

# Project Reviews, Assurance and Governance

GRAHAM OAKES

GOWER

# Project Success; Project Failure

## CHAPTER 1

Projects fail.

Our organizations invest in project management. We train project managers. We adopt project management processes. We look to organizations such as the Project Management Institute (PMI) and the UK-based Association for Project Management (APM) for support and guidance. A wealth of project management methods, bodies of knowledge, accreditations, maturity models, and so on, have been produced and eagerly taken up by practitioners and their employers and clients.

Yet projects still fail.

This is not because project managers are evil or lazy. It's not because organizations don't care about projects, nor because project teams don't want to succeed. Projects are hard. By definition, projects are about non-routine activities. Many of them are large and complex. They may involve many people, often from different backgrounds and increasingly with different languages and cultures. Complex and rapidly changing technology may be critical to success. Budgets are never large enough. There is never enough time. In amongst all this, it is easy for people to get lost, to overlook important trends, to misunderstand each other. So projects fail.

Does this matter? A certain amount of failure is probably inevitable. After all, lack of failure is a sign of lack of ambition. The problem lies in the scale of the failure.

## **THE COST OF PROJECT FAILURE**

The best known studies of project failure, at least in the information technology (IT) industry where I specialize, are the Chaos Reports. These have been produced by the Standish Group each year since 1994. The first report (Standish

Group, 1995) estimated that 175,000 IT application development projects were undertaken in 1994, representing a total investment of US\$250 billion. Only 16 per cent of those projects were considered fully successful. Of the remainder, 53 per cent ran over budget, on average spending about twice the originally budgeted cost. Even then they often delivered less than they'd planned. The remaining 31 per cent were cancelled before they'd completed.

That's an awful lot of failure.

Things are at least improving. In the 2006 survey (Standish Group, 2006), only 19 per cent of projects were cancelled before they'd completed; 35 per cent succeeded. The average cost overrun on the remaining projects was only about 60 per cent. That's better, but it still represents a vast cost to our organizations, both in wasted development funds and in foregone opportunities.

Outside the IT industry, the percentages may be different. They may even be better. However, every industry can find plenty of horror stories. Look at the construction of Wembley Stadium in London, or the Scottish Parliament, for example, or even the estimation skills of the typical builder. (The percentages may not be that different either. Consider the UK Channel 4 *Grand Designs* property makeover TV programme (Channel 4) on a dozen projects with an average budget of £225,000, the average cost overrun was 60 per cent.)

These statistics are subject to a number of challenges. Rigorously gathering survey data is expensive, so surveys often suffer from methodological weaknesses and selection biases. Many organizations are reluctant to wash their dirty linen in public, so we don't hear about some failures. Conversely, newspapers tend to focus on the big failures, so we don't hear about many successes. Analysts sell their reports by finding newsworthy results, exacerbating this latter bias.

Likewise, the statistics are very sensitive to the definition of success. Is the budget set when someone first sketches out a bright idea on the back of an envelope, or do you baseline from the (probably larger) figure that results from a few weeks of analysis? Say you set up a six month project with a budget of £1 million and projected benefits of £2 million. After a month of detailed analysis, your team comes back to you and says 'We've found a way to generate £6 million of benefits, but the project is going to take twice as long and cost twice as much.' By Standish's definition, this is a failure: it's 100 per cent over budget. But maybe from your perspective tripling your initial investment is better than doubling it? It all depends on how time-critical the end result is, and what cash you have available to invest.

Nonetheless, no-one really challenges the underlying message. Delayed, underperforming and failed projects represent a tremendous cost for many organizations. This cost comes in many guises. There is the money invested in cancelled projects. There is the cost of failing to bring new products to market. There is the cost of running inefficient operations while waiting for projects to deliver promised improvements to processes and systems. And so on.

These projects also create a tremendous personal cost for project team members, managers, sponsors and other stakeholders. People work long hours as they attempt to recover failing projects. They put other aspects of their lives on hold. Their careers are damaged by association with failure.

## **THE IMPORTANCE OF PROJECTS**

Even if our success rate is improving, as some of the surveys suggest, it's not obvious that these costs are declining. Many organizations are doing more projects.

It's hard to gather clear statistics on this growth. Associations such as the PMI and APM can measure growth in their membership and in the number of accreditations they give out. Does this mean we're doing more projects, or simply that we've become better at promoting project management as a profession? Probably a combination of the two. Likewise, the increasing number of articles on project management published in the business literature suggests that organizations see more need to manage projects effectively, as does the proliferation of organizational maturity frameworks such as the Portfolio, Programme and Project Management Maturity Model (P3M3 – Office of Government Commerce (OGC), 2006) and the Organizational Project Maturity Model (OPM3 – PMI, 2003). This is probably driven by the increasing amounts they are investing in projects. Methodologies such as PRINCE2 (OGC, 2005) also note that organizations are dealing with an accelerating rate of change and hence need to do more projects to handle it. Finally, studies such as Wheatley (2005) confirm the trend, but find it difficult to quantify.

Let's take this on faith for now. Organizations are doing more, and more complex, projects. That certainly accords with my experience, and that of many people I've spoken to. A couple of factors lie at the heart of this.

For a start, projects are a way of implementing change. They help us build new processes, new structures, new products, and so on. In a rapidly changing

world, the ability to change effectively is an increasingly important strategic capability. The ability to execute projects is part of this capability.

Second, we've done many of the easy projects. Where it used to be good enough simply to be able to schedule our fleet of trucks efficiently, we now need to coordinate a supply chain that spreads across many organizations and several continents. Where a simple customer database used to be all we desired, we now need a suite of analytical tools and increasingly flexible business processes to use their results. Where it used to be good enough to deliver individual projects on time and on budget, many organizations are finding that they need to optimize a complex portfolio of projects and programmes in order to compete.

If we are doing more projects, and these projects are increasingly complex, then it's entirely feasible that the cost of failure is growing even as we get better. We need to get better even faster.

## **PROJECTS, PROGRAMMES, PORTFOLIOS**

Before I go too much further, I need to address some points of terminology. First, does this discussion only apply to projects, or is it relevant to programmes too? What's the difference between the two?

Here are some working definitions (from APM, 2006):

- A project is 'a unique, transient endeavour undertaken to achieve a desired outcome'.
- A programme is 'a group of related projects, which may include business-as-usual activities, that together achieve a beneficial change of a strategic nature for an organization'.
- A portfolio is 'a grouping of projects, programmes and other activities carried out under the sponsorship of an organization'.

To some people, these definitions are contentious. Different organizations and associations have slightly different definitions. There's a grey area between projects and programmes: initiatives can look like programmes from one perspective (of a particular business unit, for example), yet only like individual projects from another perspective (of senior executives or of other business units). For other people, the difference is irrelevant – projects or programmes

are simply part of the wider spectrum of activities we undertake in order to deliver on our mission.

I'm not going to engage in this debate. The above definitions are 'good enough' for me to work with. What I care about is how we can use projects and programmes to deliver our organizational objectives more effectively, and in particular what role reviews and assurance play in doing this. That brings me to my second point of terminology. What do I mean by reviews and assurance?

I take my working definition of assurance from OGC, 2004a:

*Assurance is '[i]ndependent assessment and confirmation that the programme as a whole or any of its aspects are on track, applying relevant practices and procedures, and that the projects, activities and business rationale remain aligned to the programme's objectives'.*

We conduct assurance by looking at the project or programme and identifying ways in which it could be improved. That is, by performing reviews. (My *Shorter Oxford English Dictionary* defines 'review' as 'the act of looking over something, with a view to improvement or correction'.)

In most cases, when I talk about processes, techniques or considerations that apply to project reviews, they apply equally well to programme and portfolio reviews. If there's a material difference, then I'll try to call attention to it. Otherwise, in places where I talk about 'projects', it's safe to assume I was just too lazy to write 'projects and/or programmes'.

## **THE ROLE OF REVIEWS**

Two things are clear to me when I consider the role of reviews and assurance in delivering our organizations' objectives. First, any initiative, whether project, programme or portfolio, needs clear and validated information about its objectives, status, risks, and so on, in order to succeed. Reviews play an important part in delivering that information.

Second, there are many different ways to run a review. The best approach for any specific review depends on the circumstances. Differences in organizational objectives, processes and culture all influence our approach to reviews. Two organizations may approach the same project in very different ways, and for good reasons. The differences in the resulting project organizations and approaches may be far greater than the difference between a 'project' and a

‘programme’ within either organization alone. You need to account for these differences when setting up and performing a review.

That said, we shouldn’t get hung up on the differences. The similarities between organizations are also pretty striking. They’re all staffed by people, after all. It is possible to find principles and practices with general applicability.

Some purists out there have probably already discounted this book on the basis that I’m not rigorously separating projects and programmes in my thinking. For the rest of you, I hope I can help explore some of those common principles and practices, and work out how to identify and handle the differences.

## **THE IMPORTANCE OF INFORMATION**

Whatever we call them, we need to do our projects better. I believe that the key to this is information. If we don’t know how our projects are doing, then we can’t act to keep them on course. It’s as simple as that.

The Chaos Reports affirm this. They attribute much of the improvement in project success rates over the last decade or so to iterative development approaches. Regular iterations mean we have clear checkpoints on project status. They make it easier to test how we’re doing as we proceed. They create visibility. Project reviews and assurance are another means for doing the same thing.

Such information is important for other reasons too. For a start, the cost of doing projects poorly extends beyond individual projects. Lack of clean information on an individual project’s status makes it difficult to allocate resources effectively across a portfolio. Without information, we can’t prioritize effectively. We can’t predict resource contention. We can’t identify and address risks that cut across several projects. Project reviews and assurance provide information that is vital to effective portfolio management.

For many organizations, this problem affects their corporate governance. As organizations do more projects, an increasing proportion of their assets becomes tied up in the project portfolio. Project finance, staffing, systems – they all become part of a pool of intellectual ‘work in progress’ that is analogous to the stockpiles of parts that used to litter factory floors before lean manufacturing came into vogue. This work in progress now constitutes a material portion of many organizations’ assets. As such, they need accurate information on its status and disposition so that they can manage it effectively, and so that they

can report on it to their shareholders, regulators and other stakeholders. With this in mind, project assurance functions need to work closely with audit teams, and take legislation, such as Sarbanes Oxley, into account.

Finally, there's an opportunity cost associated with weak information. If we lack information, or don't have confidence in the information we do have, then it becomes harder to manage risk. Without clean information, we avoid taking risks that are otherwise quite manageable. How many worthwhile projects do we avoid doing simply because we can't be confident they'll be delivered effectively? For some organizations, almost paralysed by these uncertainties, effective project reviews could make it possible to take on some very valuable projects.

## **REASONS FOR PROJECT FAILURE**

So, what sort of information do we need from our project reviews? To answer this, we need to explore what's going wrong with our projects.

There's been a lot written about project failure. Organizations such as the Standish Group and the UK's OGC (e.g. OGC, 2002, 2004b, 2006) identify causes such as:

- The link between project and organizational objectives is unclear, or becomes broken as circumstances change.
- Success criteria, scope and requirements are unclear or unrealistic.
- Senior managers fail to take ownership of the project, or to provide clear leadership and direction.
- The project team fails to engage effectively with users and other external stakeholders (or vice versa).
- There is a lack of key skills or resources.
- Schedules and plans are unrealistic.
- The project team fails to operate as a cohesive unit, with clear allocation of roles and responsibilities.
- The capabilities of suppliers, technologies and tools are mis-estimated, especially in the face of a rapidly changing marketplace.

- There is a failure to perform key processes, such as communications, risk management, quality management, change management and benefits realization, effectively.
- There is a failure to break the project down into manageable steps.
- There is a failure to effectively track progress and to intervene when the project gets off course.

To put it another way, to avoid project failures we need clear information in a number of areas:

- Objectives: Are they appropriate and realistic?
- Stakeholders: Do all stakeholders (executives, sponsors, project team, and so on) have a clear and common understanding of their objectives, success criteria, roles and responsibilities?
- Resources: What roles, skills, resources and time are necessary to deliver the project, and how well do the available resources match this profile?
- Processes: Do we have the appropriate processes in place? Are they being followed? Are they delivering the expected results?
- Performance: How well are our teams, tools and suppliers actually performing? Are their actions taking us towards our objectives? Are they doing this in an effective and efficient manner?

Above all, we need a clear picture of where we are at any point in time, and of how well this matches our expected progress.

## **THIS BOOK**

So here, in a nutshell, is my thesis.

In a complex and rapidly changing world, organizations need to evolve in order to survive. Projects are a key mechanism through which they do this. At best, then, failed projects impose enormous costs on our organizations. At worst, they threaten their very survival.

We know a lot about the causes of project failure. Our project management bodies of knowledge are full of good advice on how to prevent or mitigate these causes. We have developed mechanisms for propagating this knowledge

– professional bodies, certifications, methodologies. People and organizations have invested heavily in these mechanisms. Yet projects still fail.

Good project management is necessary, but it's not enough. Outstanding project managers can manage upwards (their sponsor) and outwards (other stakeholders) as well as managing their team. But even they have trouble keeping on top of all the information that characterizes a typical project in today's environment. Likewise, sponsors, teams and other stakeholders find it difficult to see exactly what's happening on their projects. And if they can't see what's going on, they can't discharge their roles effectively.

Project reviews and assurance help these people to understand what's really going on with their projects. However, in order for reviews and assurance to provide this information, we need to perform them effectively. This book explores some of the things we need to think about in order to perform effective project reviews and assurance.

Chapter 2 looks at different types of project review. It discusses common trade-offs we need to consider when setting up a review or assurance programme. It then identifies three key challenges to running such a programme: the difficulty of running reviews themselves; the difficulty of getting people to act on their findings; and the difficulty of embedding a sustainable review process into an organization.

Part II of this book then looks at the first of these challenges. Chapters 3 and 4 set out a process model for project reviews. This model identifies some of the parameters governing execution of reviews. A clear understanding of these parameters can help people set up reviews more effectively. Chapter 5 looks at the feedback loops in the model, and particularly at how these feedbacks can be used to enhance organizational learning.

Chapters 6 and 7 then look at some of the more pragmatic details of performing reviews. If the primary purpose of reviews is to deliver clear and validated information, evidence gathering is at the core of reviewing. Chapter 6 therefore looks in more detail at some of the techniques we use for evidence gathering. Chapter 7 looks at logistics. Scheduling meetings, keeping records, managing checklists – these may not seem very exciting, but they can overwhelm review teams if they're not handled effectively.

Part III looks at the second challenge to performing effective reviews: getting people to act on their findings. In order to deliver actionable findings, reviewers

need to understand who is able to take what action within their organizations. This is the realm of governance. Chapter 8 develops a simple model to help understand how reviews and assurance relate to project and programme governance. Chapter 9 extends this model to consider how assurance fits into broader organizational governance.

Finally, Part IV of this book looks at the challenges of setting up a review or assurance programme within an organization. It views these challenges from two perspectives. Chapter 10 considers organizational change management. It examines some of the issues you may need to address as you persuade executives, managers and project teams to adopt reviews. Chapter 11 considers the issues of managing an independent review or assurance team. If organizations have trouble coping with reviews, review teams can also have trouble coping with organizations. How might you manage the stresses that result?

## THE CASE STUDIES

The core of this book is built around some models of project review processes and governance. The models have been derived from practice, so I have interspersed examples of review practices between the chapters. These case studies have been drawn from practitioners, project management literature and from practices in other industries. They are intended to illustrate the range of types of review that people conduct, the sort of benefits they derive from these reviews, and the type of challenges they deal with as they execute them.

None of these case studies is 'right' or 'wrong' or 'best practice' or 'bad practice'. They're simply examples of the ways that people are doing things in a range of different circumstances. They may help you take the more conceptual material in the main chapters and apply it to your circumstances. I suggest you treat this as a learning process: try something, review how well it's working, then refine and improve.

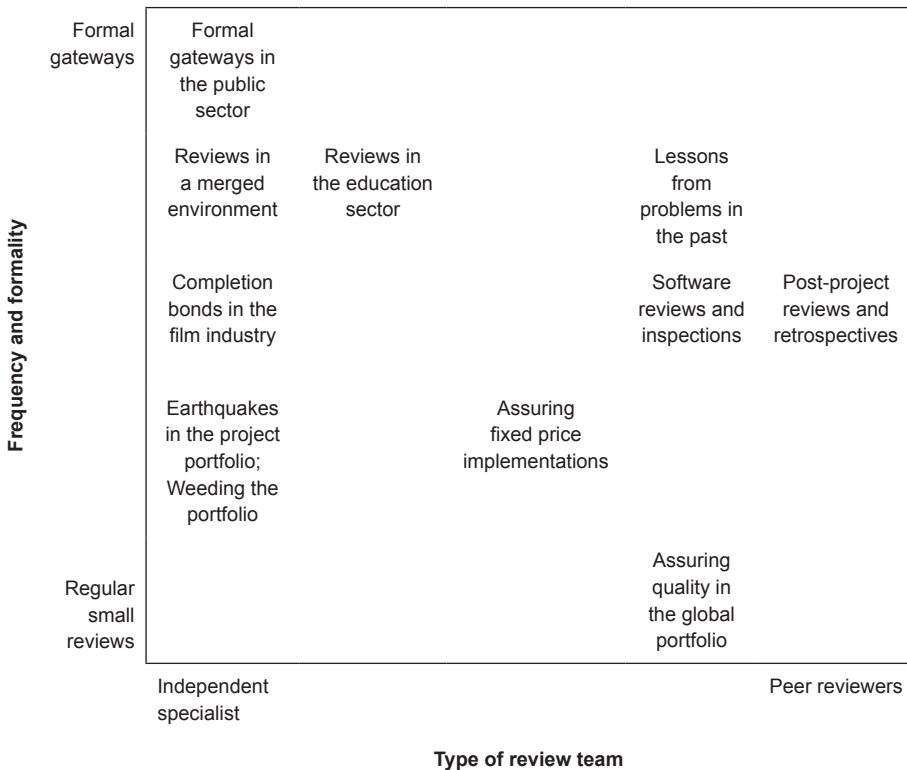
The following case studies and examples have been included:

- *Earthquakes in the Project Portfolio*: Describes some of my experiences of running an independent assurance team in the games industry. We used a combination of gateways and regular, lightweight project reviews to track project status and improve the predictability of delivery.

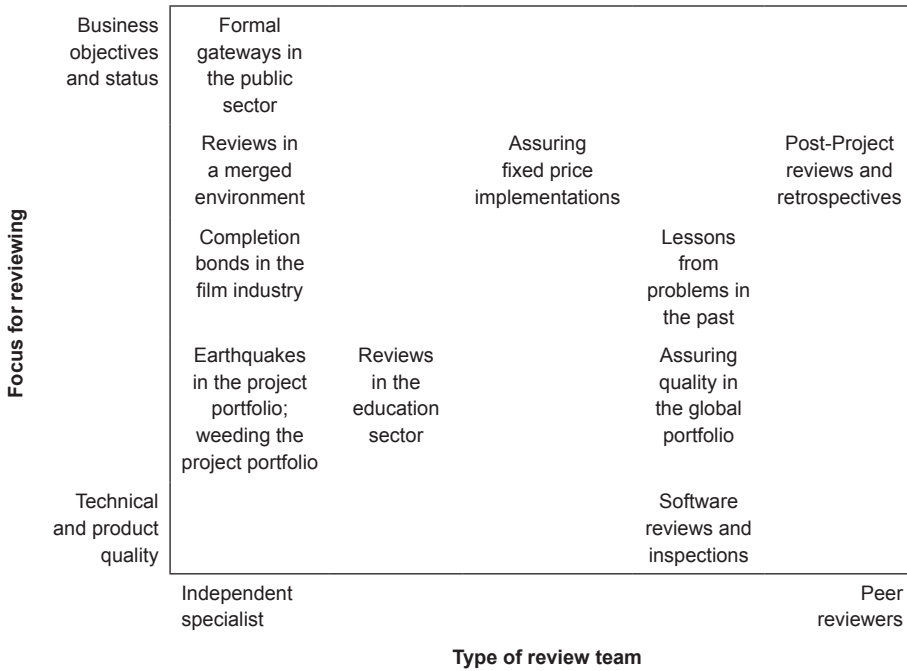
- *Formal Gateways in the Public Sector*: Describes the Gateway™ reviews overseen by the UK's OGC. These are one of the best documented examples of project reviews, and illustrate the benefits of a well-defined and formal review programme.
- *Lessons from Problems in the Past*: Describes one organization's experience of using quality reviews to share lessons and expertise across teams in the oil industry.
- *Post-Project Reviews and Retrospectives*: Discusses techniques for project retrospectives and related reviews. Again, these can be a useful way to capture lessons and share them within an organization.
- *Weeding the Project Portfolio*: Goes back to my experience in the games industry. Out of control projects can waste a lot of resources. They can also be very hard to kill. This case study looks at the traps this can create for review teams.
- *Assuring Fixed Price Implementations*: Looks at how a professional services firm combines peer reviews, gateways and health checks to ensure that it consistently delivers fixed price projects to time and budget.
- *Programme Reviews in a Merged Environment*: Discusses the use of project reviews to bring stability and a shared project management culture following a merger between two corporations.
- *Software Review and Inspection Techniques*: Project reviewers can learn from software engineering, where the literature describes several techniques, of varying degrees of formality, for conducting software quality reviews. This study gives a brief overview of these techniques.
- *Review Techniques in the Education Sector*: Much research has been done into techniques for reviewing the effectiveness of teaching. School inspections are a well-established, if politically sensitive, practice. What can project reviewers learn from these practices?
- *Assuring Quality in a Global Application Portfolio*: Examines one company's use of reviews to improve communications across globally distributed teams. By clarifying assumptions about requirements and quality attributes, reviews help such teams overcome the issues of geographical, organizational and cultural boundaries.

- *Completion Bonds in the Film Industry:* Film financiers often demand insurance for their investments, guaranteeing that their money will be repaid if the film is not produced to the original budget and schedule. Assurance processes play an important role for the insurance companies providing these bonds.

These case studies touch on some of the dimensions that need to be considered when setting up a review or assurance programme. How should we balance our effort between regular, small reviews versus less frequent but more formal gate reviews? Are there advantages to using independent specialists to conduct reviews, or would it be better to simply ask project managers to review their peers' projects? Should we focus on reviewing the technical quality of deliverables, or on overall business objectives and project status? Figures 1.1 and 1.2 illustrate where each case study lies on these dimensions. Chapter 2 discusses these issues in more detail.



**Figure 1.1** Case studies by frequency and formality



**Figure 1.2** Case studies by reviewing focus

## AVOIDING UNNECESSARY FAILURE

One final thought before we launch into this journey. A large industry has grown up around project failure. People perform research into its prevalence and causes. They develop ways to address these causes: bodies of knowledge, certifications, processes, and so on. They write books (like this one!). They sell consulting, methodologies and tools.

This industry has produced a lot statistics and reports, some of them well researched and unbiased. It has produced a lot of good advice on how to avoid failure. However, there is one thing it rarely tells you. It's easy to avoid project failures. Just don't do any projects.

The fact is that a certain amount of failure is inevitable if we are going to change and innovate. Whenever we try to do new things, we're going to get it wrong at least occasionally. Sometimes we'll do very risky projects because they have a high potential payback. Only one in eight exploration wells drilled in the North Sea discovered economic deposits of oil or gas. Yet those successes more than paid for the seven in eight 'failures'.

Success doesn't come from avoiding failure. As Dickens said in *Little Dorrit* (2003[1857]): 'Every failure teaches a man something, if he will learn.' If avoiding failure means avoiding learning, then it's not the way to prosper in a knowledge economy. The way to prosper is to fail fast, fail often, learn and move on.

Success comes from avoiding *unnecessary* failure. Projects that cover their failures, aggregating them all up into one big disaster at the end. Projects that overlook small deviations, letting them grow until they become unmanageable. Organizations that make the same mistakes over and over again. These failures happen because people create a dream world for themselves. They curtail discussion of what's actually possible. They ignore available information about what's really going on. They redefine terms to suit their preconceptions. These failures are worth avoiding.

Let's look at how we can use reviews and assurance to keep in touch with reality, to understand our experiences and to learn from them. If we can do this, we can take appropriate risks and gain the paybacks that result.