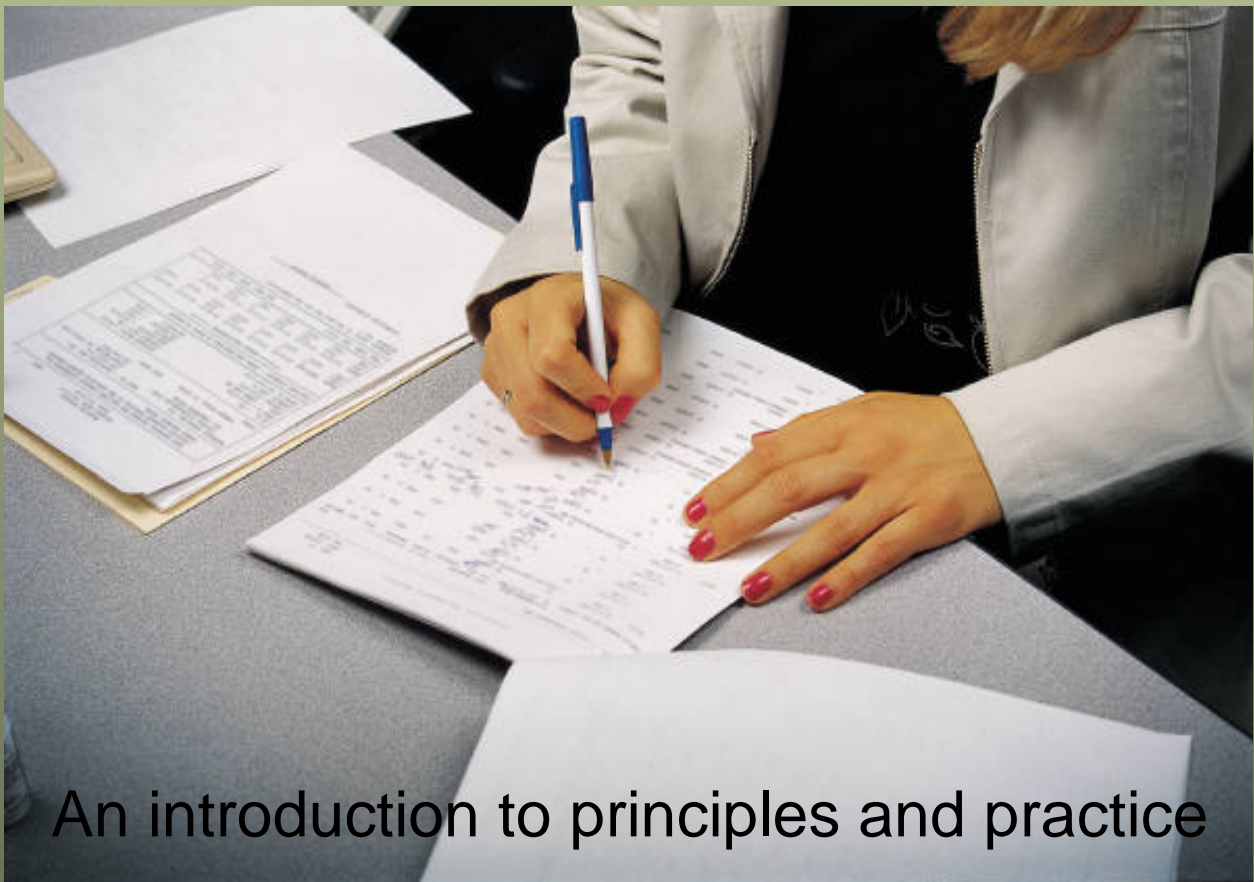


TREVOR CATER

A GUIDE TO

PROJECT MANAGEMENT



An introduction to principles and practice

Second Edition

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Preface

This book is a guide to project management and just that – a guide. It presents an overview of the life of a project, the various phases, a brief outline of some tools and some of the terminology you might encounter. It is not intended as a definitive work on project management. Nor is it superficial with an attitude of, “Yeah, just use some tools and you’ll be the best project manager ever!” You might even decide to modify some of the techniques and tools presented in here to suit your specific situation. That is fine too. As long as you understand why there is a need to modify and the impact of the modifications. Above all else, maintain a sense of pragmatism. There is no point having huge volumes of project documentation if they’re never going to be read.

Projects have start and end times and a result. Projects are a defined block of work and can be measured. They follow a format and have recognizable phases. Properly performed, project management will ensure that work is:

- organized and effectively resourced, and
- applied for the benefit of the whole organization rather than just to satisfy someone’s whim or a departmental campaign.

The actual management and execution of a project can affect the morale of people. Projects are an opportunity for staff to experience a sense of achievement and move the organization forward.

For some people, project management might turn out to be a career path – one involved in managing projects or in the administration of projects. Both avenues provide an opportunity for organizations to train staff, enhance career opportunities, improve morale and retain skilled employees. Project management can also be practiced safely using software simulators. Staff can hone their skills in a safe environment, while coming up to speed through a variety of staged “real-life” examples.

For staff working on projects, participation exposes them to different clients, business areas and broad cross-functional work. Such participation improves the person’s marketability and broadens their experience across the organization. Through those experiences they come to appreciate other areas.

Managing projects is not about using tools. Managing projects is a discipline founded in the construction and engineering industries – just think pyramids, bridges, roads, aircraft, cathedrals, and so on. Managing projects is challenging, to say the least. Don’t be put off, though. When it is done well it is very rewarding and satisfying. Believe it or not, participating in a well run, successful project is a fantastic experience!

This guide provides some ideas, insights, tools and references to assist you in understanding the basics about project management. It should act as a starting point for further investigation and education about the discipline.

The appendices in this guide provide a range of basic project management documents that you can start using on your project. Use your discretion to modify the templates to suit your own organization and particular project.

1 Introduction

1.1 The Purpose of This Book

A request for a project can come from many sources, for example, clients, Business Units, team members, management or the executive of an organization. Every project is different. It is a suite of activities performed to achieve a defined goal. While all projects are unique, the methods used to perform them are similar. Following a project management methodology means that common actions can be defined and improved upon, over time. All organizations perform projects. Some organizations do projects very well. Some are lucky to get any project completed.

This guide is an attempt to introduce you to:

- the ideas behind project management,
- some of the key terminology,
- examples of primary documentation that can be used for managing projects,
- some guidance about why certain items are required, and
- some commentary about the thinking and planning involved in projects.

This book is by no means exhaustive. However, at the other end of the scale, it is not just an overview. The intention is for you to use it as the base for tools and ideas that can be applied immediately and as an introduction for future investigations by you.

It is possible to study project management as a discipline and to become a Certified Project Manager. One organization offering this facility is the Project Management Institute (PMI). It has groups (chapters) all over the world. They conduct professional development courses that can lead to an internationally recognized qualification in project management. Refer to *Appendix N: Other Resources* for PMI's contact details and the details of a number of other institutes and associations around the world. In *Other Resources*, you will also find pointers to a range of interesting hardcopy and web information that will help you in your projects.

1.2 Project Management – What Is It?

Project management is a technique – a set of skills – that has been around for a very long time. Just think about the Great Pyramids, the Great Wall of China, ships, canals, great cathedrals and space travel. They all involved creating something that didn't exist beforehand. They all involved organizing massive numbers of people, materials and time while facing huge obstacles and sometimes great setbacks. They all had a cost. They all accommodated changes. The one thing they all had in common was a visionary idea. They weren't all necessarily managed well. Some experienced time and cost overruns. But did they all have plans? Hopefully, yes.

Next to actually doing the management of a project, planning is possibly the most crucial activity. The investment in planning can be returned many times over. It must be carefully managed to avoid over-planning. That is, you don't want to face "analysis paralysis" where the plan is a wondrous thing to behold, but nothing gets done.

However, without any planning projects meander along spending vast sums of money, time and effort to eventually be closed down without really ever achieving anything at all! What a

waste! As a sideshow, they end up frustrating everyone they have affected. We are sure there are many examples that spring to your mind.

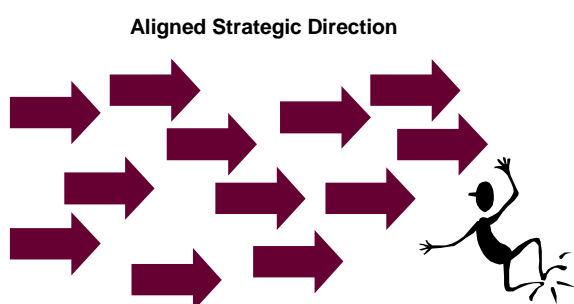
A well-planned and managed project is exciting to participate in. It's literally like a well-oiled machine that does what it is intended to do and can cope with adjustments or even obstacles. It works as expected. In short, it achieves *OTOBOS* – On Time, On Budget and On Scope. It satisfies the client's requirements at an agreed cost within an agreed timeframe. Planning and flexibility are the keys to achieving this state of project management nirvana.

1.3 Why Do Project Management?

Anarchy is not an option within an organization, especially when it comes to managing projects. The pressure of the customers' requirements, strategic imperatives, shareholder satisfaction and the very existence of the organization dictate that activities must be coordinated. Are you like the Project Manager pictured on the right? Are your organization's leaders, middle-level managers, shareholders and frontline workers working to different agendas?



Your organization should be after alignment to achieve an identified and agreed goal. In the picture on the left, you'll notice that all the arrows are separated but heading in the one direction.



All the participants in a project have different contributions to make. However, they're all following the same path. It also indicates that the plan is not "cast in concrete". Variations to the plan can be accommodated in the correct context. And like everything else, they need to be managed. We'll discuss the control of changes later.

1.4 When and How to Use Project Management?

If you have been given the task of achieving an outcome that requires some individuals or groups to perform tasks for you that is not regular in its nature, that is, it is unique, then use project management to achieve that outcome.

If the task has been done before, has a regular procedure or is operational in nature, then it is not likely to be a project. For these sorts of activities, there should be a set of documented procedures to be followed. If there are not any documented procedures, then there is an opportunity here for a project to be initiated to get some written.

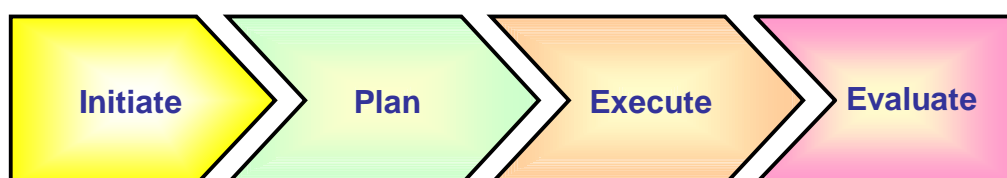
Now that you know when you should start a project, you may be asking, "But how do I do project management?" Ah, yes, that is **the** big question, isn't it?

Well, the answer is just as big too. However, it is not difficult. The rest of this guide will give you some insight into that very answer. Again, it is worth noting that this is a guide. While the underlying principles are consistent, you should use the guide to help shape your specific application of those principles and tools. Hopefully, it will encourage you to pursue further understanding about how to manage projects.

1.5 The Life of a Project

As unusual as it sounds, projects have a life. They are initiated, run their course and are then closed and finished. Despite all the different kinds of projects that occur, there are four key phases in the life of any project. These four phases are shown in the diagram below.

Figure 1 – Phases in managing a project



Initiate

The initiate step lays down the foundations for any project. Get this right and you're off to a good start. Initiating a project means doing some preliminary work so that when your idea is submitted for approval, as a project, it stands a good chance of being approved. In the initiate step, discuss your idea with potential stakeholders, obtain their feedback – comments, concerns, potential issues and known risks are all valuable.

A stakeholder is any party that has an interest in the project outcome, is going to be involved in the delivery of the project, or is going to be affected by the project in any way. That material that you get will help you to understand the project's potential impact and to scope it accurately. It also forewarns other departments that there might be a project about to start and that they might be required to be involved.

Plan

Plan – a four-letter word that conjures up a multitude of meanings. If it doesn't get done properly then there are likely to be many other four letter words (and possibly a few extras) stated about the lack of a decent plan! Good planning means that the solution embarked upon should end up being the solution desired by the client and is the solution they expected to be delivered. Planning takes some effort. The return on investment for a good plan is many times over. Similarly, the return from poor or non-existent planning is nil, zip, zilch, zero and everything else through to unmitigated disaster.

Prepare a plan by utilizing the information gleaned from the *Initiate* phase. Follow up the issues and concerns raised by stakeholders. Develop the risk plans further. Develop the Work Breakdown Structure (WBS). Get dialogue going between the various key stakeholders to achieve clarity about the requirements for the project.

Determine and publish how the communications are going to be done for the project – all players then have a clear understanding about what they can each expect and the formats to be used. Establish the standards that will be used for the project. This helps to ensure that only one set of styles are used. It also saves time. People won't need to “re-invent the wheel” every time they create a deliverable or document or minutes from meetings. Generally, the whole project is able to operate at an agreed level of consistency.

Planning is about clarifying the steps that the team will progress through to achieve the same picture imagined by the project initiator – without having to perform all of those steps first.



Execute

Despite the alternative meaning, project execution is not about putting a project out of its misery! However, it *is* concerned with putting the plan into action. Hence, the primary reason for creating a decent plan. Without a plan, the execution of a project resembles anarchy at best.

The project execution phase also includes:

- maintenance of reporting and communications with all the stakeholders, including the steering committee,
- management of the project budget,
- keeping control over changes to the project,
- mitigation of the risk events that happen,
- management and resolution of the issues that arise, and
- keeping the project team and stakeholders on target and reasonably happy.

Evaluate

Ideally the outcome of all that effort should be a successful project. Sometimes it is not. Sometimes projects get stopped. Sometimes projects fail. Irrespective of the circumstances, there should be some evaluation of the project.

The evaluation phase helps us to understand:

- what stakeholders thought about the project,
- how the project performed,
- how the project processes operated,
- any lessons that can be learned – what went well, what could have been done differently and what should have been avoided.

Evaluation also includes reflecting on the original premise for the business case that justified the project. Did the project deliver as intended? At the end of all that effort, has it created the same picture that the project initiator had in their mind originally?

It may be some time after the project has officially closed that benefits tracking occurs. Benefits tracking is used to determine if the original business justification for the project has actually been realized in the results delivered to the organization. It might not happen for every project. However, for projects that proposed eventual benefits for the business, there should be some analysis of whether the proposed benefits had been achieved or not.

The next few sections explain the phases in detail and how they might be applied in a variety of situations.

17 List of Appendices

Appendix A	Project Definition Template	Use this template at the end of the project initiation phase to define and document the project's terms of reference. Refer to page 11 of the Guide.
Appendix B	Project Registration Form	For organizations running multiple projects, use this form to register basic project information with a central projects office. Refer to page 11 of the Guide.
Appendix C	Project Plan Template	The Project Plan is the central project document. Use this template to record and track project details and to inform stakeholders and the project team. Refer to page 16 of the Guide.
Appendix D	Observations Log Template	Many ideas arise during the life of a project. This template captures these ideas for future discussion and action. Refer to page 43 of the Guide.
Appendix E	Risk Register Template	Use this template to record, assess and manage project risks. Refer to page 45 of the Guide.
Appendix F	Issues Register Template	Use this template to record, assess and manage project issues. Refer to page 48 of the Guide.
Appendix G	Change Control Register Template	Use this template to record, track and control proposed changes to the project scope. Refer to page 54 of the Guide.
Appendix H	Project Report Template	Use this reporting template at regular intervals during your project to monitor and report project performance. Refer to page 67 of the Guide.
Appendix I	Stakeholder Feedback Survey Form	Stakeholder feedback is crucial in helping promote their satisfaction with future projects. Use this questionnaire with your most important stakeholders, both internal and external to the organization. Refer to page 34 of the Guide.

Appendix J	Project Team Feedback Survey Form	Use this questionnaire with your project team members to help uncover valuable learnings for future projects. Refer to page 34 of the Guide.
Appendix K	Meeting Agenda Form	This form is suitable for compiling agenda items and distributing upcoming meeting details to prospective participants. Refer to page 7 of the Guide.
Appendix L	Meeting Minutes Form	The familiar structure of this Meeting Minutes Form complements the Meeting Agenda Form. Use this form to record meeting notes and action items and to distribute to meeting participants. Refer to page 8 of the Guide.
Appendix M	Project Management Glossary	The Glossary explains the most common project management terms in use today.
Appendix N	Other Resources	Listed here are the websites of the most prominent project management institutes throughout the world, useful books and other web resources related to project management.

