

<http://www.gowerpublishing.com/isbn/9781409419051>

Leading Complex Projects

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Preface

Too often, we hear of multi-sector complex projects that have stalled in development, blown their budgets, or simply failed to deliver their full potential despite the best efforts of everyone involved. Whether it is in capital acquisition, infrastructure development, ongoing sustainment, logistics, business evolution or even disaster relief, organisations and individuals constantly face the leadership challenges of managing in ever increasing complexity.

Against this backdrop of massive failure, in 2009 the International Centre for Complex Project Management conducted a global round table series titled *The Conspiracy of Optimism – Why Mega Projects Fail*. The two key findings of the report were that complex Project Managers are not necessarily equipped as Program Delivery Leaders, and that current tools are insufficient for managing complex projects. Kaye Remington and Julien Pollack's earlier book *Tools for Complex Projects* goes some way to addressing the latter point and is an important text in the world's first Executive Masters in Complex Project Management. Kaye's latest book addresses the second fundamental issue – that of Delivery Leadership in complex projects.

The challenge lies in navigating the uncertainty and ambiguity inherent in accelerating social, organisational and technological change, and expanding cultural diversity. Project leaders must recognise today's transformational shift from an 'information age' of interrelated systems to a 'knowledge age' of interconnected capabilities. This means that the project team skill set must be enhanced and continually nurtured to provide a holistic approach to complex challenges.

The ever present 'human factor' in the dynamics of interconnected systems is a central driver of complexity. The people involved, the ways in which they communicate and the relationships that they forge constitute the behaviour and combined culture of any organisation or project. Only by developing

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leadership that can transform dysfunctional attitudes, behaviours and culture can complex project execution the be improved.

The interviews and research behind Kaye's book reinforce the point that Complex Projects demand outcome-focused and multi-disciplinary leadership that is possessed of a broad enough repertoire to face the unknown – the ability to lead in the face of ambiguity and uncertainty. Her book is an important 'touch stone' for reinforcing what effective leadership can achieve and the importance of appropriate organisational structures to support such leadership

This outstanding work makes an important contribution to the global complex project management community by providing a practical guide for those involved in complex project leadership. I believe this book is required reading for those already working as complex delivery leaders as well as those engaged in the pursuit of developing such leaders and I strongly recommend it's inclusion in your professional library.

Stephen Hayes MBE
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Introduction:

Leadership for Complex Projects



Some books are to be tasted, others to be swallowed, and some few to be chewed and digested; that is, some books are to be read only in parts; others to be read but not curiously; and some few to be read wholly, and with diligence and attention. Some books also may be read by deputy, and extracts made of them by others.

Francis Bacon, (1625) Of Studies.

I hope this book does some credit to those who contributed and that it fits at least one of Francis Bacon's categories of readership.

This Book is About Leadership for *Complex* Projects

It is not about leadership per se. It draws directly from the experience of practitioners associated with all aspects of complex projects, across industries, through interviews with project leaders who are in the 'thick of it' everyday. Research data on leadership has been used to explain and contextualise what highly experienced project leaders, from all levels, are saying. Above all, the book aims to provide a practical guide for everyone concerned with project leadership, from project manager to executive sponsor, from team leader to end user, owner, client and specialist consultant.

As the topic is specifically about leadership for *complex* projects, not any project, it is important first, to discuss how a complex project can be differentiated from a complicated or difficult one. This is the focus of the first chapter. Within both professional and academic worlds questions about project complexity are still highly contested. If you have picked up this book you might already have come to the conclusion that some projects do not seem to respond even to best practice project management. The easy, and often quoted, answer

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to why this is so goes something like 'it's all about the people', or 'if you get the right people it will be OK'. To some extent that is true, the people matter enormously, however, there are times when even the right people can't work the miracles expected of them because the support is not there to enable them to act appropriately, or because the project is changing so rapidly that anything we do makes things worse, not better. Complex projects require leaders with what Stacey (1993; 1996) describes as *extraordinary* leadership capabilities. These projects also require the support structures that enable exceptional leaders to lead.

Given the realities faced by complex projects many executives now recognise that some projects behave in such unexpected and unpredictable ways that unusual actions are required for delivery of anything remotely resembling the initial requirements. Evidence from research and practice now indicates that leadership for these so-called complex projects differs considerably from leadership that works for functional operations or simple projects or projects with more stable contexts (Turner and Müller, 2005; Gehring, 2007). Additionally, the challenges are not only about delivering successful outcomes in the short term, but also ensuring that outcomes are sustainable and provide business and community benefits in the long term.

HIGHLY EXPERIENCED PEOPLE FROM DIFFERENT FIELDS SAID SIMILAR THINGS!

The research for this book has taken place over an extended period of seven years, draws upon about thirty years of observations by the author, in practice, and has tapped into innumerable years of knowledge and wisdom from many project practitioners, from many different fields. During my time in practice and teaching at universities I have had the pleasure of meeting scores of remarkable project leaders and I have met many others during preparation for this book. Their amalgamated insights form the practice basis for this book.

My research assistant, Jane Helm, and I interviewed 70 leaders. They included owners, sponsors, project/programme directors, project managers, client managers, HR directors, general managers, directors of project management offices and senior consultants. They came from such disparate discipline areas as defence, mining, transport, construction and engineering, IT, telecommunications, environmental management, chemical manufacturing, public policy, criminal justice, health and zoology. The commonality derives from the fact that the projects were perceived by major stakeholders to be

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complex and of high risk (financial and/or reputational) and our interviewees had taken key leadership roles in steering those projects to successful conclusions, often against all odds. In spite of the differences in background we were encouraged by the fact that repeated themes began to emerge quite quickly. A lot of highly experienced people from different fields were saying similar things!

As a research team we were very impressed by the calibre of the individuals whom we had the pleasure to interview. They came across as exceptional people as well as exceptional leaders. Our impressions of them as a whole can be found in the final section of this book. The samples for both studies (2004, 2005 and 2010, 2011) were selective and therefore to some degree the results are biased. We searched for successful leaders, seeking recommendations from customers, owners, peers and other key stakeholders.

HOW WE DEFINED COMPLEXITY INITIALLY FOR THE STUDY

For the sake of the research, when seeking leaders to interview, we used a very simple definition of a complex project. We defined a complex project as one characterised by uncertainty and ambiguity. The projects had also to be designated as high risk projects, either measured in terms of return on investment or reputation to the sponsoring organisation(s). Budget was not used as a criterion for selection because we have encountered many low budget projects that were extremely complex, success being vital to the reputations of the sponsoring organisations: international aid projects, organisational change projects and projects with a cultural sensitivity are examples. Some leaders also spoke candidly about complex projects that had gone wrong. Extracts from the interviews have been included throughout the book to illustrate, support, contest or contextualise findings from the research literature. In order to preserve the anonymity of the projects and the people who so generously contributed their knowledge, leaders interviewed are referred to by code numbers and any identifying characteristics of the projects have been removed.

Not all the findings are specific to complex projects. Many of our findings are consistent with organisational complexity leadership research (Marion and Uhl-Bien, 2001; Plowman and Duchon, 2008; Schwandt, 2008). However, the characteristics and themes explored throughout the book were consistently reported by those whom we interviewed.

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Who is the Leader?

When this book was still a germ of an idea, Jonathan Norman, from Gower Publishing, posed an important question about leadership of complex projects. He asked: 'Who is the leader?'

The answer to that question, strongly supported by the results from our research, is that in a complex project or programme there is rarely one leader. A complex project or programme is a multi-level endeavour involving numerous different groups and individuals, a kind of macro-team activity. Although certain individuals might be required to take overt leadership roles at critical times, the command-control notion of a single leader stems from a simpler world view. The many levels of leadership in a complex programme or project must somehow coalesce – individuals, teams, organisations and environment. Highly networked groups interact, each group having a small but significant impact on the overall carriage of the project. Leadership under these circumstances will be a more diffuse concept, obvious only when it is absent, the exception being times of crisis when leadership should be very obvious. Effective leadership depends upon the good will and capability of all the parties involved with the project but it will only work if the organisational structures are there to support. Understanding how these roles are performed and how they interact seems to be crucial to understanding how leadership in a complex project actually functions.

Beliefs and Myths About Leadership

Some recent thinking on complexity and leadership in organisations challenges some long-held understanding about what leaders actually do.

Many of these beliefs such as, leaders being able to control outcomes, leaders being able to define and deliver a vision, leaders' role in minimising conflict and leaders using their influencing skills to direct others are underpinned by a linear rational view of the world. Complexity theorists dispute many of these views. Instead they argue that organisations are characterised by emergence and non-linearity, where cause and effect are often difficult to connect. Leadership in these organisations might need to be different; flexible, responsive, adaptive, inclusive and richly communicative.

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MYTH: ILLUSIONS OF CONTROL

In 2004 I wrote a paper with a colleague entitled 'Illusions of Control' (Remington and Crawford, 2004). The aim was to raise awareness and question some of the convictions underpinning project management thinking at the time; beliefs that were grounded in command-control notions. About that time other authors were also beginning to argue that project management methods stemming from a command-control paradigm may indeed apply to small, straightforward projects with short durations but probably do not work when projects become more complex, where uncertainty abounds (see Ivory and Alderman, 2005; Jaafari, 2003; Williams, 2002; De Meyer et al., 2002; White 2001; Baccarini, 1996). As projects become more complex the possibility for a leader to be in full control, at any point in time, rapidly diminishes. There are too many dimensions, any of which could interrupt control, to make it possible to achieve full and consistent control of outcomes all the time. The fact that many of these complex projects are brought in close to budget and schedule is all the more remarkable and a credit to the project leaders. Often, however, at times the best leaders can do is create an *illusion of control*.

Nevertheless, an expectation remains strong in parts of the organisational literature that reducing or eliminating disorder to return to a pre-determined status quo is the role of a leader and that this kind of control is possible. One fundamental flaw in this logic is the assumption that a goal once set is the right goal and remains relevant as time progresses; presupposing that learning is not taking place. Only an unchanging, static system does not learn and evolve over time. In 1973 Minzberg (p. 78) writes of leadership: 'A disturbance occurs, a correction is necessary.' This idea of leadership stems from a military metaphor; an aircraft or a missile pursues a search path with the aim of eventually hitting a target. Ideas like these have dominated traditional approaches to project management until fairly recently.

MYTH: CREATING AND DELIVERING THE VISION

Some writers, Plowman and Duchon (2008) for example, question the idea that leaders can actually specify desired futures at all. It has been assumed for some time that the task of creating a vision for an organisation is one of the key leadership roles (see Kotter, 1999; Nanus, 1992). This constructed 'picture of the future' (Kotter, 1996, p. 68) is believed to be the key to defining what the organisation will be in the future and how it will perform. In any complex adaptive system ideas are likely to emerge from anywhere in the system.

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Marion and Uhl-Bien (2001) argue that in complex situations leaders focus less on controlling or pre-determining the future and more on enabling a positive future, whatever that may be. 'Leaders provide linkages to emergent structures by enhancing connections among organizational members.' (Plowman and Duchon, 2008, p. 139)

Does this idea apply to complex projects? Many of our interviewees stressed the need to embrace a 'few very clear goals' or 'a clear vision' as an essential way of focusing attention on the project and clearing away obstacles. In any complex adaptive system ideas are likely to emerge from anywhere in the system. From our conversations with senior project leaders, it was apparent that much of their work involved providing linkages, creating connections and ensuring information flows (see also Marion and Uhl-Bien, 2001). With the exception of some programmes of very long duration, that have been described as 'temporary organisations' (Lundin and Söderholm, 1995), compared with organisational life cycles most projects are relatively short in duration. The vision seems to be important as a distant goal to channel energy and motivate. However, the project leaders interviewed focused less on controlling the pathways and more on enabling flexible paths towards the vision and being responsive to adaptation.

MYTH: MINIMISING CONFLICT

Another widely held belief is that leaders should seek to minimise conflict. Minimising conflict is desirable if the conflict is destructive, however, the uncertainty and instability that occurs during constructive conflict stimulates idea generation and growth (Maguire and McKelvey, 1999; Prigogine and Stengers, 1984; Stacey, 1996), even if parts of the programme or project might, at times, appear chaotic to outside observers. Some researchers (Plowman et al., 2007) observe that effective leaders play an important role in destabilising a system where they see complacency. This kind of system disturbance can encourage followers to look at issues from different perspectives. This vital role of project leaders, particularly at the level of sponsor, in challenging project teams was clearly identified early in our research. Senior project managers interviewed expected executive sponsors to challenge them to think differently.

MYTH: LEADING THROUGH DIRECT INFLUENCING

Directing progress through influencing others is also considered by many to be an important role in leadership (Yukl, 2006). While influencing was a key

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strategy used by the leaders we interviewed, influencing as a strategy needs to be placed in perspective. One assumption that should be challenged is a belief in a direct, linear connection between the person engaged in influencing and the intended result. As with communicating and creating a vision, implicit in this idea is the assumption that people in leadership roles really do know what needs to be done all the time. As many of the leaders interviewed observed, in reality any person in a leadership role has only a very limited perspective of what is happening, both internally and externally. All complex adaptive systems have the capacity to learn and evolve. That also means at any time different parts of the system will be behaving differently and reacting differently to their immediate environments. In other words some groups in the project will know things that other groups don't. If the information is being used constructively the groups who know more or are experiencing stronger environmental pressures will be learning faster, faster perhaps than their leaders (Schwandt, 2008). Partnering is a preferable strategy in complex situations partly because it encourages collaborative sharing of information, problem-solving and learning.

Leading a complex programme or project requires leadership that fosters sharing of mental models and information across the entire project. Researchers have found that when leaders and followers share the same information and the same understanding about processes and how decisions are made, performance is better overall (Solansky, 2008). Plowman and Duchon (2008) suggest that leaders in complex environments should focus more on clarifying processes rather than specifying outcomes. This resonates with some other research on effective leader communication, which will be discussed in Chapter 2.

HOW OUR LEADERS LED

This is the subject of the final section of this book. Suffice to say at this stage they seem to understand how best to lead in complex environments.

How Does This Apply to Complex Projects?

Much of the recent research about complexity leadership might seem inappropriate for project management, which is by nature a goal driven activity. Nevertheless, the reality is that for many complex projects, or programmes, a fixed goal is an illusion rather than a hard reality. What the goal really looks, sounds and feels like is often not understood or shared by those who are

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expected to deliver the goal, or indeed by other leaders. Even if the goal is understood and agreed, the goal-paths, the means of achieving the goal, might be unclear, particularly to those who are expected to lead the implementation.

A project with which some of my colleagues were involved several years ago springs to mind as a perfect example. The vision was to inculcate 'a culture of trust' in a large regional police force. It is a good example of a vision that the people tasked with implementing soon realised was very, very nebulous. It took the project teams many months to arrive at a shared understanding of the goal and years to carry out the hundreds of projects that were needed to shift the culture towards the vision. In the process the expectations changed and the nature of the 'simple' initial goal went through significant mutations. In the end, sharing decision-making and processes were fundamental to finding the ways forward. Interview 62 GM.

This was a very 'soft' project but even so-called 'hard' projects, like building a submarine, can be affected by uncertainty and nonlinearity. At a high level the brief might be to build a top-of-the-range submarine within a certain budget and time-frame. These projects tend to have durations of several years. During the life cycle of the project it is almost certain that the initial specifications will need to be altered, as new technology becomes available or as technical problems are encountered. Setting aside political and economic pressures, changes in leadership, changes in executive structures, changes in project teams, and countless other sources of complexity, the goal-paths are circuitous and emergent. On completion of the project the initial specifications might seem to have been almost absurd, however more likely than not the initial goal, to deliver a state-of-the-art submarine, will have been achieved – now it just looks nothing like what was initially envisaged because both technology and requirements will have emerged and adapted.

How complexity and uncertainty impact project leadership and how successful project leaders have handled complexity is the focus of this book.

This Book is Set in Three Sections:

Section One: *What effective leadership achieves* in complex project environments forms the bulk of the book. The chapter themes within are derived directly

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from what was 'top of mind' for those senior leaders who took part in our studies.

Section Two: *What effective leadership needs* in complex project environments discusses some of the structures that are required to support effective leadership, without which leadership would not work.

Section Three: *How effective leadership performs* in complex project environments, the final section, summarises our observations of the leadership styles of the 70 project leaders interviewed. The chapters in this section come from a synthesis of individual reflections by the research team.

I hope that what follows rings true for project leaders at all levels!

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