leadership capabilities should not be left only to those individuals with 'leader' in their job title, as the project community

is discovering, and every project professional needs elements of leadership capability to be effective. These are some of the concerns that prompted this research, which also contributes to the emerging thought around project success.

We believe that the identification of particular competences leading to an improvement in project leadership capability will have a significant impact. Further, project leaders have typically come from the STEM fields through technical career routes. Understanding project leadership capabilities that 'make the difference' can support organisations in widening the pool of future project leadership capability in line with predicted need through recruitment, retention, learning and development. It can also help develop the existing pool of talent.

We hope that this research will be practical and useful to those project professionals working in the field, those responsible for the development of project leadership capability and project communities, and the wider APM membership.

1.2 Literature review of leadership and project leadership

The simple question 'what is leadership?' has long been, and continues to be, debated. As part of this research, we sifted through the literature focused on general leadership, and that focused on project leadership. One thread throughout our literature review highlighted that the potential for achieving organisational success relies heavily on effective leadership setting the right environment, behaviours and cultural patterns. This view was reinforced by the comments of many of our interviewees.

We recognise that 'leader' is the noun and anointed title, whereas 'leadership' relates to certain competences. Those who have 'leader' in their title do not always demonstrate leadership competences; similarly, individuals who do not have hierarchical seniority or status can demonstrate leadership competences without the leader title. Schmitz (2011) remarked that "leadership is an action many can take, not a position only a few can hold", and we can identify where pluralistic or distributed leadership occurs at all levels of the organisation. Kouzes and Posner (2011) asked a key question from the perspective of the follower. The question was simply: "what personal values, traits and characteristics do you look for and admire in a leader, someone whose direction you would willingly follow?". They identified four attributes we require from a person we choose to follow: honesty, competence, inspiration and forward-looking.

At the most fundamental level, a leader is someone who has followers, as a result of either compliance by virtue of hierarchical authority, or commitment by virtue of influence or engagement. What qualities distinguish an individual as a leader? As part of this research, our literature review revealed that traditional views of leadership tend to focus on a formalised role, title or hierarchy, or on centralised command and control. These views have typically emphasised the personal heroic model of leadership, and have often reflected the cult of the individual. These views have continued to evolve, and new models of leadership have introduced an emphasis on social and ethical behaviour.

Below are listed some of the most recent influential thinkers on leadership, together with a brief synopsis of their models of leadership:

- Greenleaf (1977) has given us the concept of servant leadership, which focuses primarily on the growth and well-being of people and the communities to which they belong. This leadership model highlights putting the needs of others first to help them develop and perform as highly as possible.
- Burns (1978) introduced two types of leadership: transactional leadership, where the focus is on the relationship between leader and follower, and transformational leadership, which focuses on the beliefs, needs and values of followers.
- Chrislip & Larson (1994), Archer & Cameron (2009) and Ibarra & Hansen (2011) have all developed the idea of collaborative leadership, which brings together diverse communities to create real, measurable change. Research suggests that people typically choose to collaborate with others they know well or who have similar backgrounds, but that this homogeneity breeds insularity and conformism, which can act against innovation.
- Goleman et al (2002) have given us ideas around emotionally intelligent leadership, building on Goleman's original work into emotional intelligence. Here, the importance of strong leadership lies in the fact that it builds energy and focus, establishing the emotions and attitudes that percolate the organisation.
- George (2004) introduced the concept of authentic leadership, championing responsible leadership and "doing things right".
- Ancona et al (2007) presented the notion of incomplete leadership, squashing the myth of the "flawless person at the top who's got it all figured out". No single individual can stretch into every aspect of leadership that an organisation needs, but complementing that individual's strengths with others' capabilities by actively cultivating and coordinating them can fill the leadership 'gaps'.

"In 2015, Blanchard commented on two types of leadership: strategic and operational"

A few of the most-cited definitions differentiate between management processes (concerned with planning, budgeting, organising, staffing and controlling) and leadership processes (which involve establishing direction, aligning people, motivating and inspiring) (Kotter, 1996), and the operational and strategic ("Management is efficiency in climbing the ladder of success; leadership determines whether the ladder is leaning against the right wall"(Covey, 2017)). However, the lines between leadership and management are becoming more blurred. In 2015, Blanchard commented on two types of leadership: strategic and operational. He suggested that the former (which entails setting the vision and direction) is what we usually associate with leadership, whereas the latter (which entails how the vision is implemented) is thought of as management, but that the two are strongly interlinked.

More current areas of leadership research and thought are related to neuroscience. Rock (2013) originally coined the term 'neuroleadership', drawing on the latest research related to the brain to improve the quality of leadership and leadership development. The field is based on the neuroscience of four leadership activities, namely how leaders make decisions and solve problems, regulate their emotions, collaborate with others, and facilitate change.

Having taken a brief look at more recent mainstream leadership literature, how much does this play across the functional gap into projects? Available literature on project leadership is less abundant, but it does draw on the mainstream leadership literature, research and models. For many organisations, projects are used to deliver products, services and change, so they are critical to the future of the organisation. Given this, the lack of literature on this subject is surprising. However, recent and noteworthy additions to project leadership literature are Remington's (2011) research into successful leadership of complex projects; the 'eight lookings' (Coleman & MacNicol, 2015), which identify the different focuses of project leadership; Lewis's (2003) presentation of the personal traits, principles and examples of leaders and followers; Madsen's (2015) consideration of how to move from project management into project leadership; and McKinsey's 2017 report highlighting the mindsets necessary to deliver ultra-large projects at a time when they fall short of expectations. Finally, the International Centre for Complex Project Management's *Project Leadership* discussion paper (2018) comments that: "In the domain of complex projects, the importance of leadership cannot be understated. Leadership is necessary to deal with emergence, change management, maintain strategic outcomes focus, and work with multiple stakeholders to name the many other challenges for complex projects."

"Much of the project management and leadership literature draws attention to the importance of strong leadership at the project level and within the organisation on the business side"

So how does this inform delivery organisations and the wider project community? Much of the project management and leadership literature draws attention to the importance of strong leadership at the project level and within the organisation on the business side. Projects are themselves temporary organisations, established within the framework of the permanent organisation (Turner & Muller, 2003), and leadership should set the tone and the culture for that temporary organisation, as well as setting out the direction of travel and the storyboard. This is something highlighted strongly by the interviewees in this research. The project literature also recognises that contextual elements are crucial in influencing the progress and outcomes of projects (Lechler & Thomas, 2007) and, as will be seen from our findings in Section 3, this too is recognised to be important for those project leaders we interviewed.

2. About the research

This research was a collaboration between academia, industry and project practitioners, and so provides a broad and joint perspective. It focused on a range of related questions: what is good project leadership? What are good project leadership competences? What are these in terms of behaviours, preferences and traits? What helps to support these (and indeed, what doesn't)?

Our research also focused on what is special about the leadership of projects and where it differs from general leadership competences. Our working hypothesis was that there are specific and particular critical competences for project leadership, and that the 'one-size-fits-all' assumption that currently pervades mainstream general leadership competence literature and development programmes for the project community needs to be reconsidered.

“We deliberately targeted a cross-section of people in project leadership roles and those closely associated with project leadership”

2.1 Methodology

2.1.1 Organisations

To help this research, we approached five multinational private-sector organisations that undertake major and complex projects. BAE Systems, IQVIA, Jacobs, Shell and Siemens all agreed to help structure the research questions and provide a set of interviewees. We deliberately targeted a cross-section of people in project leadership roles and those closely associated with project leadership, recognising that major and complex projects are multifaceted and multilayered. We also wanted to consider project leadership from the perspective of the practitioner and their lived experiences.

This research was based on the experience of project leaders and those associated with project leadership in our five industry partners. These companies reflect a range of industry sectors relying on project professionals and methods to deliver major projects. We benefited from having a single partner from each sector, which minimised commercial confidentiality issues and ensured that participating organisations weren't in direct competition with each other. We ran workshops to feed back the results of our research to our industry partners, using their input and reflections to inform and validate our findings.

2.1.2 The interviewees

A total of 38 interviews were carried out. Together, these individuals have over 500 years of project experience. Interviewees were nominated by their respective organisations and covered a range of roles (see Figure 1) including project sponsor, project leader, aspiring project leader and client, in order to provide a breadth of perspectives. It was clear from the range of interviews with those individuals in project leadership roles that, in the majority of cases, their formal organisational title did not include the word 'leader'.

The interviews covered a range of roles (see Figure 1).

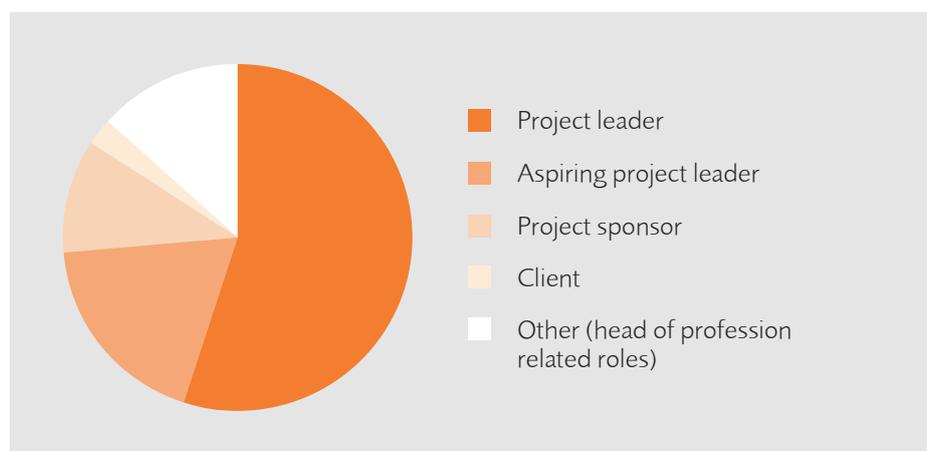


Figure 1: Range of roles interviewed

The interviewees ranged over geographies, although the majority were UK based (see Figure 2).

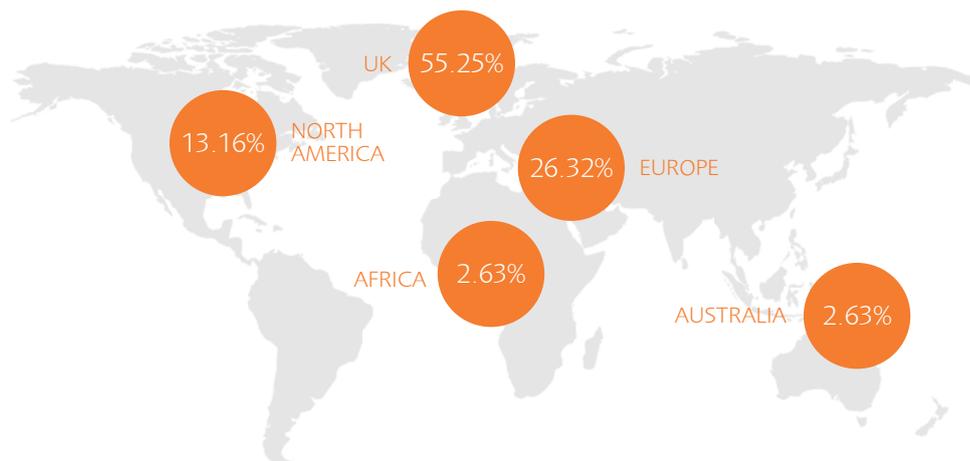


Figure 2: Geographical spread of interviewees

The interviews covered a range of ages (see Figure 3).

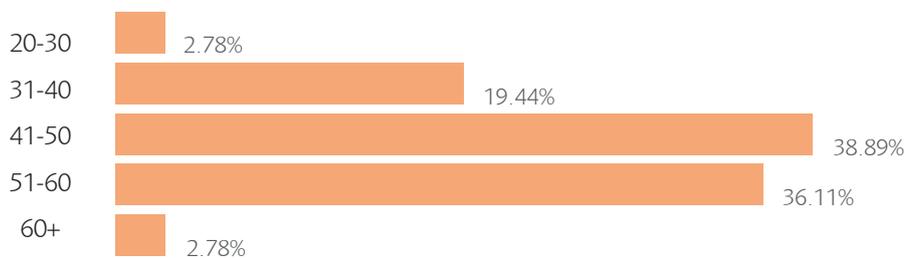


Figure 3: Age range of interviewees

The majority of interviewees identified themselves as male (see Figure 4).

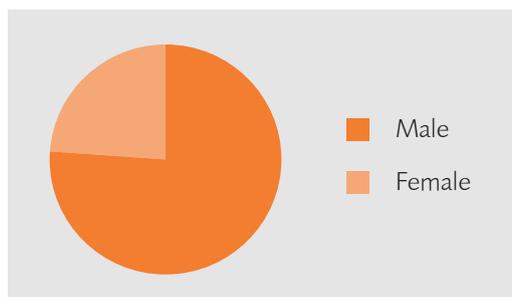


Figure 4: Sex of interviewees

2.1.3 Research approach

Although we had significant experience and understanding of project delivery before this research, which provided some initial preconceptions of what we might find, we decided to take an open-minded approach to prevent bias. We therefore undertook the interviews by adopting elements of two particular approaches:

- Grounded theory (Glaser & Strauss, 1999): this approach to research is based on a clean slate and open mind, with no prescribed framework or set of assumptions.
- Appreciative inquiry (Cooperrider & Whitney, 2005): this approach focuses on identifying what works well, so highlighting the best of 'what is'. In focusing on strengths, appreciative inquiry offers a different perspective from many approaches that focus on weaknesses and problems.

"The basic underlying approach was based on phenomenographic research, which is academically robust, but also a light-touch method"

However, the basic underlying approach was based on phenomenographic research, which is acknowledged as an academically robust approach, but is also a light-touch method. Using phenomenographic research, we attempted to build our understanding of project leadership by asking a series of simple questions about the subject with a few prompts. Here, we have developed our understanding of the subject directly from those being interviewed. We started by developing the core concepts and then moved on to creating a more nuanced view. This research approach has been used in the past by others (for example, Lupson, 2007) to better understand programme management.

To provide a little more detail, "... phenomenographic research attempts to see the phenomenon of interest from the perspective of the respondent, what is known as a 'second order' or experiential perspective (Ashworth and Lucas, 1998)" (Lupson, 2007). Therefore, it is aimed at the description, analysis and understanding of experiences; that is, research which is directed towards experiential description (Marton, 1981: 180). The basic intention of phenomenography is "to identify and describe the individual conceptions, and the hierarchy of conceptions, with the greatest degree of fidelity to individuals' experience of an aspect of reality" (Sandberg, 1997).

All interviews started with questions about age, sex, role title, time in role; they then moved into qualitative discussions, led by the interviewee's own perceptions and experience of project leadership, key project leadership competences, the differences between project management and project leadership, the differences between project leadership and general organisation leadership, difficulties faced when moving from 'management' to 'leadership', and particular challenges facing project leaders.

"Our approach was to encourage interviewees to talk through their own 'lived experience' and personal perspective"

Our approach was to encourage interviewees to talk through their own 'lived experience' and personal perspective, rather than to simply recount organisational or project good practice. Interviews were electronically recorded or, where this was not possible, documented by hand. Responses were analysed to identify common themes across interviews. Section 3 documents our findings at the meta level, dispersed with particularly insightful or representative anonymised quotes, identifies eight project leadership survival skills and illustrates a project leadership competency framework resulting from interviews. No individuals, nor the organisation they represent, are identified in the findings or themes outlined.

3. Findings

From analysis of the interviews, we have created two sets of findings:

- The first is captured in Figure 5 which represents the breadth of conversations with all interviewees across the five organisations, across all levels of experience. This is our initial conceptualisation of project leadership drawn directly from the interviews, and we will discuss this in Section 3.1.
- The second is a more nuanced analysis. Here, we have taken what was said in the interviews and interwoven these with the stories and examples given to create eight specific emerging themes of project leadership, which we have termed the eight project leadership survival skills. We will discuss these in Section 3.2.

From our analysis, we have also developed a project leadership competency framework based on the eight project leadership survival skills. We will discuss this in Section 3.3.

3.1 Project leadership

To briefly recap, we asked our interviewees to outline their understanding of project leadership, the competences of a good project leader and the difference they saw (if any) between project leadership and general organisation leadership, and between project leadership and project management. First, we will briefly discuss the differences.

When we asked whether there were substantive differences between project leadership and leadership in a general organisational setting, there were mixed responses. Some interviewees thought the only differences were the temporary nature of the organisation, and therefore the time frame of the leadership task. Others believed that there was a difference, but found it difficult to articulate precisely. A third group, which comprised the most senior and seasoned project professionals, gave the clearest insight and best examples. One interviewee remarked: "Leadership is leadership. The only difference is having project or technical knowledge which allows you to navigate projects. The skills are largely the same." Another commented: "Attributes such as being bold and testing yourself are more important in project leadership than in a general organisation leadership role."

"When we asked whether there was a substantial difference between project leadership and project management, there was complete agreement that they were different"

When we asked whether there was a substantial difference between project leadership and project management, there was complete agreement that they were different. However, it must be stated that the difference may have been slightly extenuated by the way we asked our questions. We started by asking about the interviewees' understanding of project leadership before talking about project management. When interviewees reached the stage of describing project management, they typically talked about a very narrow set of activities that focused on planning and control. In fact, the interviewees identified project management as all the elements of running a project that didn't involve the leadership elements they had previously identified.

It is also worth mentioning here any references made by interviewees to existing general leadership literature and available project leadership literature (see Section 1). Of the interviewee group, a small minority talked about leadership models and linked them to their own project leadership style. These models were incomplete leadership (Ancona et al, 2007) and situational leadership (Hersey & Blanchard, 1982). The most-cited role model was Richard Branson, British entrepreneur.

Figure 5 represents the words and phrases used by interviewees when asked for their views of project leadership, illustrating the breadth of responses given. This raw data has been analysed to provide five broad categories. These are:

- project purpose and intent;
- self;
- project organisation;
- project people; and
- project context.

3.1.1 Project purpose and intent

For major, complex projects, project purpose and intent were seen as going beyond the formal project deliverables (the outputs delivered by the project) to focus on the ultimate purpose or intent (the outcomes and benefits the project is there to achieve). The role of the project leader was then seen as that of aligning all the effort towards the ultimate strategic intent, while working through emerging issues to achieve it. This was seen as being very different from the role of a project manager, who is there to plan, measure and control the use of the resources in line with the plan.

3.1.2 Self

The category of 'self' captures the attributes of a good project leader. It covers aspects of leadership such as resilience, calmness under pressure and motivating, which are also the attributes of a good role model. Further, it covers personal skills such as listening and communicating, those skills a leader needs to help build the best possible picture of the health of the project. Being authentic is important too, and so is the humility to admit when things go wrong.

There is also a major element of self-awareness under this category: good leaders know their strengths and weaknesses, so build their team and project organisation in a way that mitigates their shortcomings and enables them to work to their strengths. Our interviewees recognised they aren't super-human, all-knowing and omnipresent, and they have to work with their team, creating trust and delegating appropriately. Many interviewees talked about their style as being positive and optimistic: one talked about "projecting relentless positivity", another about "positivity and realism underpinned by optimism", and another commented that "to be a project leader, you have to be a born optimist". Many recognised that the project team typically took their cue from the project leader's own mood and behaviours. There were also many conversations about self-reflection and self-learning, which are discussed further in Skill 6 – Learning.

"Good leaders know their strengths and weaknesses, so build their team and project organisation in a way that mitigates their shortcomings and enables them to work to their strengths"

3.1.3 Project organisation

Project leaders typically get to create their own project organisation. They set up the environment and culture; establish the various teams and functions within the project; set the lines of reporting, the roles, delegated authority, controls and monitoring. They are able to define how the project will work with the wider organisation, setting up functional interfaces and stakeholder interactions. They need to hold people to account for delivery within this structure. These are the particular elements around project organisation that the interviewees raised, and we will explore this further in Section 3.2.

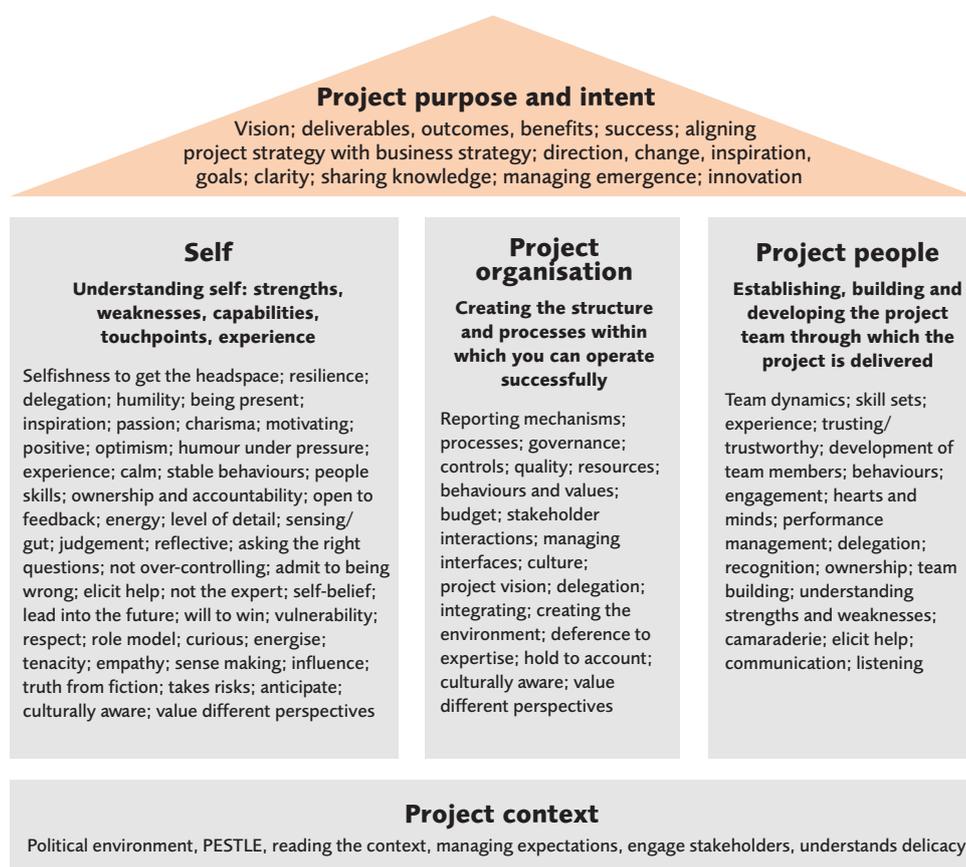


Figure 5: Illustration of the breadth of responses across all interviewees

3.1.4 Project people

The interviewees identified a very clear leadership role involved with galvanising the project team. This is about engagement, motivation, and building camaraderie and a culture of success. The majority of interviewees mentioned the importance of developing the project team and helping to improve their knowledge, experience and performance: "... part of the role is to contribute to the next generation of project professionals and leave a legacy" (interviewee quote). All the people-oriented soft skills are important here, such as recognition, capturing hearts and minds, developing ownership and building team dynamics. This is combined with a number of the tools that are customarily used, such as delegation and performance management.

In many cases, developing the team was made more difficult due to a mix of permanent and contract staff, virtual teams and extended geography, and the dynamic nature of resourcing requirements at different stages of the project life cycle.

"The majority of interviewees mentioned the importance of developing the project team and helping to improve their knowledge, experience and performance"

3.1.5 Project context

The interviewees talked about the context of the project. In describing their understanding of project leadership, they recognised the importance of being aware of the broader environment and context. However, at this level, it was almost a superficial acknowledgement that this couldn't be ignored but, through the analysis of the interviewees' responses and particularly the stories and examples given, the project context became a rich picture in which the project leader had to work and navigate through. Aspects of project context are explored more fully in Section 2.2.

A number of interviewees also mentioned that part of the project context was a lack of understanding from other parts of the organisation about how projects work in practice ("... ours is not a project organisation", said one interviewee), so that it was often necessary to educate the organisation about how the project would work and build the appropriate interfaces with functional areas of the business.

3.2 Project leadership survival skills

3.2.1 Interview context

In Section 3.1, we reported the breadth of responses to our questions about how the interviewees understood the concept of project leadership. These are illustrated in Figure 5.

In this Section, we have developed eight themes based on our analysis of the interviews and our interpretation of the examples and stories provided by the interviewees. Here, we are deliberately picking out what we saw as the critical attributes of project leadership that interviewees predominantly discussed in terms of self (see Section 3.1.2), given the emphasis and importance placed on these by our interviewees. We have called these eight critical attributes the 'project leadership survival skills'.

Skill 1 – Anticipating

Anticipating is an important attribute for a project leader. This wasn't universally recognised, but was cited as being important by the more experienced project leaders interviewed. Anticipating enables the project leader not to be caught off guard. By recognising some of the signs that something is about to happen, they can be prepared before the issue becomes apparent. To their team, this preparedness looks impressive and builds the status of the project leader.

Anticipating comes from two sources: first, from sensing what is going on in the project and with the major stakeholders; and second, from experience. So, sensing is important: are the major stakeholders happy or was there a throwaway remark at the last meeting that suggests an emerging issue or concern? What is the feeling in the local community? Is there any indication that their position has changed, or that someone new is agitating from a different perspective? Is the project team talking maturely about the technical risks to delivery? Are there members of the team whose concerns are not being heard?

Sensing can allow a project leader to spot problems early and so get ahead of the game. Experience is important too – knowing from previous projects what happened at different stages will help, but continuing to be open and questioning also helps. Questions such as "What do I need to worry about most?", "What's going to ruin my day?" and "What is going to hit us next?" (interviewee quotes) help the project leader in thinking through their position and responses.

Most of the project leaders we interviewed were dealing with significant emergence in their projects. This emergence was usually not of a technical nature but more to do with the politics around the project and the development of understanding of the problems and solutions as the project progressed. None of the project leaders talked about using formal tools such as scenario planning, but, from the conversations and examples given, there was certainly an informal and continuous discussion of emergence combined with informal planning of potential responses.

"Sensing can allow a project leader to spot problems early and so get ahead of the game"

Skill 2 – Judgement and decision-making

Project leadership is about judgement. Project management systems may produce accurate data about progress and adherence to the plan, but project leadership is about the future. What is to be done next? There is no data about the future, so decisions have to be based on judgement, intuition and experience.

One interviewee said: "Project leadership is about keeping the outcome in mind and keeping everyone focused on the outcome". This sums up most of the views of project leadership. Interviewees were talking about the big picture, what the project is there to deliver in the longer term for the organisation; by contrast, they saw project management as delivering the project and the specific outputs.

"Project leaders were critically aware that there was a limit to what their project reporting systems could tell them"

Judgement and decision-making were always discussed in the context of the big picture. Project leaders were critically aware that there was a limit to what their project reporting systems could tell them. Skills such as questioning and listening were frequently discussed. Asking the "right killer questions" and "sensing what is really happening" (interviewee quotes) were important. Many recognised that there was limited value in project data and that they were having to frequently use their judgement to make timely decisions with limited information. Comments about "going beyond the data" and "sense making" (interviewee quotes) were frequently made. Our interviewees recognised that their decisions often needed to be made within defined time constraints and with limited information, so their responsibility was to make reasoned decisions with the information available, although this may be incomplete. They also had to be comfortable with that decision.

But it was also recognised that, in a large, complex project, one can't be the project manager as well as the project leader. There isn't the time to do both. Project leaders have to make the decision whether to work in the project or work on the project. Working in the project involves immersion and dealing with the day-to-day issues. Working on the project takes a different and more strategic stance, sitting slightly more removed from the project in a position to interact more freely with the different stakeholders and see the project from the outside. From the interviews, it became clear that most saw project leaders as working on projects and project managers as working in projects, albeit that project leaders needed the capability to zoom in and out of the detail as necessary.

Project leaders also had the responsibility of creating the project management team and then trusting them to do the day-to-day project management activities while they found the space to make decisions most frequently based on judgement. When asked, some saw the transition from the detail of being a project manager to the role of being a project leader as a difficult one to make because of the "letting go" (interviewee quote) required of the familiar data-driven project management activities. This led into questions outside the scope of this research, such as whether good project managers can become good project leaders.

The final point interviewees made was that decisions need to lead to credible action. This sometimes meant not following the classic rules of project management. Interviewees told us: "Project leadership is where you stop looking at or playing by the rules" and "You can get to level 3 maturity with project management structures but to get to level 4 and 5 [you] need to start acting outside the rules".

Skill 3 – Seeing it all

The project leader is the person with the best holistic view of the project, by virtue of their role. The project sponsor may understand the environment and outcomes better, but they are much further away from the project; members of the project team may see in much more detail how their particular part of the project works day to day, but they won't be able to see the whole picture. A project leader needs to know what is going on in a reasonable amount of detail, but not so much as to be "lost in the weeds" (interviewee quote). So "seeing it all" (interviewee quote) was recognised across a wide group of project leaders, and this combined well with focusing on the ultimate deliverables and outcomes of the project. As one project leader said, it is about "keeping the main thing the main thing".

So, when we talk about 'seeing it all', the project leader is doing this with their internal knowledge of the project, but they are mainly doing this from the position of working on the project (see Section 3.2.2). This can only be done with the support of a trusted project team. This allows two things to happen. First, the project leader can remain slightly aloof from the day to day without losing control. Second, this allows the shortcomings of the leader to be balanced by other team members who have complementary strengths.

To summarise, 'seeing it all' is a very particular view of the world. It requires a deep understanding of the project which comes from "emotional knowledge" (interviewee quote) as opposed to a detailed factual knowledge of what is working and what isn't working delivered through the team; at the same time, having a comprehensive view of the stakeholders, the project environment and any changes or threats which could occur. "Emotional knowledge" was a term used by one of the interviewees, but it captured a number of interviewees' description of a situation where people were aware of what was happening in the project to a level far beyond what the information system was telling them, and emotionally comfortable that they were not missing anything.

Skill 4 – Building credibility and confidence

From the interviews, it was clear that the project leader has to have the confidence of two groups – the sponsoring organisation and the project team – and that building their own credibility is a key way to achieve this.

Project leaders need the space to lead and run a project their own way. Many project leaders talked about being trusted and, in turn, trusting their own teams. Under these circumstances, people have the responsibility and authority to get on with the job within the parameters set, and micromanagement is squeezed out.

Some of those project leaders interviewed were conscious of the need to control the messages coming out of the project team. This wasn't about hiding issues and problems, but about managing the message so the sponsoring organisation can feel well enough informed without the need to interfere. When the project leader loses the confidence of their sponsor and their organisation, this creates an untenable situation for both the project leader and the project.

At a personal level, project leaders talked about needing to have self-belief and leading into the future. Part of this is delivered by setting the project direction: project leaders described doing this by constantly and consistently talking about the purpose and intent of the project, and about the outcomes and deliverables resulting from the project.

Within the team, credibility and confidence are also extremely important attributes. To quote one interviewee, the role of the project leader "is to make people believe that the

"When the project leader loses the confidence of their sponsor and their organisation, this creates an untenable situation for both the project leader and the project"

“The initial credibility of the project leader comes from their industry experience and previous reputation for project delivery”

project is deliverable when they don't think it is". Project leaders need to instil confidence and be calm in a crisis. Their leadership is as important when projects begin to go wrong as at any other time. The ability to steady the ship, get to the heart of the matter and access additional help or resources while keeping the existing team focused and motivated is crucial. From the interviews, the initial credibility of the project leader comes from their industry experience and previous reputation for project delivery. But that reputation only goes so far, and the project leader will be judged on how they create the team, lead the project and deal with any crises as they occur.

But confidence is not hubris. Difficulties have to be acknowledged and overcome. Risks have to be identified and mitigated. Resources and expertise have to be found and exploited. Maintaining confidence is important while not overlooking the factors that will get in the way of delivering a successful project. This balance is a difficult one to achieve.

One final thought to reflect on: "would you work for this person [the project leader] again?" This was a question posed by many of the project leaders we interviewed about themselves. It was a reflection of whether people wanted to follow them, but also a measure of whether or not they would be able to attract the best resources to work for them on future projects.

Skill 5 – Organisationally intelligent

Interviewees told us that organisational intelligence is needed to attract and hang on to resource, to understand the wider organisational landscape and to build political awareness. Organisational intelligence was typically cited by those running large and complex projects.

A key task for any project leader is to acquire the resources and expertise needed to deliver the project. From our interviews, these resources are usually in short supply, and project leaders have two ways of ensuring that they are well resourced:

1. Having people who are happy to work for them. A good project leader will build their own team of individuals who work with them on projects, but they will also build a reputation for being someone people want to work for. In that way, the project leader can attract talent from across the organisation.
2. However, the informal network approach isn't enough and good project leaders need to be sufficiently organisationally connected to be able to use their influence with those decision-makers allocating the resources. Interviewees also talked about being able to access these decision-makers when things went wrong or when they needed additional resource.

Operating landscapes change over time, and an astute project leader will read the signs and notice when this is happening. The longer the project, the more likely this is to be an important factor. Being sufficiently organisationally connected enables the project leader to reposition or repurpose their project with the least disruption, rather than becoming the victim of events.

Besides the obvious influencing skills required, project leaders need to be good networkers to develop and maintain their contacts, ensure they continue to stay in touch with those they need to influence, and manage the wider interfaces with clients and suppliers. In all organisations there are power plays and politics, so building your power base and maintaining effective links with others is an essential requirement for an effective project leader, especially if you are remote from head office or where key business decisions are made.

"Project leaders need to learn who they can and can't trust and, probably most importantly, when they make a mistake"

Skill 6 – Learning

A number of the interviewees talked about learning on and through projects but, in synthesising their comments, we have identified that learning needs to occur at three levels. These are:

- **Learning through the project:** the project leader needs to learn throughout the project, and we have commented elsewhere about their ability to sense and anticipate things that are happening inside and outside the project. They also need to learn who they can and can't trust and, probably most importantly, when they make a mistake. Mistakes identified early can be rectified more quickly with lower costs.
- **Reflecting on the project:** all the senior project leaders we interviewed were reflective leaders and identified situations and projects that they had learnt from and informed the way they led. They were also open to, and listening for, feedback. They asked themselves "What did I get wrong?", "How close to the cliff edge did I get?" and "What do I need to do differently next time?" (interviewee quotes). Many interviewees recognised that part of the way in which they gauged whether they were successful in the project leadership role was in the question: "Would you work for this project leader again?" (interviewee quote).
- **Team learning:** learning should also occur at the team level and a few of the interviewees were explicit about this. Finding people who have done similar projects and understanding the difficulties and challenges early on were important for some leaders. On reflection, this was probably mentioned less by others, as they were able to construct their team from people who had experience on similar projects. Many of our interviewees also talked about developing team members through the shared experience of the project; for example, having access to new experiences, learning new technical skills, and having the opportunity to learn new behavioural skills.

Individuals typically learn more through lived experience but major, complex projects can be "difficult places to learn" (interviewee quote). As important is being reflective, curious and open to feedback. Interviewees from three of the companies identified learning and the ability to learn effectively as being important for capacity building for the future. It was about stretching people beyond their existing capabilities over the life of the project without taking them completely out of their depth. Many of the project leaders interviewed enjoyed developing others and considered it an important part of their role.

Skill 7 – Conflict resolution and collaboration

Our interviewees talked about conflict resolution and collaboration. We have combined both themes here, since there was a strong thread running from one to the other in our conversations.

"For the most part, our project leaders saw their role as overcoming that conflict through collaboration"

Most projects are built on contracts. When these are with external clients and suppliers, the contract is typically, but not exclusively, to supply explicit deliverables by a certain time and for a specified sum of money. When the project is internal to the organisation, our interviewees described an internal agreement setting out the same parameters for the project delivery to the organisation. This structure can easily lead to conflict between the different parties involved. For the most part, our project leaders saw their role as overcoming that conflict through collaboration and building a single project team set on delivering the outcomes and benefits.

Various interviewees highlighted their approach to minimising conflict and creating real collaboration by actively creating the project culture and environment (see Skill 8 – Creating the project culture and environment). This can be an effective way of breaking

"If stakeholders can't be even loosely aligned, there won't be a deliverable project"

down silos between planning and delivery or between the main contractor and subcontractors. But conflict can still occur and project leaders talked about resolving the conflict without damaging the overall delivery of the project and, in particular, without "reaching for the contract" and "persecuting the problem, not the person" (interviewee quotes). The skills cited as being needed to do this included effective listening, communicating, negotiating and influencing as well as the courage to decide to make an informal gesture or agreement that wasn't in the original contract.

"Corralling stakeholders" (interviewee quote) was also mentioned on many occasions. The more complex the project, the more complex the stakeholder base, and the more diverse the views of why the project exists and what it is there to deliver. The same skills of effective listening, communicating, negotiating and influencing are important in the stakeholder context too. If stakeholders can't be even loosely aligned, there won't be a deliverable project. The phrase "speaking truth to power" was used on several occasions.

For all the above reasons, we see collaboration and conflict resolution as a single theme in project leadership.

Skill 8 – Creating the project culture and environment

Culture was identified as an important element by a wide cross-section of the project leaders interviewed, but it meant different things in different settings. Typically, our interviewees defined culture as "the way we do things around here". Some focused on the national culture of the location in which the project was being delivered; others focused on the international culture of the project team. But the majority focused on the culture within the project team, within the group of people who were tasked with delivering the project, regardless of whether they were local, distributed or a virtual team covering different geographies. Here, the conversation was about "creating the environment for success" (interviewee quote) and the leader becoming the role model for and promoting behaviours that set the tone for the project culture, since "the way the team behaves is very indicative of the leader's style" (interviewee quote). Our interviewees also talked about the difficulty of being visible and accessible to distributed or virtual project teams.

Part of the conversation about environment and culture significantly overlapped with the theme around collaboration and conflict resolution. In larger contracts with significant subcontract and supply chain involvement, project leaders were consistently talking about the creation of a "single team" with a "single intent of delivering the project outcomes and benefits" (interviewee quotes). This related to how people were treated, to the extent that some described not being able to tell if a person working on the project was part of the company or being employed by a contractor. It also related to how the team was physically organised, with many stories about teams being co-located to facilitate collaboration, the disadvantages of not being co-located and the turnaround of projects that happened when contractors eventually moved into the same offices as the delivery organisation. One memorable example was a project leader who provided the office space to his contractors free of charge so they had no financial excuse for not being co-located.

Besides the culture, the project environment is also critical. During our interviews, this was much less explicit, but appeared in many of the stories and examples given by the project leaders during the interviews. Projects were consistently cited as being temporary organisations, but temporary organisations need a structure: they need to report into the parent organisation and interface effectively with the customer.

“In normal operations, most leaders are faced with an existing structure with people in the roles and established reporting lines and responsibilities”

In normal operations, most leaders are faced with an existing structure with people in the roles and established reporting lines and responsibilities. In a project, this doesn't exist at the start, so the project leader has the opportunity to create this from a blank canvas. This is a very significant difference between project leadership and general organisation leadership. How the project organisation is created is important: who is on the senior management team? Does this include key contractors, so they are right at the heart of decisions made about the direction of the project? These decisions are critical for the environment, culture and leadership of the project delivery team.

However, some more experienced project leaders gave us examples of how they had created the structures beyond the delivery team: how they had gone about designing the formal structures for interacting with the customer. In one example, the interviewee had orchestrated the creation of the project board and, through engagement with the members, made them understand that they were all responsible for the project delivery. This significantly changed the relationship with some of the key stakeholders for the better, moving the project forward.

3.3 A competency framework for project leadership

Having synthesised the interviews into eight project leadership survival skills, we have developed a competency framework for project leadership reflecting these. We talk further in Section 4 about competency frameworks and their uses, and compare a total of 15 competency frameworks relating to project leadership, project management and general organisation leadership.

Our competency framework for project leadership (see Table 1) illustrates three levels: level 1 covers junior, aspiring or entry level; level 2 covers intermediate or transitional; level 3 covers experienced and expert.

It is worth noting that the project leadership competency framework in Table 1 is based on the 38 interviews carried out and our subsequent analyses. This means the competency framework has been developed from the ground up from the interviewees' direct experience and personal perspective, whereas competency frameworks are typically developed 'top down' reflecting the organisation's own values and thoughts around good practice.

We offer this project leadership competency framework to help organisations build in-house capability and to help individuals assess where they are and where they can focus any opportunities for development.

Table 1: Project leadership competency framework using the eight project leadership survival skills

	Level 1	Level 2	Level 3
Anticipating	I know the key items on our risk register.	I understand the items on the risk register. The project leadership team and I are having useful conversations about possible future issues.	I am confident that items on our risk register are being monitored and managed at the appropriate level in the project. Through internal dialogue and frequent contact with our main stakeholders, the project leadership team and I are aware of potential and emerging issues, and we have appropriate processes to respond to these.
Judgement and decision-making	I struggle to get the information in time to make decisions.	I have the information to make timely decisions and am making experience-based judgement calls.	I have developed ways of working that allow us to be sensitive to situations and get the best from our experts, so that we can make timely decisions, with limited information, to keep the project moving forward.
Seeing it all	I know our project schedule, budget, resourcing and progress to date.	I understand our performance to date. The project leadership team and I have conversations about project delivery over the next period. I am aware of the wider organisation context of this project.	I have ensured appropriate processes are in place so that the project leadership team has a sense of the project trajectory, and of technical, stakeholder and emerging issues both from the information at hand and the conversations with key participants. I believe we can reasonably predict the future pace and direction of the project while remaining sensitive to emergent uncertainties. I understand and keep a watching brief on our wider organisational environment and that of our client.
Building credibility and confidence	My past experience of projects brings an initial level of credibility, and this supports the team confidence in delivering this project.	My past experience of this type of project is being combined with that of other members of the project team to build confidence in delivering this project. I am aware of the positive impact of raising the profile of the project for building credibility and confidence, and ensure that we take advantage of any opportunities to promote the project to a wider audience.	My reputation provided an initial credibility and I have enhanced project team confidence by enabling us to anticipate problems before they occur, and work effectively with each other to resolve issues and steer the project forward. I have developed the project direction in consultation with the project leadership team. Together, we convey consistent messages about the purpose, intent, outcomes and deliverables from the project. I work with the project sponsor to champion the project within the organisation, to ensure our successes are recognised and to promote the reputation of the project.
Organisationally intelligent	I know who the organisation decision-makers are and, as a result, I have a reasonable share of the talent available from the organisation on my project team.	I have access to the organisation decision-makers and, as a result, the project has good access to the talent needed to complement the project team.	I have deliberately built good networks and relationships with the key decision-makers in my organisation, with the client organisation and across our major suppliers. I can easily access these decision-makers if needed, and they will keep me informed of emergent issues that are important to the project. I have preferential access to the best people and have attracted a talented team to work on the project.
Learning	I reflect and learn from my experiences and mistakes, and from feedback. I encourage my project team to do the same.	I am developing a learning culture within the project to create an openness that allows us to recognise mistakes, take corrective action and reflect on what we have learnt.	This project team takes appropriate risks and, when necessary, identifies failures fast, learns quickly and corrects mistakes. We all reflect on our experiences and help each other learn. Team members are appropriately stretched in their development over the project and leave better skilled to deal with the future.
Conflict resolution and collaboration	I have created a common set of goals for the project.	I have widely communicated our common set of goals. There is respect between different parts of the team, leading to a constructive approach to conflict resolution.	Project team members, suppliers and contractors are all working towards a set of common goals that are in the best interest of the project. I have enabled an environment where the project team co-creates solutions with our contractors and suppliers. Issues are identified early and resolved at the local level before they become problematic.
Creating the project culture and environment	I have let the project team know their roles and responsibilities in the project and provided a set of common goals.	People know their roles and responsibilities in the project and are working towards a set of common goals. I am building a supportive and collaborative environment in which to deliver the project.	I have led the creation of an open and supportive project culture and working environment. The whole team knows how we should interact with each other, our client and our supply chain to promote openness, controlled risk taking, collaborative environment and feedback, and the offer and acceptance of help. Members of the team have roles and responsibilities, but all take personal ownership of the project outcomes.

"Influence is leveraged through creating the right culture and environment both inside and outside the project"

3.4 Summary

We have described in Section 3 the two sets of findings from the interviews. The first was a distillation of the raw data into five broad categories, the second a more nuanced analysis to highlight eight critical attributes of project leadership. Taken together, these eight skills are about being able to influence the future direction of the project through having the credibility, organisational intelligence and knowledge of what is happening. This influence is leveraged through creating the right culture and environment both inside and outside the project, exercising good timely decisions, and managing the necessary collaborations while resolving conflicts. But there are two other equally important attributes: learning and anticipating. The former is about identifying where things are likely to go off-course and acting on them; this is necessary, as often decisions are made with far from complete information. The latter is about anticipating, sensing and become aware early of things that can trip up the project.

We also developed a project leadership competency framework in response to the eight project leadership survival skills. We invite organisations to relate these eight skills to their own competency frameworks and individuals to assess where they consider they currently are in relation to the eight skills.

4. Comparing competency frameworks

Competency frameworks are a favoured way of organisations to present the skills, knowledge and behaviours expected from their staff. The early applications of competency frameworks focused mainly on performance management and development; they are now often seen as a way of shaping and fostering general and specific capability across the organisation, and of achieving high organisational performance through focusing and reviewing an individual's capability and potential. These skills, knowledge and behaviours are aligned to what the organisation is trying to achieve, and provide the answer to the fundamental question: "How can I contribute to achieving the organisation's aspirations?"

4.1 Comparison approach

The five multinational private-sector organisations that volunteered interviewees for this research also provided their competency frameworks. Seven additional competency frameworks were provided by other organisations. Some organisations provided more than one competency framework covering project leadership and/or project management with a leadership component and/or general organisation leadership, so that a total of 15 competency frameworks were reviewed.

In comparing the competency frameworks across project leadership, project management and general organisation leadership, we tried to establish which competence sets the organisations valued and how they saw the differences between those valued for project leadership, project management and general organisation leadership. The project leadership competency framework developed in response to the eight project leadership survival skills (see Section 3.3) was not used in this comparative analysis.

The competences contained in the 15 frameworks covered a mix of behaviours, skills, knowledge and organisational values. In some instances, these were simply a list of expected competences with short descriptions; in others they were development programmes explaining those competences that the programme covered; in others, they were structured frameworks with competences, descriptions and assessment across multiple levels (for example, level 1 low to level 3 high; level 1 entry to level 4 leader; level 1 specific job title to level 5 specific job title; level 1 does not meet expectations to level 5 exceeds expectations), so that it was clear what each competence meant for the particular organisation. In each case, the intention behind the framework was to provide an individual with a way to gauge themselves against each competence, so providing them with a clear awareness of their own preferences, strengths and challenges, and which areas to develop.

Since the breadth and depth of the competency frameworks differed, this also meant it was not unusual to find a single competence defined in different ways across different organisations in order to accommodate the different focus or need across the different organisations. This being the case, it was not always possible to map exactly a single competence across organisations (for example, they were differently nuanced) so that, in some cases, it was necessary to take the spirit of the competence mentioned, rather than the title.

Together, these allowed us to do a comparative analysis of competences in three areas:

- project leadership competences;
- project management competences; and
- general organisation leadership competences.

"Since the breadth and depth of the competency frameworks differed, this also meant it was not unusual to find a single competence defined in different ways across different organisations"

"Of particular interest are those competences that organisations have chosen and how they have described each of these"

4.2 Competency framework analysis

Of particular interest are those competences that organisations have chosen and how they have described each of these, so illustrating what 'good' looks like in that particular instance (and sometimes providing behavioural examples) to help shape and foster that particular competence within their organisation. Each competency framework focuses on those particular sets of skills, behaviours, knowledge and values which are important to the organisation at that particular time and given their particular set of circumstances. As such, we would expect to see the competency framework evolve over time to reflect the organisation's changing circumstances, as well as reflecting professional body and industry accepted good practice.

Of equal note is the comparison between what the organisation has explained about project leadership by way of its competency framework with those responses and discussions put forward by interviewees from those same organisations. We noted some alignment, but not a particularly strong one. For example, none of the interviewees described the list of their organisation's competence set; instead, our interviewees raised generalisations rather than the specific competences that were documented by the organisation. There may be a number of reasons for this: as stated, our approach was to encourage interviewees to talk through their own 'lived experience' and personal perspective, rather than to simply recount organisation or project good practice; the project leaders gave us their direct experience of being "in the thick of it" (interviewee quote) and needing to be able to respond to the situation in real time. It is no contradiction to understand that what the organisation believes to be good and important competences do not necessarily always reflect the real world of major, complex projects.

The analysis is shown in Figure 6.

Project leadership

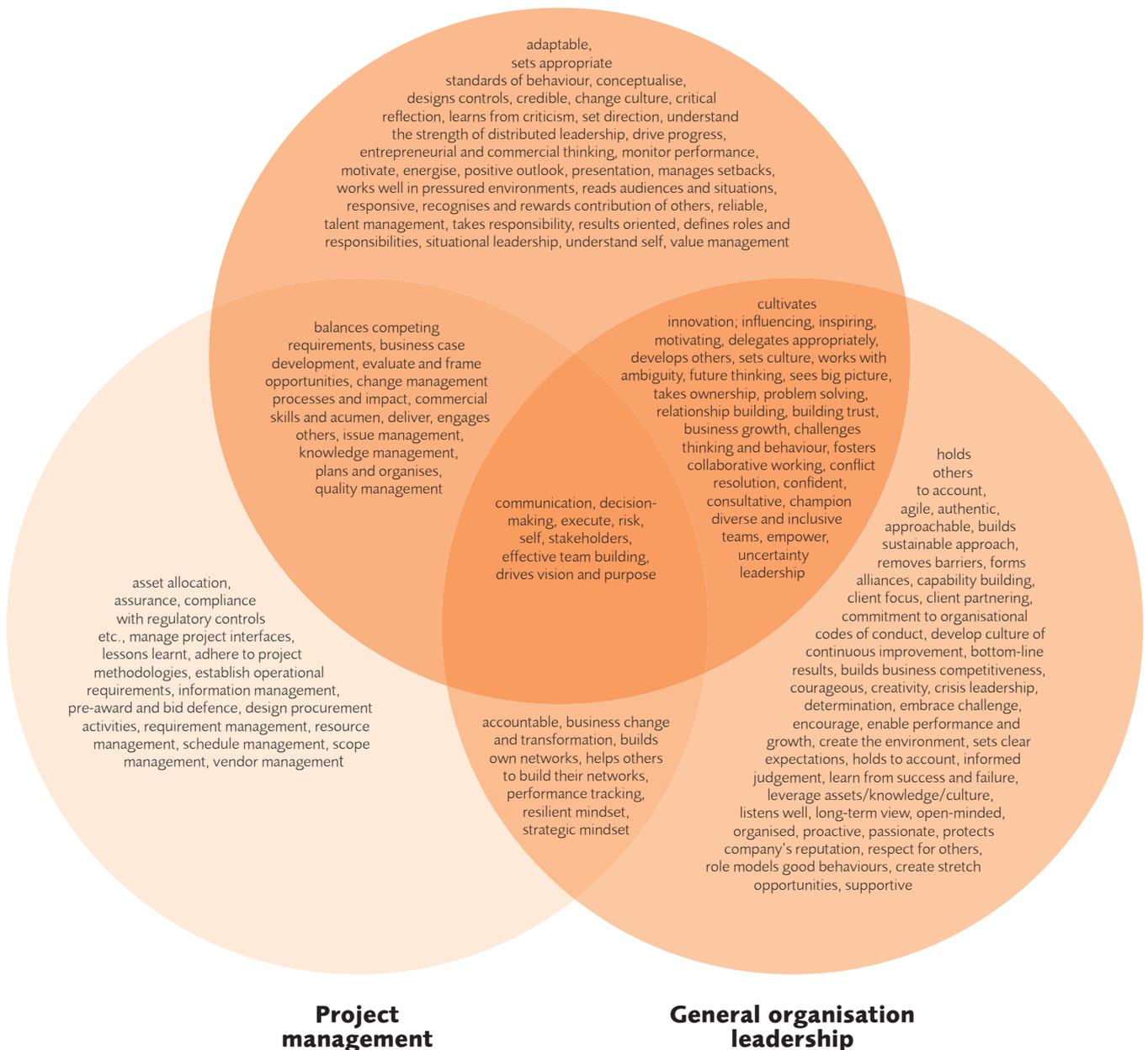


Figure 6: Analysis across three groups of competency frameworks (project leadership, project management, general organisation leadership)

A number of competences feature across all three areas (communication, decision-making, execute, risk, self, stakeholders, team building, vision and purpose), although not in all the competency frameworks within each area. These competences are typically nuanced differently in their descriptions. For example:

- Communication: this is described varyingly as ensuring clear messaging for vision and mission, for goals, and for roles and responsibilities; ensuring communications are clear, targeted and relevant to stakeholder needs; selecting channels appropriate to stakeholders; good listening skills; using consultation to elicit different perspectives; influencing others; having courageous and skilful conversations to share difficult messages; presentation of the project; communicating and reporting performance.
- Risk: this is described varyingly as risk identification, evaluation, planning and mitigation; strategic risk taking; informed risk taking; lessons learned; supporting experimentation for innovation; balancing risk with pursuing commercial opportunities associated with the client/project/business area.
- Self: this is described varyingly as self-awareness, self-management and understanding self. It includes staying focused under pressure; building a resilient mindset; sustaining energy; learning constructively from feedback, success and failure; reviewing and reflecting on personal performance; presenting self; critical self-reflection; understanding personal impact on others; building credibility and trust. Additionally, developing self to build the leadership and other capabilities needed to achieve results; recognising own preferences, strengths and weaknesses.

There were a variety of competences specific to the project leadership competency frameworks we received, which were not reflected in either the project management frameworks or general organisation leadership frameworks. For example:

- Building and retaining credibility: especially when working with ambiguity and in pressured environments.
- Controls: designing, commissioning and implementing appropriate project control systems and processes. These may be formal (for example governance structure; escalation paths; performance tracking and monitoring; reporting dashboards; change control and impact analysis; budget construction and control; benefits tracking during the lifetime of the project; and resource management) and informal (leadership by walking about; having direct contact with the team, stakeholders, client, etc regardless of their geography; seeing, hearing, sensing; listening with intent; using project values and culture as a control mechanism; and project vision and intent).
- Situational leadership: the leadership style the project leader has as a natural style; being able to read the audience and situation well enough to change their leadership style to one most appropriate to the situation and to those involved.

There are some competences which all the project leadership competency frameworks analysed have in common. For example,

- Communication (see above).
- Collaborative: fostering collaborative working for mutual benefit; working across functional, organisational and geographical boundaries; connecting team members, clients, stakeholders and suppliers to successfully deliver; organisational networking; building effective internal and external networks, and helping others to do the same.
- Relationship building: this includes stakeholder identification and engagement; identifying key stakeholders (for example, client and project sponsor); and active engagement and management of stakeholders, adjusted according to a set of criteria (for example, interest, power, proximity).
- Trust: building trust for personal credibility; trusting others.

4.3 Summary

The comparison and analysis of the 15 competency frameworks provided have highlighted the variety of ways in which organisations choose to document the competences they value. It also highlights the breadth of competences valued, and the depth of description they feel is most suitable for their circumstances.

Three types of competency frameworks were provided (project leadership competences, project management competences and general organisation leadership competences). In analysing these three groups of competency frameworks, we tried to establish which competency sets the organisations valued and how they saw the differences between those valued for project leadership, project management and general organisation leadership. The analysis of these 15 competency frameworks is illustrated in Figure 6, showing those competences unique to each area and those common across the three areas.

“We recognise that each of the 15 competency frameworks represents a snapshot in time”

We recognise that each of the 15 competency frameworks represents a snapshot in time, focusing on those particular sets of skills, behaviours, knowledge and values which are important to the organisation at that particular time and given their particular set of circumstances. By implication, we would expect to see these competency frameworks change and adapt over time to reflect the organisation's changing circumstances, as well as reflecting professional body and industry accepted good practice.

5. Implications

Given our initial conceptualisation of project leadership, drawn directly from the breadth of conversations with 38 interviewees across the five organisations and our subsequent analysis, what implications can we draw? In this section, we'll look at the implications for existing and aspiring project leaders, for the organisations they work for and for the wider project community.

5.1 Implications for project leaders and aspiring project leaders

“The experienced project leaders we interviewed expressed no preference for any single leadership model”

What does this all mean for current project leaders and for individuals making the move into a project leadership role, that is, for new and aspiring project leaders? The most immediate conclusion is that there is no single best style of project leadership, that it depends on the context and circumstances of the situation as well as on the strengths and capabilities of the individual. The experienced project leaders we interviewed expressed no preference for any single leadership model and understood that their style at any point depended on their ability to read the situation and context well enough, and their ability to be flexible to the situation. We would describe this as *situational* or *chameleon* leadership. We expect none of the eight survival skills to be a complete surprise to any reasonably experienced project leader, but we believe that these along with the project leadership competency framework (see Section 3.3) will help focus an individual's attention for their further reflection and development.

In making the move into the project leadership space, perhaps as a result of promotion or role change, our interviewees made the point about ensuring the individual is able to create, with their organisation's support, the headspace necessary to shift behaviours

and ways of doing things. Any career transition (promotion or new role) carries with it challenges, issues and ambitions about leaving behind the familiar and embracing the new. Project leaders are typically promoted on the basis of their technical ability and so need to consider refocusing their behaviours and reprioritising their work so that they are able to work *on* the project, as opposed to getting dragged back to work *in* the project or reverting back to their comfort zone of working in the project.

Our interviewees identified the importance of "letting go" of the comfortable or familiar project management technical activities that had helped get them to this point, and transitioning into a new and enhanced set of skills and behaviours (see Figure 7).

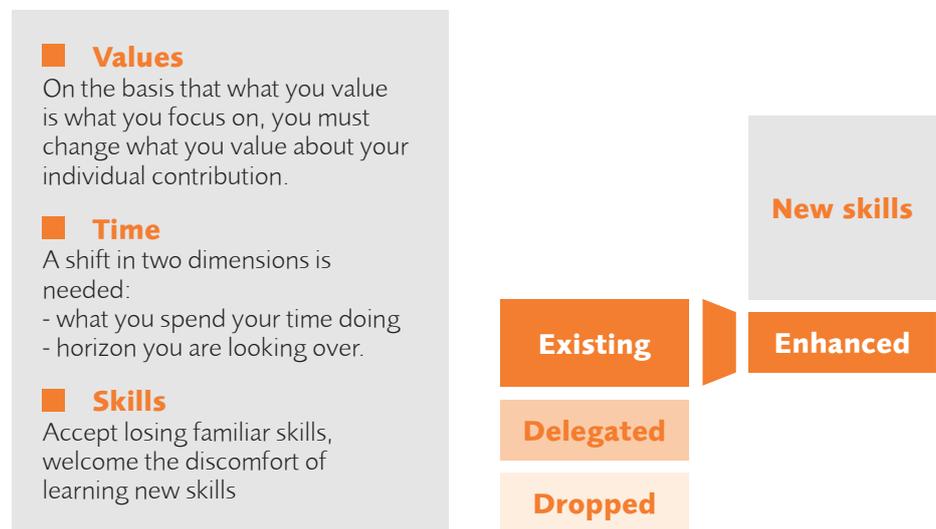


Figure 7: Transition model – leaving behind the familiar and embracing the new (Coleman & MacNicol, 2015). Reproduced with kind permission of the authors

Especially in the early days of their new role, they recognised the temptation to assist project team members to do the tasks they themselves once did, so continuing to do what they were comfortable doing (working *in* the project), rather than what the project leadership role demanded (working *on* the project). Having the support of the organisation to create space for reflection while making that transition easily and in a timely fashion was valuable to the interviewees, recognising that it often takes between six and 12 months to be effective in a new role.

5.2 Implications for delivery organisations

Similarly, what do the research findings mean for those delivery organisations that rely on their project leaders to successfully deliver products and services? At the organisational level, the growth of the knowledge economy, demographic changes and the increasingly rapid turnover of experienced and senior project professionals have all resulted in shortages of high-quality people. This has all contributed to the pressure on succession planning, selection and recruitment, and learning and development. Organisations are compensating for this by developing project leadership talent in-house, as well as recruiting in new talent from outside. They also have the opportunity to use this research report in focusing, developing and refining the way in which they build project leadership capability within their own organisations.

As described in Section 4.1, our interviewees valued the support of their organisation in creating the headspace necessary to refocus their behaviours and priorities. They saw the ability to have that space and time to reflect and realign as crucial to their successful move into a new role, and their organisation played a key part in allowing that to happen.

As a follow-on from the discussions about the shortage of required skills, some of the preliminary discussions with the participating organisations covered the question of taking into project leadership roles individuals who did not have the traditional technical skill set their organisation or industry sector typically sought. These conversations were focused on whether organisations would only recruit or promote project leaders with direct relevant experience, or whether any project leader would be able to succeed in any project leadership role within a different sector. This is of particular significance to those organisations struggling to recruit for or develop project leadership capability. Doubtless, it is for organisations to decide whether to open out project leadership roles to those who demonstrate the necessary behavioural skills and attitudes, but who do not come through routes traditional to their organisation or industry sector. Our discussions also narrowed in on two further topics: first, on the question of credibility in a project leadership role and how an individual can build confidence and project capability when they had not had the usual technical career route associated with the organisation or industry; and second, whether and how organisations typically take the opportunity to match the type of project with their project leader's own experience, behaviours or other criteria – for example, according to project complexity type, whether structural, sociopolitical or emergent complexity (Maylor et al, 2013). These questions are outside the focus of this research, but may be picked up for future research.

Some organisations develop their project leaders and project leadership capabilities through specific project leadership development programmes or, in some instances, academies. The Major Projects Leadership Academy and Project Leadership Programme are examples of this. Development programmes, and particularly academies, are significant investments for organisations to make in building leadership capability across the organisation. However, it is also not unusual for organisations to provide a more general leadership development programme for their senior individuals, regardless of their function or role, due to cost constraints or ignorance of the particular requirements of project leadership development (see Section 3). This means those areas specific to leading major, complex projects are often ignored or glossed over.

The Major Projects Leadership Academy (MPLA) was established in 2012 with the objective of transforming the implementation of government policy through world-class delivery of major projects. The stated aim is that no one will be able to lead a major government project without completing the academy programme, and the MPLA will achieve this in a number of ways:

- returning major project leadership capability to Whitehall;
- developing project leaders to become world-class at successfully delivering major projects;
- creating a cadre of world-class project leaders, formed into an expert support network;
- elevating the status of project leadership professionalism in central government;
- developing permanent secretaries' ability to foster a corporate environment that supports successful major project delivery and improve the way in which their organisations optimise the use of the valuable project leader resource.

The MPLA has been accredited by APM. The competency framework developed for the MPLA was benchmarked on APM competences.

Source: www.gov.uk/government/publications/major-projects-leadership-academy-mpla-handbook

The Project Leadership Programme (PLP) was established in 2015 with the objective of developing a cadre of project leaders across government and improving project delivery. The programme is designed to enhance project leadership skills. It addresses the requirement to build excellent project leadership capacity at the level below major projects. The programme is based on three key leadership competences: leadership of self (40 per cent), commercial leadership (30 per cent) and technical project leadership (30 per cent). It is designed to help build the skills of project leaders and develop their capabilities, providing demonstrable improvements in the way that projects are led across the public service. At the time of writing this report, over 800 public-sector employees have started on or graduated from this programme.

The PLP was accredited by APM from cohort 1.

Source: www.cranfield.ac.uk/som/research-centres/centre-for-business-performance/project-leadership-programme-plp-fact-sheet

5.3 Implications for the project community

What are the implications for the wider project community? First and foremost, good project leadership won't guarantee a successful project, but the lack of it is one of the most cited factors in unsuccessful projects by the UK's National Audit Office and other analyses. It is also becoming increasingly clear that leadership competences should not just be left to those anointed with the title of 'leader', so that all project managers need leadership skills: leadership skills and behaviours can be distributed across the project at all levels.

Further, the need for project leadership development goes over and above what is typically provided by organisations for general organisation leadership development (see Sections 3 and 4.2). Project organisation building for a temporary organisation still requires all activities and functions typically seen in enterprises. To put this in context, the majority of project leaders we interviewed were responsible for multimillion or, in some cases, higher than £1bn budgets. In effect, the project leaders we interviewed were responsible for budgets that exceed the turnover of UK small and medium-sized enterprises, which, in 2015, accounted for 99.9 per cent of the business population (Department for Business, Innovation and Skills). Projects are temporary endeavours, so that the life of a project organisation is much shorter than that of a typical enterprise; however, project organisations still require the range of functional support found in typical enterprises; they also need to be built rapidly and then dismantled at the end of their life.

It remains unlikely that the project leader role has positional authority or hierarchy outside the project, so it is still having to network, influence and build robust relationships to accommodate the lack of wider organisational authority. Finally, but by no means least, project professionals need to look beyond simply their technical skills to behavioural competences.

And for the project professional bodies? As bodies of knowledge across the various project professional bodies continue to evolve there is the opportunity to reflect existing and new thought in project leadership. The *APM Body of Knowledge 7th edition*, due to be published in the spring of 2019, has already established its framework and will develop ideas for project leadership competences.

The implications for future research are varied, but these might include: analysing the impact of project leadership programmes and their impact on project success; and exploring the role of projects and project leadership within the C-suite. For example, as project management moves from execution to the delivery of organisational strategy, will a role emerge within the boardroom, such as chief project officer, much in the way that we have seen the role of chief information officer become established? Further exploration may also centre around transformational leadership: APM will be publishing a study on understanding leadership in the context of transformation projects by the end of 2018, which will shed further light on this important area.

6. Conclusions

There has been a considerable focus over the years on project management. Much of this focus has been on the technical aspects of managing projects, and the tools and techniques for planning, measuring and controlling project delivery. However, and from our perspective, this emphasis on the mechanics of project management has been overemphasised at the expense of the leadership required to deliver projects. The tools are useful and help with the planning of simpler projects but, in this world of dynamic environments and complex projects, this traditional view of project management isn't enough. We hope that our research will promote a rebalancing of the technical with the behavioural.

Mainstream leadership literature and recent leadership models have certainly contributed to the discussions here. The focus has been on transformational, rather than transactional, leadership; the acknowledgement that soft skills and emotional intelligence are required to lead; and, in particular, the concept of the incomplete leader. All this makes sense, and we have heard strong echoes of these concepts in interviews that we have replicated in our research findings. They provide us with ways of thinking about leadership that can be applied to a project environment.

More recently, too, we have seen a burst of activity around project leadership. Some major companies have launched project leadership academies, and the government, under the auspices of the Infrastructure & Projects Authority, has launched the MPLA and PLP for senior civil servants leading projects across government. There has also been the development of project leadership competency frameworks, although these are not as common as general organisation leadership or project management competency frameworks.

From our understanding of the current literature and our review of the competency frameworks volunteered to us, we have come to the conclusion that most writers are coming at this issue from the perspective of the organisation. What we have attempted to do in this research is look at project leadership from the perspective of the project leader. What we have identified here are skills, behaviours, knowledge and values that project leaders believe they need in order to deliver major, complex projects successfully. We believe that this is a slightly different perspective to that which has been taken in the past, and we hope that this will be useful for existing and future project leaders to reflect on their personal skills, to inform organisations in the development of their future project leadership capability, and for project professional bodies to consider the competence range for their bodies of knowledge, competency frameworks, and spectrum of accreditations and qualifications.

Finally, we come to the question of further research into project leadership. A number of follow-on questions and discussions surfaced during the preparation and undertaking of this research. These were wide-ranging and not necessarily linked. There were four questions that, as a team, we kept revisiting in one form or another. First, there was a question of credibility in a project leadership role and whether an organisation would be confident in engaging an individual at that level when they had not had the usual technical career route associated with the organisation or industry. As one interviewee told us: "Individuals who've not had the experience of delivering in this type of environment often underestimate the complexity involved." This question strikes to the heart of whether, and to what extent, project technical and behavioural skills are truly portable across industry sectors. Second was the question of whether and how organisations take the opportunity to match the type of project with their project leader's own experience, behaviours or other criteria. Many organisations operate a bench system, whereby the next available project professional is allocated to a project without considering the project type or complexity, or the project leader's particular skill set. Third was the question, particularly in relation to discussions around competency frameworks, of whether good project managers can become good project leaders. Finally, what specifically are the differences, if any, between male and female project leaders? These questions are outside the focus of this research, but may be picked up for future research.

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