Contents

Note from the author

In case you were wondering why there isn't a comma after 'Project' in the title of the book, it's because the book doesn't cover project management, it covers project program management and portfolio management, which are developments from and extensions to project management. A project program refers to a series of projects that are related, and together will achieve a major change in a business. A portfolio refers to the total set of all the projects and programs being carried out in a business at any given time.

Although I have included a chapter on project management, it is not intended to be a complete coverage of the subject. It is only included to establish a baseline from which to compare and contrast program management and portfolio management. For a complete coverage of project management, I would recommend Effective Project Management in easy steps (or Agile Project Management in easy steps, if you are working in an agile project environment).

I have included a high-level road map for implementing program and portfolio management on the inside front cover and a more detailed road map in chapter 11, but this is only a suggested approach and nothing in this book should be considered as mandatory. However, implementing anything as significant as program or portfolio management without first establishing the existing level of project management maturity would introduce a serious level of risk to the process. Otherwise, feel free to cherry pick the bits that apply to your organization.

Acknowledgements

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1 Introduction

This chapter introduces Project Program and Portfolio Management and explains how they can help to ensure successful projects.

Overview

Project Program and Portfolio Management (P3M) represents project management taken to the enterprise level. It is increasingly being seen as critical for large organizations (such as governments and multinational corporations) but it can also play a significant part in improving the success rate and financial payback from projects in any size or type of organization. But before we get into the details, let us start with a basic definition of each term:

Hot tip

Implementing project program and portfolio management (P3M) can bring significant benefits to any organization, whether large or small.

Project

A project can be described as a temporary organization that will focus on the creation of a set of business deliverables (as defined by the project scope), within an agreed time span (usually of a year or less), cost budget and quality parameters. A project will be justified by its business case and will deliver some form of new product, service, system or business process.

Projects are generally well-defined although they can also be complicated. Their focus is to provide changes that are needed in the business now.

Program

A project program (usually just referred to as a program) again refers to a temporary organization but this one will coordinate, direct and oversee the implementation of a series of related projects and supporting activities to deliver outcomes and benefits in line with the organization's strategic objectives. Programs are the link between the business strategy and the individual projects that will implement the solutions required to deliver it.

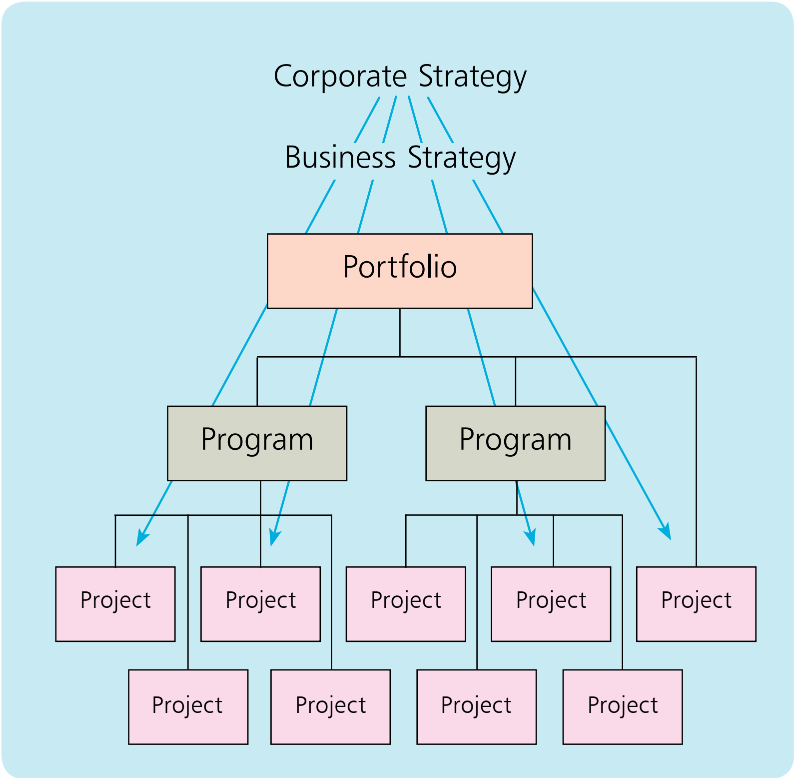
Programs are generally complex and will deliver multiple products and services aligned to the business strategy. They will usually span several years and therefore the scope, time and cost are likely to change during the life of a program.

Portfolio

A portfolio refers to the total set of programs, stand alone projects and other change initiatives undertaken by an organization. It is aligned to the organization's budgetary and decision making processes and is the link between the corporate and business strategy and the programs and projects that will deliver it.

Portfolios have strategic corporate deliverables and are on-going. They are reviewed and revised regularly and changed as needed.

The following diagram illustrates the relationship between corporate and business strategy, portfolios, programs and projects:



Corporate strategy is implemented through the business strategy and the portfolio is aligned with the business strategy. The business strategy is then implemented through the programs and projects that make up the portfolio. Portfolio management ensures that all projects and programs stay aligned with the business strategy and deliver business benefits. Program management also ensures that projects deliver business benefits.

Who This Book is For

There are many books on project management but far fewer on program and portfolio management. The few books that have been published tend to be theoretical or technical, rather than hands on guides. This book is for people who will be commissioning, running or involved in the delivery of project programs or portfolios and who need to get up to speed quickly on P3M.

This book explains how to implement effective project program and portfolio management (P3M) in any organization and in easy steps.

Leviathans and Vanities

The reason we need P3M stems from the fact that the majority of organizations have a poor record when it comes to delivering business change projects. According to most surveys, around 25% of projects are total failures and have to be abandoned, while around another 50% are seriously late, way over budget or fail to deliver the full business requirements. But there are two specific types of projects that most often seem to result in failure or significant wasted effort: Leviathans and vanities.

Leviathans

Leviathans were enormous, mythical all-consuming sea monsters which sounds awfully like some of the recent high-profile failed or struggling projects reported in the media:

- **British Broadcasting Corporation: Digital Media Initiative**, to improve efficiency and allow better management, but underestimation of the complexity, poor governance, organizational immaturity and continual changes resulted in the contract being abandoned in 2013, at a cost of £100m.
- **State of California: 21st Century Project (MyCalPAYS)** payroll and benefits system development. After eight months of operational failures the system was eventually scrapped, at a cost of around $254m.
- **BSkyB: Customer Relations Management system**, where the supplier failed to resource the project properly and was seriously late. When the project was finally scrapped, little had been accomplished but the cost was £318m.
- **UK Government Regional Fire Control Centre project**, which was flawed from the outset and scrapped as the IT systems could not be delivered. The cost was £469m at the time of cancellation but the costs are still on-going.
- **US Department of Defense: Expeditionary Combat Support System (ECSS)**, an integrated supply chain and logistics system (at one time the largest project in the world), finally scrapped as they couldn't get it to work at a cost of $1b.
- **Airbus SAS: A380 commercial aircraft development project**, delayed by nearly two years due to design faults caused by the use of different computer aided design (CAD) software in different parts of the organization at a cost of $6b.

The problem with these Leviathan projects is they become like out of control giant tankers, almost impossible to stop until they hit a rock and flounder. Many more projects end up like this than get reported in the media; they get hushed up by the embarrassed organizations responsible for them.

So what can we learn from them? Effective Project Management in easy steps (a companion volume to this book) defines 20 laws of project management. The most pertinent of these is this:

"A two year project will take three years;
a three year project will never finish."

The basic problem is that the world will change, often quite dramatically, over a two to three year period. As a result of this, the business requirements are also likely to change in line with it. With the passage of time, what the project initially set out to achieve will no longer be what the business now requires.

Changing the project's requirements (scope) on the fly will seriously impact on the project's time, cost and quality. This will add to the risk of it falling further and further behind until, eventually, it gets abandoned. The larger the project is, the greater the risk of failure.

Beware

There is a direct correlation between the size of a project and its risk of failure.

Vanities

The second type of problem projects are vanity projects, promoted by proud men (usually senior executives) with whom no-one likes to disagree. These typically have poorly defined objectives and no sound business justification. They may eventually get completed but they produce little or no real benefit to the business despite using precious resources. Even worse, they prevent those resources being used for projects of more value to the business.

Hot tip

It might be thought that hosting the Olympics or Football World Cup can tick both of these boxes!

The problem is that without proper project, program and portfolio management processes in place each individual project is considered in isolation. It doesn't matter if the project is necessary or not, as long as the person sponsoring it can make a convincing case for it. In fact it might not even need corporate approval if the sponsor has sufficient finance in his own budget to fund it.

So clearly what is needed is some process for screening out these Leviathan and vanity projects and that process is what P3M is all about delivering.

A Cautionary Tale

Once Upon a Time

Many years ago, while working as a project manager for a fairly large manufacturing company, I took up a new position based at the organization's headquarters. While being given a tour of the site, I was proudly shown the shiny new mainframe computer system they had recently bought. I discovered fairly quickly that the beast was hardly used and had masses of spare capacity but it took me a little longer to find out the story behind its purchase.

The head of information technology had proposed it as he wanted to have the biggest and best computer to impress other heads of information technology. He also had the support of the chief finance officer, who had been lavishly wined and dined by the suppliers. Aided by a brilliant presentation from the supplier's top sales executive, they pitched their proposal to the board of directors. To say that the board was baffled by science would have been an understatement but they felt happy that the head of IT and CFO must have understood it as they were proposing it.

The business case (developed and presented by the supplier) had some very big numbers in it. Although the computer was expensive, it looked like the payback would also be enormous, through impressive cost savings, huge cash flow benefits and some exciting new opportunities. Of course, the details of the savings and new opportunities were not presented (they didn't want to bore the board with details) and rumor has it they never existed. Needless to say, after an hour of high-pressure sales pitch the board agreed it on the nod. Exit one very happy head of IT and a salesman already thinking of how he would spend his not insubstantial commission.

The Punch Line

The next item on the agenda was repainting the bicycle shed and this the board did understand. Indeed they argued for hours about what color it should be and where the cheapest paint could be purchased. But when they finally finished the meeting they felt they had done a good day's work.

Does that sound unbelievable? Well to tell the truth I did borrow the bit about the bike shed but the rest is real and I saw it almost happen again a few years later at another business. Is that any way to make business decisions about major projects and gain real competitive advantage for a business?

The decision as to which projects should go ahead is far too often based on the organizational clout of the person sponsoring or proposing the project. Many organizations do try to allocate funds to projects that are perceived as adding the most value to the business. But unless there are mature business processes in place to support the decision making and subsequent monitoring of the resultant projects, they can still end up as Leviathans or vanities.

What Business Benefits?

Even apart from these Leviathan and vanity projects, the general failure rate of all business change projects is still way too high (as detailed on page 10). Without established P3M practices in place the majority of projects still do not satisfy the basic criteria of being on time, to budget and to scope (referred to as the iron triangle). What's worse, nearly three-quarters of organizations do not even bother to evaluate and report on these project variations.

If that wasn't bad enough, of the projects that do get completed, around 70% do not deliver the business benefits that were promised for them. The vast majority of organizations do not track the actual benefits realized to the business, so have no way of even knowing whether or not they justified the business case they were based on. This is referred to as authorize and forget!

Beware

If an organization is not tracking and recording the results of projects, they will never improve their rate of success.

Fear of Failure

There is another factor that makes the situation even worse. Part way through a project it is not unusual for the project team to realize that the promised business benefits are unlikely to be realized, but there is an organizational fear about canceling projects as it is seen as failure and no one likes to be associated with a failure. So the project stumbles blindly on.

Project Overlap

One final factor is that projects do not often happen in complete isolation. There are frequently other projects taking place which could have an impact on them. If there is no mechanism in place to coordinate projects and no regular channel for inter-project communications, projects can have an adverse impact on, or totally nullify the work of other projects.

The good news is that properly implemented P3M can and will address all of these problems and ensure a much higher rate of general project success with far fewer total failures.

Hot tip

In the next topic we will see how P3M can solve these types of problems.

How P3M Can Help

Some major research carried out for the government of New Zealand in 2007 also studied project management practices in the USA, UK, Canada and Australia. It found that there was not only a significant opportunity for increasing the success rate and reducing the cost of projects by using P3M, but also that poorly defined or low payback projects were much more likely to be scrapped with P3M in place.

Overall, the research found that the amount of benefits leakage (benefits promised in a project's business case, which the project fails to deliver), could be reduced by a quarter to a half with P3M. They also found that it resulted in far fewer complete failures in organizations that had implemented it.

So how can P3M help with Leviathan projects, vanity projects and failed projects in general?

Beware

Surveys have identified that the risk of project failure increases dramatically once the duration exceeds a year.

Enter the Program

Starting with the large (Leviathan) projects, the solution is to break these down into smaller sub-projects (preferably of no more than one year's duration), each of which will achieve some of the prioritized business requirements. Each of these sub-projects should then be treated as a project in its own right and project managed accordingly.

The development of agile project methods, which can deliver prioritized business requirements much faster than traditional methods, can then also be utilized where appropriate. However, these sub-projects, together with any temporary operational and support procedures, are still related and need to be managed as a coherent group and that group is a program.

But this will still leave most organizations with a number of projects and now programs competing for scarce human and financial resources.

Enter the Portfolio

By treating the totality of the organization's programs and projects as a single portfolio, they can be ranked on their alignment with corporate strategy and their potential business benefits.

Supported and reinforced by a number of other processes such as project office and authorization gateways, portfolio management optimizes the organization's projects and programs, so that only the most beneficial are authorized to proceed. It also ensures that those that do go ahead have a much greater chance of success.

Project Success

The portfolio and programs are still implemented through a number of individual projects. But with P3M there will be effective and mature project management processes in place which of themselves will reduce the likelihood of project failure. The implementation of P3M will help to ensure that:

- Only the most appropriate projects are commissioned in line with corporate strategy
- All projects will deliver value for the organization
- There is a proper monitoring of return on investment
- More projects are successful, there is less wasted effort and there are far fewer total failures

Can Methodologies Help?

A number of methodologies, standards and practices for P3M have been developed in recent years. The principal ones are those from the Project Management Institute (PMI) in the USA and the Office of Government Commerce (OGC) in the UK.

PMI first issued their Project Management Body of Knowledge (PMBOK) as a white paper in 1983 and have subsequently developed that methodology together with their Standard for Program Management and Standard for Portfolio Management.

OGC has taken a similar role and first issued PRINCE (Projects in Controlled Environments) in 1989. This was further developed and relaunched as PRINCE2 in 1996 and they have since added Managing Successful Programmes, Management of Portfolios and Gateway Reviews.

Potentially of more benefit, although not a methodology, is the Capability Maturity Model (CMM) developed by the Software Engineering Institute (SEI) at Carnegie Mellon University. Both PMI and OGC have also developed models based on it.

This book indicates the potential advantages of each methodology and where they can usefully be applied. However, none of these methodologies are essential for the introduction of P3M.

Hot tip

While methodologies can help, this book also provides an independent route to the implementation of P3M based on best practice.

How the Book is Organized

The rest of the book will expand on projects, programs, portfolios and the management of them. It will also look at creating the right business infrastructure to support them and how to make the best use of the organization's resources. You can work your way through the book from cover to cover, but if you want to home in on a particular subject the following sections explain what each chapter covers.

Setting the Scene

Chapter 2 provides a brief overview of project management and how it differs from operational management. This provides a baseline against which to compare program and portfolio management in the following chapters. It covers what project management involves, methodologies, project life cycle, project management maturity and the role of the project office.

Chapter 3 introduces program management and explains how it differs from project management. It describes the interface between a program and its constituent projects. It also covers benefits management, stakeholder management, program governance, the program life cycle, program controls, program management maturity and the role of the program office.

Chapter 4 introduces portfolio management, portfolio selection, the portfolio life-cycle and portfolio management maturity. It focuses on the interface between it, corporate strategy and the programs and projects that will implement the portfolio.

Preparing the Organization

Chapter 5 examines the business environment in which the projects, programs and portfolios are executed and what is required to support them. It looks at the importance of organizational capability maturity and the process of developing that maturity. Finally, it explains how a properly established project, program and portfolio office can support the process.

Implementing Program Management

Chapter 6 explains how to go about implementing program management in an organization. It sets out the precursors that must be in place, the required level of project management maturity, establishing a program office, program governance, the program organization and the key processes that need to be in place to support it.

Chapter 7 examines what's involved in managing a program through the program life cycle. It explains what is required in each phase and each stage from preparation and initiation, through setting up a program infrastructure and benefits delivery to program closure and transition.

Implementing Portfolio Management

Chapters 8 explains how to go about implementing portfolio management in an organization. It explains the precursors and level of organizational maturity required to support it. It expands on the role of the portfolio office, portfolio governance, the portfolio organization and the key processes required to support it.

Chapter 9 examines what is involved in managing a portfolio through the portfolio definition and delivery life cycle. It explains what is needed in the six processes of: portfolio selection, portfolio prioritization, portfolio planning, benefits management, risk management and stakeholder management.

Gateway Reviews

Chapter 10 looks at the gateway review process and how it can help to exercise improved governance of programs and large projects. It covers the six gateways (phase and stage reviews): strategic investment, benefits justification, delivery strategy, investment decision, readiness for service and benefits realization.

Implementation

Chapter 11 sets out a road map for the successful introduction of project, program and portfolio management. This road map and action plan really do work as the author has used them successfully in a number of organizations. It will be an exciting journey and the benefits it will bring are:

- Projects will perform better and better as the organization's capability maturity develops
- Program management brings a better use of resources and a focus on changes that will deliver real benefits
- Gateway reviews ensure that programs and projects are effective and unnecessary projects don't take place
- Portfolio management puts control right back where it should be at the strategic heart of the business

Summary

- Project, Program and Portfolio Management (P3M) should be considered critical for any large organization and can play a significant part in improving the success rate and financial payback from projects in any size or type of organization
- Projects should be short (a year or less) and focus on changes needed in the business right now
- Programs are longer-term collections of related projects and other activities that will be managed in a coordinated way
- Portfolio refers to the total set of programs and projects being undertaken by the organization and managed in line with corporate strategy
- Large (Leviathan) projects are better managed by being broken down into smaller sub-projects and then managed as a program of projects
- Vanity projects will typically have poorly defined objectives and no sound business justification
- Unless there are mature management processes in place to support the decision making and subsequent monitoring of projects, they can still end up as failures
- Fear of canceling failing projects (no one likes to be seen as failing) can result in them stumbling blindly on
- Projects do not often happen in isolation, there will be other projects going on that could be impacted by or have an impact on them
- The decision as to which projects should go ahead should be based on their alignment to the strategy of the organization and their perceived ability to add value to the business
- Program and portfolio management can help to ensure that the most appropriate projects are commissioned in line with corporate strategy and that more projects are successful
- There are a number of methodologies that can provide useful starting points for the development of organizational standards and methods, but they are not essential