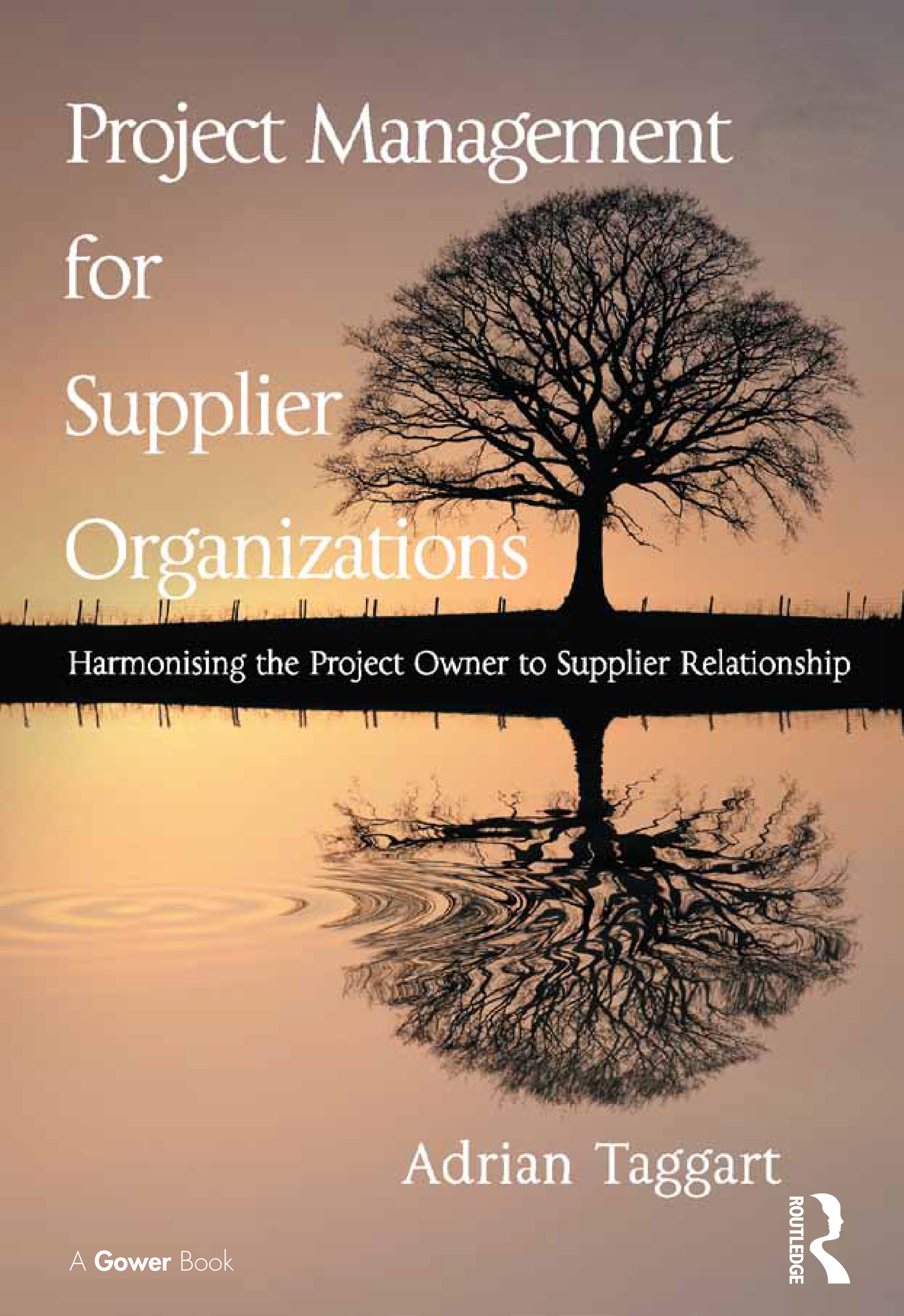

Project Management for Supplier Organizations

Harmonising the Project Owner to Supplier Relationship

Adrian Taggart

A Gower Book

ROUTLEDGE

Project Management for Supplier Organizations

Reviews for

Project Management for Supplier Organizations: Harmonising the Project Owner to Supplier Relationship

Adrian has produced a guide that deals with the realities of project management. He addresses the key issues that cannot be controlled by rules and procedures, including the interaction between people, the relevance of organisational structures and the importance of stakeholders. He uses practical experience to guide us through the management of the full project lifecycle from a supplier and owner organisations view. This helps the reader understand the challenges of their counterpart. This is a wide-ranging and practical guide.

Steve Pears, Managing Director, telent Technology Services Limited

Much has been written about project management over the last ten to twenty years. Around the world well developed project management Bodies of Knowledge (and methodologies) have developed. One area that is ignored by Bodies of Knowledge is the conflict between the owner organisation and the contracting organisation. These two parties have much in common. They both want a successful project but they measure success in different ways. One wants to maximise profit, while the other wants to maximise the benefit derived from the output. This creates conflict and tension in the project. This book is about how to manage the tension to generate creative solutions for the benefits so both parties get what they want.

Paul Naybour, Parallel Project Training, UK

Although private supplier organizations have always existed, they haven't always been as keen to share their secrets and hidden ways, as their publicly funded customers. This book really opens up the differences in approach between supplier organizations and owner organizations and serves as a solid foundation for both areas. Dealing with the uncertainty of facts and circumstances is a common theme throughout and we are shown some important ways of addressing our own over-confidence and assumptions. What is great about this book is that the author has an entertaining and light-hearted approach of simplifying some complex concepts. He shares important methods and models as well as his own secrets.

Neil Murdy, ABB Global Process Template Owner – Projects

This is a precious addition to the project management literature. The beauty of this book is that it encompasses a theoretical framework of project management with its profession and practice. This contribution also embraces and covers in good depth the APM body of knowledge. Adrian's book is essential reading for academics, practitioners and project-based businesses.

Taha Elhag, University College London, UK

Project Management for Supplier Organizations

Harmonising the Project Owner to Supplier Relationship

ADRIAN TAGGART

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2015 by Gower Publishing

Published 2016 by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN
711 Third Avenue, New York, NY 10017, USA

Routledge is an imprint of the Taylor & Francis Group, an informa business

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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data
Taggart, Adrian.
Project management for supplier organizations : harmonising the project owner to supplier relationship / by Adrian Taggart.
pages cm
Includes bibliographical references and index.
ISBN 978-1-4724-1109-9 (hbk) 1. Project management. I. Title.
HD69.P75T34 2015
658.4'04--dc23
2014033761

ISBN: 978 1 4724 1109 9 (hbk)
ISBN: 978 1 3156 0239 4 (ebk)

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List of Abbreviations

APM	Association for Project Management
APMP	Association for Project Management Professional
B2B	Business to Business
B2C	Business to Consumer
BOOT	Build Own Operate Transfer
BOT	Build Operate Transfer
CMS	Configuration Management System
CPFF	Cost Plus Fixed Fee
CPIF	Cost Plus Incentive Fee
CPPF	Cost Plus Percentage Fee
ITB	Invitation to Bid
ITT	Invitation to Tender
KPI	Key Performance Indicator
NEC	New Engineering Contract
OBS	Organizational Breakdown Structure
OJEU	Official Journal of the European Union
OO	Owner Organization
PBS	Product Breakdown Structure
PERT	Programme Evaluation & Review Techniques
PFI	Private Finance Initiative
PMI	Project Management Institute
PM	Project Manager
PMP	Project Management Plan
PMP®	Project Management Professional
PPP	Public Private Partnership
RACI	Responsibility Assignment Matrix
RFQ	Request for Quotation
SO	Supplier Organization
W5H	Who, What, Where, Why, When, How
WBS	Work Breakdown Structure

To Mum, to Dad and to Cath – the best things that ever happened to me.

Preface

To this day I remember the frustration.

I wanted (I really, really wanted) my business card to have the title ‘Project Manager’ under my name, but to my perpetual irritation, the company insisted upon ‘Contract Manager’.

‘Contracts’ weren’t the reason I did the job I did. ‘Contracts’ were routine, boring, administrative, bureaucratic. They didn’t need a ‘manager’ they just needed a supervisor; some patsy who would simply tick the various boxes, fill in the necessary forms and do all the other steps that the process required.

No, this wasn’t what I wanted. I wanted to command, to direct, to decide, to be in charge, to be the focal point, the driving force of some creative and exciting adventure that was delivering the future. I wanted to be a ‘Project Manager’.

‘What’s the difference?’ I would plead. ‘Customers think less of me’, I would argue. ‘It just confuses people’, I would cry.

Looking back now, with the perspective offered by age, I see that my frustration was largely explained by an ambitious young man’s vanity and desire for recognition, but there is another element that intrigued me then, and still does now – the technical element – is ‘Project Management’ the same as ‘Contract Management’?

Retrospection also shows the irony of my predicament because it was as that ‘Contract Manager’ that I was to enjoy many of the happiest moments of my career. Although, subsequently, I did get to enjoy the title I coveted (and in more than that one organization), and the thrill and excitement of being that focal point was just as satisfying as I had hoped for, it was no more or less demanding and exciting than my time as a ‘Contract Manager’.

My enjoyment of both of these roles had a very great impact on me, so much so that the path of my subsequent career has been devoted to helping others realize the same experience. As a university lecturer, a business consultant and a trainer I have helped people with the management of their projects such that they too can enjoy the rewards that this wonderful role has to offer, and to avoid the dangers that are the flip side of such positions of influence.

Whereas the nuances of a particular title no longer consume me, the technical aspect of the question posed above still does. Further, in my opinion, this question remains largely unanswered by the published literature and the various bodies of knowledge posed by the project management intuitions (such as the Association for Project Management (APM) in the UK and the Project Management Institute (PMI) in the United States). This has been a growing source of frustration to me, especially when preparing delegates for the various qualifications offered by those institutions such as the APMP or PMP®. It is this frustration that has moved me to write this book and can be summarized as follows.

The role of a 'Project Manager' is different depending upon the commercial relationship of their organization to the project.

The classic situation for a project manager is when the organization for whom they work initiates a project that will create an asset that they will own and operate. A bakery, for instance, may introduce a new custom-made high capacity oven. The reason they do this is to benefit from the operation of the new asset (e.g. bread baked cheaper and faster). The project is a speculative investment and will be deemed successful if the benefits of ownership exceed the additional costs. Most of the books on the subject of 'Project Management' are written predominantly from this perspective, one of an 'Owner Organization' (OO).

The difficulty is that, in the experience of the author, this is not the situation that most 'Project Managers' find themselves in.

A far more common scenario involves the project manager working for an organization that creates a bespoke asset which will be the deliverable, or part thereof, of a project. To continue the example above, this new asset will be the same custom-made oven, but it will be sold to the 'Owner Organization'. The reason the organization embarks upon it is not to benefit from the operation of the oven; it is to profit from its sale. The oven is the 'goods and services' exchanged within a business deal and the right to this monetary reward is established in the contract agreed with the 'Owner Organization'(OO). It is this document that becomes the principal project document for this 'Supplier Organization' (SO) and so it could be said that it is managing a 'contract' rather than a project.

I do not advocate the strict adoption of the term 'Contract Manager' as opposed to 'Project Manager' – this would only serve to complicate issues further – but I do advocate the promotion of a deeper appreciation of how 'Project Management' must be tailored, depending upon the commercial relationship of one's organization to the project. Currently, regardless of whether the manager in question is a member of an 'Owner' or 'Supplier' organization we describe them as a 'Project Manager', and, by implication, expect them both to undertake identical 'Project Management'. However, close inspection reveals that 'Owner' and 'Supplier' organizations have some perspectives on the 'project' that are very different and, in turn, this has an impact on the management approach they choose to adopt. Project lifecycle models, attitude to changes, risk and resource management are topics where such differences are acute and the interests of a project manager within the SO is poorly served by the literature which predominantly takes the view of the OO.

This book seeks to address that deficiency and interprets the lexicon of project management primarily from the perspective of the Supplier Organization (SO).

This, however, does not render it irrelevant to those practitioners within the OO. All but the smallest of projects involve the OO engaging the SO who collectively form the overall project team. For this team to operate successfully, the interests of each party must be understood and aligned. Consequently it is as important for the Supplier Organization (SO) to recognize the Owner Organization's (OO) predicament as it is for the OO to understand that of the SO.

The book is structured to assist an organization, primarily a SO, as it moves to embrace project management because, for example, it chooses to move away from the manufacture of standard products, to the creation of bespoke products. It explains the nature of the new challenges projects will present, the changes this will demand of its structures, culture and practices, and the management competences it must master.

To this end, it is divided into four sections.

'Project Management' is appropriate only when addressing projects and, outside of this, its adoption will result in expensive failure. Accordingly, Part 1 clarifies the defining characteristics of projects, the challenges they pose, and hence the rationale for the various project management techniques that have evolved. It also considers the implications that these have for the organizations involved both in terms of the structures adopted and the culture that evolves, and how these contrast with those organizations that are not involved in projects.

Part 2 examines the perspective of the Supplier Organization (SO) upon the project with which it is engaged, both in terms of its role within the overall project team and the activities with which it engages. The latter is explored by reference to a lifecycle model specific to the SO. In doing so it contrasts the interests of the SO with those of the Owner Organization (OO) and identifies where they are aligned and where they diverge.

For a successful relationship, the terms of engagement between the Owner Organization (OO) and the Supplier Organization (SO) require careful consideration such that the interests and abilities of each party are fully recognized. Building upon the analysis established earlier, Part 3 explores the myriad of options for contracts and procurement structures and how and where each is appropriate. It also contains a whole chapter dedicated to the management of changes; a critical aspect of the relationship between OO and SO.

Part 4 contains a number of separate chapters and each is dedicated to an individual management topic and its practice within a project environment. The topics are selected, firstly, because they are key competences required by a Supplier Organization (SO) involved in projects, but secondly because they are not competences strongly evident within organizations not engaged in projects. Consequently, as a SO moves from the non-project to the project environment, these are the areas where a shortfall in management exercise will be most evident.

PART 1

The Challenge of Projects

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Chapter 1

What is a Project and Why Project Management?

'What is a project?'

The question is so simple but the answer is not.

Given the title of this book, it is imperative that we are able to provide an answer to the question, and indeed much of this chapter is devoted to such an answer, but before we embark on that it is helpful to remind ourselves of why the question is so important.

Projects and Non-Projects and Why We Need to Differentiate

Imagine if we cannot answer the question.

If we cannot differentiate between projects and other endeavours then how can we object to every creative process being called a project? Further, if every creative process is a project how does project management differ from any other type of management?

If everything becomes a project then the term fails to have any significance and if this is the case what is the point of having a 'Project Management' training course, book or qualification? In such circumstances the word 'Project' becomes meaningless and can be struck out; 'Project Management' becomes just generic management and the skills of a 'Project Manager' would be as appropriate to launching a space rocket as they would be, say, to running a bakery.

For the concept of 'Project Management' to have any relevance at all to an organization, it must satisfy itself that it is actually engaged in project work and to do this it needs to be able to define what a project is and understand how it differs from its other endeavours.

Defining a 'Project'

Consider the following two scenarios. The first involves the construction of a main Olympic stadium. Inevitably such buildings offer a radical and cutting-edge design since they become the iconic symbol of each Olympic Games.

Would you consider this endeavour to be a project?

Secondly, consider a factory making consumer goods. Along the length of the factory is a production line that manufactures 250 washing machines each day. Let us imagine it is midday and the 125th machine of the day is about to be started. Imagine escorting it down the line and overseeing its construction.

Would you consider this endeavour to be a project?

Most readers would be happy to describe the first scenario as a project, but would be reluctant to describe the second scenario in the same way. Why is this the case?

The question is trickier if we consider the similarities between the two scenarios.

Both have a financial budget and both will have a finite timescale. Both create something new (a product), both use resources and both are technically challenging. They are similar, but we are happy to describe only one of them as a project. Why?

It is appropriate, here, to take advantage of the work of others.

ESTABLISHED DEFINITIONS OF A PROJECT

Project management is a mature discipline and there are many professional organizations around the world whose mission is to refine and promote the subject. Two of the most popular organizations are the Project Management Institute (PMI) based in Pennsylvania in the United States, and the Association for Project Management (APM) based in Buckinghamshire in the UK. They offer the following definitions of a project:

> *A unique transient endeavour undertaken to achieve a desired outcome.*
> *(APM, 2006)*

> *A temporary endeavour undertaken to create a unique product, service or result. (PMI, 2013)*

These excellent definitions warrant further examination. The first point to note is that, unsurprisingly, there is a significant similarity between the two definitions. The key adjective the two definitions have in common is the word 'unique'.

Two other adjectives are similar. Reach for your dictionary if you like but even then you will find it difficult to differentiate between the two words 'transient' and 'temporary', with the expression 'not permanent' seemingly applying to both.

Both definitions consider a project as an endeavour leading to some kind of output, however, the difference in quite how this output is described is noticeable with one favouring a 'desired outcome', the other a 'product service or result'. The difficulty in finding the precise words reveals that the outcome of a project is complex.

Thus, we can assume that a project is characterized by these four features:

- Unique.
- Temporary.
- Transient.
- Complex outcome.

They provide the key for a deeper understanding of what a project is, the challenges it poses and ultimately the rationale for project management as a discrete and separate branch of management.

We investigate them and their consequences, as follows.

The Consequences of Projects Being Unique

The obvious point to make about our Olympic stadium, above, is that to be iconic, it has to be different. Certainly, there are other sports stadia around the world but none look and operate quite like this one. It is designed and built specifically for this individual application, i.e. it is a bespoke product. When completed it will be the only one of its type. It will be unique.[1]

In the second scenario the word unique simply does not apply. The 125th washing machine of today will be identical to the others made today and the tens of thousands made in the proceeding weeks and months. It is a standard product.

THE HIGH DEGREE OF UNCERTAINTY

The significance of this difference becomes clearer if, just as we are to start each of these two endeavours, we ask ourselves the following questions:

- How much will it cost?
- How long will it take?
- What will it look like when it is finished?
- What precise sequence of actions do we need to follow to complete the assignment?

In the case of our washing machines all of these can be answered at the very outset with precise estimates.

In the case of our stadium, no such luxury exists. Here, especially at the commencement of the endeavour and especially if the stadium is of a truly radical design, the answers are little better than educated guesses and come with a level of imprecision to match.

This high degree of uncertainty at the outset, even about fundamental aspects, is a key characteristic of the project environment and one of the main reasons why projects are so difficult to manage successfully. Very many of the project management techniques are direct responses to the need to reduce this uncertainty as much as possible, as quickly as possible. It will only be eliminated by the end of the project, too late for the management team, who, during the project, will be faced with the unenviable obligation of making decisions in the absence of full knowledge.

---

[1] Usually, the product is the unique element of a project but this is not always the case. For instance a project may be initiated to create a standard product but to do so using a different manufacturing technique, or by using alternative equipment, or in a different location. In each of these cases the challenge is to do something which has not been attempted before and as such the word 'unique' is applicable and hence the use of the word 'project' justified.

It is very important to acknowledge here that this uncertainty is there not because of any failure on behalf of the team managing the project. It is there because it is a feature of projects. Project managers will deploy expertise and specialist techniques to try and deal with the challenge but, fundamentally, the presence of uncertainty is not due to their failings.

Such high levels of uncertainty present many practical difficulties. Consider the following.

HIGH RISK OF OVERALL FAILURE

When faced with making decisions in the face of high uncertainty, there is every chance that the wrong decisions will be made, with dire consequences.

The probability of our 125th washing machine not performing as expected is negligible but this stands in stark contrast to our new sports stadium. The record shows that such projects frequently flirt with disaster.[2]

The reality is that all projects face a high risk of failure and whilst the project management team will seek to mitigate this risk, they will not be able to eliminate it.

The lack of precedents for unique endeavours does not only create uncertainty about money and time. It also has consequences for the management of the technical aspects of the project product.

For our washing machine there are opportunities for the partially completed product to be assessed continuously throughout its manufacture. Within the organization it is known precisely what an acceptable washing machine looks like at the various points. This knowledge exists because the manufacture of the machines is a routine operation which has been completed very many times and it can be expressed in a set of procedures and rules that can exert a very effective control over the creative process. Simple adherence to these rules will result in a successful outcome.

---

[2] The troubled facility created for the 1976 Olympic Games in Montreal, the chaotic preparation of the stadia for the FIFA World Cup in Brazil in 2014 and the reconstruction of Wembley Stadium in 2007 are notable examples in this respect.

This is very different to the situation within a project environment, posed by the creation of a bespoke product.

If the product is unique then, by definition, there are no identical precedents and so no one knows for sure what it should look like at the various points of its construction. Procedures, rules and suchlike to control the creative process are far less prevalent and there is far more reliance upon those undertaking the work to attest to whether 'it feels right'.

The very different perspectives on rules that are a consequence of these two differing scenarios have profound implications for the methods of governance appropriate in each.

A non-project environment, characterized by near total knowledge and a repeated process, can achieve good governance simply by using extensive rules that are strictly enforced.

The bespoke, uncertain and often haphazard nature of the project environment does not support this approach and considerable latitude and scope for judgement must be granted to those managing the work. In these circumstances a strict and inflexible rule-based governance approach will simply not work.

This is a lesson that many project organizations have learnt only at great cost.

The Consequences of Projects Being Temporary

'You do realise we are building pharaoh's tomb?', was the expression a colleague of the author once used.

We were having a torrid time working on a difficult and unpopular project and this remark, although somewhat cynical, was conveying a very significant point. My friend had started his career as an apprentice in the shipyards of Glasgow and this had made him shrewd. He thought more than he talked and did not miss much of significance.

His remark alluded to the pyramids in Egypt that served as tombs to the pharaohs. The commonly held narrative explains that the pharaoh's wealth and possessions were accommodated alongside his mortal remains. The ancient

Egyptian belief system was such that these possessions would be required to ensure a very comfortable afterlife for the recently deceased ruler. Accordingly, grave robbers were a very real concern since they and their criminal enterprises could easily deprive an unlucky pharaoh of the very experience the pyramids were designed to provide. Therefore the pyramids were furnished with many devices such as secret passageways and secret doors to confound these would-be thieves. However, by necessity, the slaves who built these pyramids were familiar with these security arrangements and as such they constituted a major impediment to the pharaohs' post mortem comfort, should they ever be tempted off the 'straight and narrow'. A convenient solution to this was found whereby, upon completion of the building project, the slaves were murdered and their remains simply tossed into the basement of the pyramids.

Modern-day Egyptologists would be likely to violently disagree with the veracity of this version of events, but the story is sufficiently well known for it to offer an insight into a fundamental problem with projects, namely, they do not offer their practitioners any long-term job security.

My friend was making the simple point that, torrid as our current situation was, only unemployment lay beyond it.

The temporary nature of projects is most obvious in the context of the teams that deliver them. They are a temporary arrangement that only exist as long as the project. Project teams are therefore unusual in the world of work since they work diligently to do away with the only reason for their existence.[3]

By contrast, teams engaged in non-projects (often referred to as 'Routine Operations') are designed to survive beyond just one cycle. When one washing machine is complete, they simply start the next. So, if this team worked faster and better then the machines would be cheaper, sales would increase and hence their job security would be enhanced.

This represents one of the major reasons why the soft skills are so important to project managers. An understanding of the human condition is very valuable when trying to motivate someone to work themselves out of a job.[4]

---

[3] Many readers will be employed by organizations that deliver successive projects and the completion of one project does not lead to termination of employment. These types of organizations are referred to as 'matrix' organizations and have special characteristics, some of which they share with organizations engaged in non-project work. They will be addressed in some detail in Chapter 2 but for the purposes of this chapter it is appropriate to consider what may be referred to as a 'pure project', like our stadium project, a characteristic of which is its temporary management structures.

The Consequences of Projects Being Transient

As acknowledged above, the words ‘transient’ and ‘temporary’ have very similar definitions that describe a state that is not permanent. For our purpose we need to stretch the boundaries of good grammar to emphasize a slight difference that exists between the two definitions; a difference that is perhaps more familiar to physicists and engineers.

The difference is this.

Consider using the light in your room. You can turn the light on and then, after some time, you turn the light off. The illumination is temporary but whilst the light is energized the level of emitted light is constant.

Contrast this with turning on a radio and then, after some time, turning it off. Again the radio is on for only a temporary period but, critically, whilst it is on the volume of sound is not constant, it is in a state of flux, it is changing all the time; it is transient.

Projects are both temporary, in that they are not permanent, but they are also transient in that whilst they do exist they are constantly undergoing change.

This has huge relevance for those who seek to manage projects because many of these changes are not random; they are predictable.

We, as people, undergo change during our lives. Our physical size, emotional security, energy levels, priorities, all change over time. These changes are not random, they are known about, they apply to everyone and hence they are predictable. Knowledge of this makes managing our lives, and that of others, a much easier prospect, as anyone with an adolescent child will readily confirm.

It is the same for projects.

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[4] In practice, the involvement of individual project team members is even more volatile than the life of the overall project team. Most likely, an individual will be a member of a sub-team which will only exist until the fragment of the project for which the sub-team is responsible, is complete. For this reason the make-up of the overall project team is always changing.

Many of the changes are known about, they apply to all projects, and hence they are predictable. Knowledge of them, and how they lead to generic models of project lifecycles, is an enormous boon to anyone trying to understand and manage projects and the teams that deliver them. Chapter 4 addresses this topic in detail.

The Consequences of Projects Having Complex Outcomes

Projects are deceptively complex entities and nowhere is this more relevant than in the consideration of what they actually achieve. Consider the following.

CHANGE

If the world is the same at the end of the project as it was at the beginning, then the project manager will have failed. At the most fundamental level, projects deliver change!

To illuminate this, consider the management of the production line creating our washing machines. The management team seek to keep the line in operation. Much effort is spent in sustaining the supply of raw materials, ensuring work rosters are full and the pace of work is upheld. The emphasis is on maintaining the status quo, on avoiding disruption, on avoiding change. This is most prevalent within the maintenance division where even its very name reveals its ethos: maintain.

Compare this to our project. Projects usually create something new, but often they involve destruction, demolition or removal. What each has in common is that they are delivering some kind of change.

This is the root of so many project difficulties because it can be safely asserted that people have a natural resistance to change. Admittedly, some of us are more resistant than others but if it is a change that: 1) affects us; 2) is something upon which we have not been consulted; and 3) is in any way vague as to its purpose or content, then our default position is to resist it.

Of course much change is positive and if we stand to benefit then we will be more positively disposed towards it, but as a general point our attitude to change is not neutral and our bias is towards the negative. No one has articulated this particular facet of human nature better than Machiavelli and his conclusion stands repetition here:

> *There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order, this lukewarmness arising partly from fear of their adversaries … and partly from the incredulity of mankind, who do not truly believe in anything new until they have had actual experience of it. (Machiavelli, 1513)*

Projects are affected by, and in turn affect, a great many people. Anyone fitting into this classification is known as a 'stakeholder'. It is a very loose brief and as a consequence an average project can include a very large number of stakeholders.

Within this classification are all the groups and individuals who possess the skills, knowledge, resources, contacts, influence, facilities, apparatus and general wherewithal to ensure that the project is a success. It will also include those who will ultimately judge whether or not the project is a success.

For these reasons alone 'stakeholder management' is an important (possibly the most important) element of project management. Unfortunately, very often it is the hardest facet of the project to influence.

The reason for this is, of course, the fact that not everyone will be in favour of the project. Take any project and typically there will be about 10 per cent of the stakeholders who view the project as an excellent idea and will freely give of their time, resources and expertise to support it. By the same token about 10 per cent will think the project a disastrous idea and will give freely of their time and expertise only to confound, disrupt and, in extremis, sabotage the project team's efforts. The other 80 per cent, frankly, will not be bothered, and wish the project would just simply go away.

If we consider that, in some instances the 10 per cent who are vehemently opposed to the project are those with the skills and resources very necessary for success, then we can begin to understand just how demanding 'stakeholder management' can be of both time and energy.

Clearly, non-project endeavours also affect people, but in the absence of such fundamental change, the attendant issues are not as prevalent in the non-project environment. There is an order of magnitude in the difference between the two environments in respect of the demand for 'stakeholder management'.