Project Management in the Real World

Shortcuts to success

Elizabeth Harrin

BCS

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About the Author

Elizabeth Harrin has worked within the financial services industry since 1998. Now a senior project manager for the global financial services company AXA, she has successfully led a wide range of technology and business projects, involving managing international project teams across multiple sites. Elizabeth is a PRINCE2 Practitioner and is trained in the Six Sigma process improvement methodology as a Black Belt. An alumnus of the universities of York and Roehampton, Elizabeth is a keen gardener, a hobby which is seriously hampered by the fact that she currently lives and works in Paris, where vegetable patches are non-existent.

Acknowledgements

I am indebted to the many managers and companies who have generously given their time and offered their experience for these case studies.

In many ways, producing this book was a family affair. Numerous errors were spotted and erased by the eagle eyes of Pauline Harrin. Several of the diagrams were produced by Caroline Harrin, whose talent for turning my scribbles into graphics that mean something never fails to amaze. And if it wasn't for my father Alan, who taught me how to program on a tape-driven computer, I might not be working with technology today.

Thanks are due in particular to my husband, Jon Borley, who was generous with his great ideas, suggestions and cups of tea.

I am also grateful to the team at BCS, in particular Matthew Flynn for his patience and support throughout the process. His input, plus that of the two anonymous reviewers, helped me improve the text. The book has been extensively proofread and reviewed, and so any errors or omissions in it are strictly my own.

Glossary

Actual cost of work performed (ACWP) Amount of money spent on the project activities up until a given date.

Assumptions Statements made during a project that are not based on known or certain facts.

Baseline Stake-in-the-sand view of a project schedule, budget or other moveable activity that provides a comparison of the actual situation against the expected situation.

Business-as-usual Day-to-day activity as distinct from project activity.

Change control Process of managing change in a controlled way.

Change management See *change control.*

Contingency Provision made within the project planning stages to allow for unforeseen circumstances; usually built into the budget or schedule.

Critical path Longest route through a project plan; collective name for the group of tasks that must be completed on time in order for the project to deliver to the planned end date.

Critical path analysis Process of establishing the critical path; can include drawing out the critical path diagrammatically.

Deliverable Something tangible delivered as a result of the project.

Dependency Relationship that links the order in which activities are carried out. Task B is said to be dependent on task A if the start or finish date of task A must be reached before task B can start.

Earned value analysis (EVA) Method to establish the budget and schedule position of a project based on resource planning.

Estimate at completion (EAC) Total budget required to finish the project, calculated by adding together estimate to complete and expenditure incurred to date.

Estimate to complete (ETC) Budget required to finish the project calculated from a given date to the project end.

Ice-breaker Activity or short game used to introduce team members to one another; used in workshops, long meetings and at the beginning of projects.

Issue Risk that has actually occurred or another known circumstance that may impact the project's outcomes.

Issue log Document listing all the issues that are impacting the project; updated with the activities required to actively manage and resolve each issue.

Issue register See *issue log.*

Milestone Date by when a particular chunk of work is due to be completed.

Network diagram Visual representation of a project plan, showing the links between each task; used in critical path analysis.

Plan Document, or several documents, detailing exactly what the project needs to do in order to deliver the objectives; a practical analysis of what deliverable will be produced by whom and when.

Pilot phase/stage Project implementation in miniature to test and assess the impact of the deliverables before the project is fully rolled out.

Programme Collection of projects with a common theme, sponsor or reporting process.

Proof of concept Test of the project deliverables in a controlled environment; shorter and more laboratory-based than a pilot.

Post-implementation review See *post-project review.*

Post-project review Meeting to evaluate the project's successes and challenges and record any learning for future projects; a way of sharing corporate knowledge.

Project board See *steering group.*

Requirements document Document that records all the things (requirements) the end user wants from the project; used as a basis for technical documentation.

Risk Statement of the possibility that something unforeseen will happen to the project that will have a negative or positive impact on the outcome.

Risk log Document listing all the risks that may impact the project; updated with the activities required to minimize each risk.

Risk register See *risk log.*

Risk response Approach to managing a risk; typically one of: avoidance, transference, reduction, acceptance.

Schedule Document listing all the tasks that need to be done in order to complete the project and the dependencies between them; the project calendar.

Scope statement Description of what is included in the project and what is not; covers deliverables but also groups of people impacted and the reach of the intended activity.

Sponsor Senior manager who heads up the project; person who champions the work and to whom the project manager reports with project progress.

Stakeholder analysis Exercise to determine the interest and influence of stakeholders to establish their support for the project and what can be done to influence their position.

Stakeholder mapping See *stakeholder analysis.*

Stakeholders People who have an impact on, or who are interested in, the project.

Steering committee See *steering group*.

Steering group Group made up of the project sponsor, project manager and one or two other key stakeholders; this group is responsible for decision making.

Success criteria Standards by which the project will be judged at the end to decide whether it has been successful in the eyes of the stakeholders.

Test scripts Documents explaining the step-by-step method required to test a deliverable; given to testers to ensure testing is done in a methodical way.

Workstream Part of the project that can be managed as a discrete chunk; led by a workstream leader.

Preface

Project Management in the Real World won't teach you how to be a project manager. It's not going to show you how to set up your first project, walk you through it and see you out the other end with all the benefits realized.

Traditional project management books do that, following the project lifecycle with chapters on project definition, initiation, execution, closure and so on. This book is different.

It's for people who already know that a project has a beginning, a middle and an end and who want to take project management further. It's for people who know the theory and feel there must be an easier way to get things done. It's over 250 years' worth of combined project management experience distilled into 200 pages so you can see how other people run their projects outside the management texts and research papers: how projects get done in the real world.

This book is organized into five sections: managing the project budgets, scope, teams, plans and yourself as project manager. Wherever you are in your project, you should be able to easily find information relevant to the particular situation you find yourself in.

Each section is divided into short chapters, which explore discrete elements of the business of project management. Each chapter includes an anecdote from a manager who has been there and done it or a case study from a project with a valuable lesson to be learnt. For clarity, and also because this book is designed for people without much time to study project management theory extensively, each short chapter covers one discrete point that you can put into practice immediately: you'll understand both why and how things can be done. Dip into the chapters at random and pick a section, or make your way methodically through the section most relevant to where you are in your project at the moment. If a topic particularly grabs you, flick through the further reading suggestions and references to find ways to take it further.

Throughout the book, you will see icons in the margins to guide you to important information in the text. Here's the key:

HINT

A hint or tip to help you apply the knowledge in the chapter.

ANECDOTE

An anecdote or case study: real-life experiences from project managers who have been there.

GOLDEN RULES

The golden rule to remember, even if you don't remember anything else about the chapter.

DEFINITION

A definition of a project management term or principle.

WARNING

A potential trouble spot or project management pitfall.

Some names and project settings have been changed or disguised at the request of interviewees. The chapters cover the elements that I feel are most relevant to modern project management but are frequently overlooked. It has not been possible to include everything I wanted, and I'm sure you'll have a favourite hint, tip or memory that you believe other project managers could learn from. Please email me with your ideas for another volume at elizabeth@elizabeth-harrin.co.uk.

Elizabeth Harrin
Paris, July 2006

Foreword

In this book, Lonnie Pacelli is quoted as saying 'Surprises are for birthdays'. It was in fact a few days after my birthday that Elizabeth Harrin approached me to write this foreword, a very pleasant surprise!

In the media, we frequently read or hear about project failures, which consequently adversely affects the reputation of all project managers. The success stories rarely hit the headlines. As Chair of the BCS Project Management Specialist Group (BCS PROMS-G), I am, *inter alia*, responsible for promoting professionalism in our specialist sector of the information technology (IT) industry. By providing, through our countrywide events, timely and relevant information on industry developments and by sharing lessons learned, PROMS-G promotes continuing professional development. Our aim is that project managers, and therefore their projects, will be increasingly successful and hit the headlines for the right reasons. Elizabeth is one of our 5,000-plus valued members and an occasional speaker.

A key skill required of all project managers is to identify potential risks and to remove or mitigate their effect before they become issues. While we all appreciate pleasant surprises, it is the unpleasant ones that have the most adverse effects on a project. Regardless of whether you are an experienced project manager, it is highly probable that you will come across both types of surprise.

It is, however, impossible for project managers to foresee all situations that may arise. While we should all attempt to continually develop our professionalism and to keep abreast of developments in our own industry or particular area of expertise, this may not always be possible due to the large amount of change that occurs. It is therefore imperative that project managers are able to focus on these changes and assess their impact rather than spend their precious time resolving underlying project management issues such as budgets, processes and so on.

This book aims to assist with getting the latter right. It is a valuable reference point for ensuring that a project has the underlying essential processes and authorities in place and that they are working as intended. Some of the pitfalls that await the unwary or unskilled are identified and guidance is provided on how to avoid them. In following these recommendations, and not spending time resolving basic issues, a project manager's time will increase, allowing him or her to focus instead on the more critical risks and issues.

It is no surprise to me that Elizabeth has written a book that is very easy to read and that you can dip in and out of as required. Each part is self-contained and will provide that nugget of information you have been looking for. Elizabeth has collected the issues, anecdotes and success stories not of entire projects but of the elements within them. I am pleased that so many project managers were willing to share their experiences, because it is only by sharing and learning from these experiences that we can all continually develop and enable our professionalism to grow. All project managers, whether working in IT or in other industries, will identify easily with the lessons learned. If you find something works for you, then please pass it on. By the way, PROMS-G is always looking for speakers for our events.

The phrase ‘Surprises are for birthdays’ is one of the mantras that should guide us in all aspects of project management. As a professional project manager and chair of PROMS-G, perhaps I should have anticipated the pleasant surprise of being asked to write this foreword. On the whole though, I would rather focus on avoiding the unpleasant surprises and leave the pleasant surprises just as they are. Elizabeth’s book helps to do just that.

Ruth Pullen
Chair, Project Management Specialist Group
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March 2006

Section 1
Managing project budgets

Know that with a farm, as with a man, however productive it may be, if it has the spending habit, not much will be left over.

Marcus Porcius Cato (BC 234–149), *De Agricultura*

More than one-third of projects have a budget of over £1 million, and so knowing how to handle the finances is an essential part of a project manager's repertoire. The initial budget is often just a starting point. An incredible 56 per cent of projects are affected by budget changes, and that's not just a one-off financial revision. The average project, if there is such a thing, has its budget revised 3.4 times.[1]

Keeping on top of all this is not always easy, and it is made harder by the fact that project managers themselves don't always get control over the money. This section covers how to manage project variables over which you do not necessarily have authority, how to find out who has that authority, and how to manage the relationship with the budget holder. Many projects do not appear to have budgets at all, and Chapter 11 looks at working effectively in that environment. This section also looks at reporting, tolerances and contingency.

1 Create a realistic budget

Even the smallest project will have overheads, your time as the project manager being a minimum. Nearly all projects will have more than that, so part of your role in setting up the project is to define and propose a budget for the work and get that approved.

BRAINSTORMING THE BUDGET

'I haven't had much experience handling money, so doing my first project budget was really hard,' says Emily Jones, a junior project manager in a small public relations consultancy. The project was to revamp a room that had been used for storing spare furniture into a new area for holding workshops. 'My sponsor left me to it, so I had to work out the money I thought I'd need by myself.' Jones set up a brainstorming session with her team and asked them to help her identify all the likely costs for the project. 'We came up with the obvious ones like staff salaries and buying the new office furniture really quickly,' she says. 'Then I asked them to be more creative, and someone said "Hiring a projector for the staff briefing." OK, so that might not sound really creative, but as our company projector had just broken, and we were scheduled to do a presentation on the project in three weeks at a briefing for all 45 staff, it was a cost I certainly hadn't thought of.' In fact, Jones hadn't even known the company projector was broken. The replacement was on order but not due to arrive for another five weeks. Jones wanted her presentation at the company briefing to be professional, and projector hire was not a great deal of money, so a member of the team was tasked with finding an estimate and the cost was added to the budget. 'On the subject of hire, we also came up with hiring a van to take the old furniture to a charity warehouse. We could have had the council take it away for free, but we decided we'd rather it went to a good cause, so that cost ended up in the budget too.'

Jones split the identified costs into groups. 'In the end we had a group of charges for manpower for our time and one part-time contractor, and a group of charges for putting in a new telephone, the decorating costs and some miscellaneous things. I added a contingency line of 15 per cent of the overall budget as I knew many of the costs were just estimates,' Jones continues. 'I explained to my sponsor that this was for risk management and he cut it to 10 per cent. I thought that was reasonable, and he approved the budget on that basis.'

Creating a budget is like putting together a project schedule, which we'll look at later. You can work out how much money you will be spending based on what you know needs to be done, just as you work out how much time the project will take based on the same information. Think of the budget as a shopping list of all the things you need to buy to make sure the project gets completed. Just like a trip to the supermarket, you might not end up spending exactly what you expected but at least the list gives you a reasonably accurate starting point. 'When planning, assume your budget will not be increased or decreased during the project,' writes George Doss in the *IS Project Management Handbook*. 'Budget changes . . . are adjusted through negotiations with the project sponsor based on circumstances at the time.'[2]

There are five steps to creating a project budget:

(i) Identify the resources required for the project.
(ii) Estimate the cost for each of those resources.
(iii) Document the costs and calculate the overall figure.
(iv) Submit the budget to your steering committee or sponsor for approval.
(v) Find out your budget code.

Let's take each of those steps in turn.

IDENTIFY THE RESOURCES REQUIRED FOR THE PROJECT

Review the schedule, project initiation document and any other documents you have to identify the activities that need to be completed. Draw on your stakeholders and project team to brainstorm anything else that might be required, e.g. travel, accommodation, couriers, equipment. Will your project have to pick up the costs incurred by other areas of the business that are impacted by the work you are doing? Ask other managers who have done similar projects to validate your list.

ESTIMATE THE COST FOR EACH OF THOSE RESOURCES

Every step, every task of the project will have associated costs. Projects that do not have full-time staff may avoid paying for the entire salary of anyone working on it, so ask the finance department whether there is a list of standard chargeable rates per 'type' of employee. For example, your project might have to pay £1,000 per day for an expert manager but £650 per day for a junior marketing executive. Some of these costs may be just 'paper' prices – especially for internal resources. They are just figures you plug into the business case, but in reality money never changes hands. Check out your company's rules for charging for business resources, and also check with each department head about their expectations. For example, if they are loaning you a person, then they may expect the project to fund a temporary resource to backfill that person's day job.

A NOTE ON ESTIMATING

Given the flexible nature of budgets, and projects in general, it's very hard to pin down costs to an exact figure at this early stage of the project. And it's not a good idea either, unless you are absolutely 100 per cent sure that your estimation is spot on and will not change.

At this stage, present your estimates as a range rather than a fixed sum. This means your overall project budget, once you have added up all your estimates, will be between £*x* and £*y*. It's this range that you present to your steering group and sponsor.

Presenting a range means a little more flexibility later on. It also gives you the chance to start managing the expectations of your sponsor now – they will have to come to terms with vagaries and changes as the project progresses, so now is a good time to start explaining the nature of project management.

DOCUMENT THE COSTS AND CALCULATE THE OVERALL ESTIMATE

Companies that carry out a lot of projects will probably have a standard template for submitting a budget, so find out whether a form already exists. Create your own form in the absence of anything standard, using a method that suits you, for example a computer spreadsheet. The advantage with an electronic budget spreadsheet over using a word-processing package or a paper system is that the figures will update automatically, reducing the risk of manual error and saving time. Group together similar costs, so you have subtotals as well as an overall total, and include a line of contingency for risk management. Compare your budget range with any amount given to you by the project sponsor, and see below for what to do if the figures don't match.

SUBMIT THE BUDGET TO YOUR STEERING COMMITTEE OR SPONSOR FOR APPROVAL

Once you have your budget written down, it needs to be approved before the project can continue. Your sponsor or steering committee is the first point of approval. They will advise you on whether the budget needs another level of approval from finance, a central planning committee, an IT authorization forum or another group, depending on where the funds are actually coming from.

WARNING

More often than not, you'll be asked to kick off the project without budget authorization. In the real world, there are deadlines to meet that won't wait just because the budget committee meets only on the last Tuesday of the month. If you're asked to start work without the relevant approvals, get on with it! But make sure you have something in writing to cover yourself against any expenditure incurred during the time you're working without an approved budget.

FIND OUT YOUR BUDGET CODE

Assuming all goes well, the budget will be approved and you will be given the go ahead to spend the money required. Any expenditure needs to be tracked back to the project so the budget holder can keep an eye on what is being spent. The project might be allocated its own pot of money, ring-fenced from other budgets, in which case you will probably have a cost centre code of your own. Alternatively, the project might be allocated a portion of the budget for a particular department. If this is the case, ask your sponsor how they want you to identify project spending. A non-committal answer means you will have to invent your own code, perhaps the project number or a shortened version of its name. When you sign an invoice or raise a purchase order, use the code to ensure the expenditure can be tracked back to the project; make certain that anyone else who has the authority to use the budget does this as well.

WHAT IF MY SPONSOR ALREADY HAS A BUDGET IN MIND?

Just because this is a sensible five-step approach that allows you to analyse the work involved and cost it accurately does not mean it is followed by all project sponsors. For many reasons, you could find yourself working on a project where the sponsor already has a set figure in mind. Some sponsors will knock off 10 per cent from your total because they believe the numbers are padded. Others may be compelled to halve the budget because someone higher up the chain expects cuts across the board.

If you put your mind to it, you can complete any project to a specified budget – at a hidden cost. Corners will need to be cut, quality might suffer and the customers may not get everything they thought they would. Present your steering group with a couple of options for reducing your proposed budget to their predefined figure, making the trade-off between quality, time, scope and cost. They may still tell you that it's their budget you need to follow, but at least you have explained the risks of delivering to a certain abstract budget figure and you have your planning documentation to back up your arguments.

GOLDEN RULES

To create a realistic budget, base your predicted expenditure on your project planning documentation and get the budget approved as quickly as possible to prevent any delay in starting work.

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