



Project Portfolio Management

**A VIEW FROM THE
MANAGEMENT TRENCHES**

The Enterprise Portfolio Management Council
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 **WILEY**

 **PMI**
Project Management Institute

Part I

INTRODUCTION

Chapter 1

What Is Project Portfolio Management?

INTRODUCTION

“I don’t understand, why aren’t these projects delivering as they promised?”

This familiar cry has been heard from business leaders and project managers for some time now. Thousands of books and articles offer answers to this question, but the frustration continues. An idea that is gaining ever more traction in answering this question is Project Portfolio Management—the concept of focusing on the selection and management of a set of projects to meet specific business objectives. But when business leaders and project managers review this concept of PPM, their response is often: “This portfolio management stuff sounds way too simple. It just can’t be the answer!”

However, this response itself begs a question. If PPM is so simple and self-evident, why does it have such limited traction in organizations that are apparently so in need of its help? The logic of simply reviewing all projects underway in an organization, making sure they meet business needs, align with strategy, and provide real value does *seem* self-evident. Practice and observation tells us that PPM does work, when properly implemented. Unfortunately, what our experience tells us is that a lot of the time, it’s the implementation of PPM that leaves much to be desired and results in responses such as:

- “This process is too complex.”
- “We don’t have time to go through all this business case stuff—we need to get to work!”

- “This process is really needed for our organization’s business projects, but mine are different and don’t need to go through all those steps.”

Apparently PPM isn’t so self-evident after all. So what do we do?

Business leaders want the business to be successful. They want sound business processes they can depend upon. Project managers want their projects to be successful, so the company will be successful. So it sounds like we’re all on the same page, right? Wrong. Here’s where the age-old dilemma rears its ugly head for the business leader and project manager alike—there are limited resources, lots of ideas and projects, only so much time in a day and . . . oh yes, things keep changing.

This is when it becomes important for us to be able to make tough decisions: which projects do we invest in (and over what timeframe) to be successful? This requires good facts to make the right decisions. We need to be able to examine the facts when changes and issues arise that require a decision be made and acted upon. And these facts need to be weighed against our gut feel for the situation (sometimes called “experience”)—by both business leaders and project managers—and then a decision made. This, too, may seem to be self-evident, but is it really? So, how do we get the facts and data we need? And how do we know we’re making the right decisions?

This is where the power of PPM comes into the picture. PPM forces us to think strategically: what we want our organizations to be, and what we should be doing to get there. But it’s not an easy fix. When implemented properly, PPM often requires organizational change across the business, and that can be very difficult to carry through. However, as this book demonstrates, the potential benefits for the business can be immense.

SUCCESSFUL PPM

PPM invariably changes the culture of the business because it demands we ask the hard questions. Five such questions rise to the top of the list and will be explored in depth in the chapters that follow (see Figure 1.1). Your ability to answer these questions accurately will determine how well you’ve implemented PPM in your organization:

1. Are we investing in the right things?
2. Are we optimizing our capacity?

Successful PPM

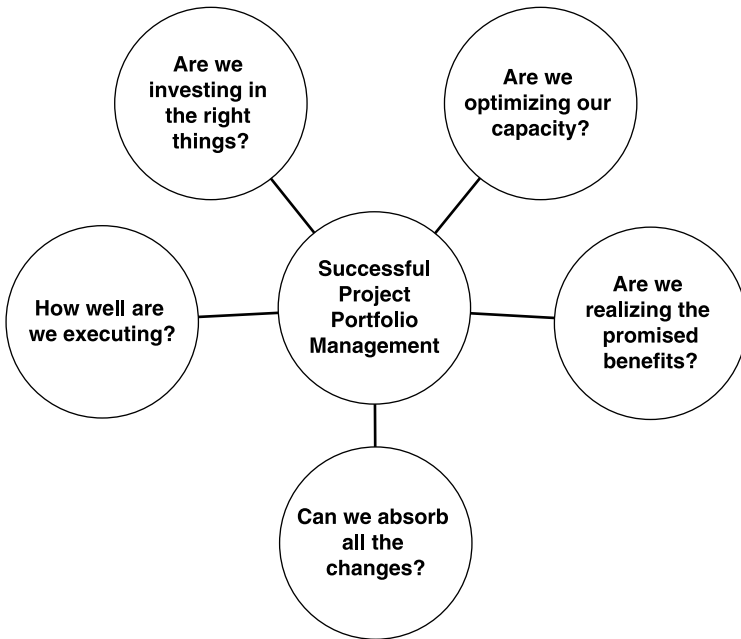


Figure 1.1 Five key questions that successful Project Portfolio Management addresses.

3. How well are we executing?
4. Can we absorb all the changes?
5. Are we realizing the promised benefits?

THE FIVE QUESTIONS IN BRIEF

Let's take a brief look at the five questions we will explore in depth later.

"Are we investing in the right things?"

Any task, activity, project, or program requires either money, equipment, material, people's time, or some combination of these. And when you look at it, the equipment, material, and even people's time can be readily converted to a common unit of measure: money. Therefore, since PPM is looking at these things as a whole, and they all take money in some form,

then it only makes sense to view them as “investments.” If our projects are investments, then doesn’t it make sense to ask whether we’re actually spending our money and time on the right things? And, so, we have the first question: “*Are we investing in the right things?*”

A sound PPM capability requires, at a minimum, four things: informed managers, involved participants (including the right level of executive sponsorship), good facilitation, and appropriate processes, systems, and tools. (Okay, that may technically be six things—we just view processes, systems, and tools as a single, integrated item—but you get the picture).

Since money is very much a limited resource, we must figure out a way to invest in the right things. This is a balancing act between the desire to fulfill the business strategies, the limited money we have to invest, and knowing when is the right time to start a project. Along with deciding which new projects deserve investment, we need to monitor the progress of active projects so that, if they’re not reaping the expected benefits, they can be closed down, and their allocated capital can be recovered to apply to more beneficial projects.

However, this is not all. Businesses operate in a dynamic environment that shifts strategic objectives over time. Projects that are strategically aligned today may not be tomorrow. So PPM must also be a dynamic process. Ideally, the portfolio would be optimized in real-time (or near real-time). Also, since not all good projects can be approved immediately, what is “right” for the portfolio may not be optimal for all the potential projects competing for funding.

Foundational Tool

The Business Case

Along the way to successfully implementing PPM, we discovered that there is a foundational, and essential, tool that is often overlooked. This tool is the Business Case. It provides the necessary facts and data for understanding the value, cost, and benefit of implementing a project. It also lists the assumptions used to reach the touted conclusions, the various options considered, and the required cash flow for implementing the project.

Ultimately, the business case elicits a decision about the project, and you’re given one of three choices:

- Go
- No-Go
- Wait.

One of the keys to making the best decision is understanding the criteria used to judge and prioritize projects. The company already has projects under way, and usually has a list of possible projects to add to that inventory. So how do you decide which ones to add, and when to add them? The business case is your fundamental tool for providing facts and data about each decision criterion to enable apples-to-apples comparisons to be made among projects in determining which ones should become part of the portfolio.

Lesson Learned

Even “mandatory” projects have options.

Let us share one invaluable lesson we have learned the hard way: even “mandatory” projects have options (“mandatory” projects are required to be done, maybe by law, or maybe by your CEO). Often, people will say, “We don’t need to do a business case, we have to do this project because . . .” The truth we have unearthed is that there are multiple ways to meet the mandatory requirements. For example, if the requirement was to provide an efficient mode of transport, then we could meet it with a motorcycle or a sport utility vehicle (SUV). But what are the tradeoffs between these two options? Even though we may “have to do it,” planning and analysis are still needed; these are accomplished effectively by producing a business case. In addition, a business case coupled with project plans enables scenario and option analysis to aid in the decision-making process.

One of the best definitions we’ve found for a business case is:

*“A business case is a decision support and planning tool that projects the likely financial results and other business consequences of an action.”
(Schmidt, 2002)*

In particular, note the last part of the definition. A true business case looks at more than just “the numbers.” It includes financial, strategic,

commercial, industrial, or professional outcomes of the project under consideration. Ideally, the business case should have more than one option from which to select, including the “do nothing” or “business as usual” option. The decision about the project needs to be made by those people with responsibility, accountability, and authority for the resources (e.g., people, tools, machines, computers, facilities) to be allocated to achieve the desired outcome.

For now, that’s enough about the first of the five key questions. There will be more later, don’t worry! If you can’t wait to hear more about business cases and making good project investment decisions, feel free to go straight to Chapters 3, 8 and 10. So, on to the second question.

“Are we optimizing our capacity?”

This question puts into fancy words a simple concept: since we only have so much money, time, equipment, material, and skilled people, are we using them in the best way we can to get the “biggest bang for the buck?”

- Capacity optimization can also be called portfolio resource optimization. There are two key principles to understand here:
 - Optimizing resources is about *balancing* the demand for resources with the supply.
 - The primary aim of resource optimization is to create an open dialogue, based on factual analysis, between the portfolio management office and the business project sponsors (the decision makers).

Lesson Learned

Engaging business leaders in an open, fact-based dialogue is a key outcome of PPM.

Resource optimization is achieved through the balanced management of our resources. It is about understanding, managing, and balancing the demand side and the supply side of the resource management equation.

Foundational Principle

Demand-side resource management must balance with supply-side resource management.

Demand-side resource management, which concerns all the things we *need* in order to accomplish the projects in the portfolio, entails resisting the desire to control the detail. In Chapter 4 we will discuss the role of “boulders,” “rocks,” “pebbles,” and “sand” in properly managing our resources. To ease the planning for the management of portfolio resources we group them into three categories:

- Skills (availability of sufficient people with the right skills and experience)
- Technology environment (the capacity of the computer systems or platforms to cope with the demands of the portfolio)
- Facilities (physical infrastructure, networks, office space, real estate, and the like needed to deliver projects and that will be impacted by project outputs)

Also in Chapter 4, we will seek to understand three key planning disciplines:

- Planning for skills
- Planning for the technology environment
- Planning for facilities

In effectively implementing PPM we realize we can engage four levers that help us to manage resource capacity constraints:

- Changing timescales: shifting projects within the portfolio to flatten resource demands
- Decoupling development from roll-out: helping to flatten technical resource demand
- Descoping: helping reduce the absolute need for resources
- Removing projects from the portfolio: if none of the above options are sufficient in managing resource capacity, then projects may have to be cancelled.

In supply-side resource management, which concerns all the things we *currently have* in order to accomplish the projects in the portfolio, it is key to differentiate between the organization's core competencies (those that give a competitive edge) and those competencies that can be commoditized (general skill-sets not necessarily unique to the organization). For supply constraints, core competencies are increased by training and/or recruiting qualified people from the marketplace. Commodity skill-sets are increased internally through cross-training and externally by developing and maintaining relationships with partners having different competencies and geographic footprints.

There are several ways to deal with supply-side management of the technology environment: by using an Application Service Provider (ASP) model, virtualization, or duplicate environments to better manage constraints. In handling constraints in the supply-side management of facilities we have found it beneficial to consider creative solutions such as using temporary accommodations, hotels, regional offices, or taking over a new floor in the office building.

Lesson Learned

When seeking to implement resource management for the first time, focus on a staged approach, using quick wins to build momentum and buy-in.

So, to put the question another way: "Are we getting what we are after, by using what we have, in the best way we can?" We will explore this question more in Chapter 4.

"How well are we executing?"

Doing the work of business enables us to reap the rewards. So it only makes sense that once we set plans in motion, we should check to see how well we are performing against those plans. However, as many of us have discovered through the "school of hard knocks," the world does not hold still for our plans to be executed the way we envisioned.

PPM enables us not only to know how well we are doing on our projects, but also gives us the information we need to decide what we can do to stay in tune with the demands of the marketplace and emergent situations in the business. This may involve moving people from one project to another to meet emergent demands and knowing just what the impact will be on all of our projects as well as our entire business. It also enables us to know when to stop throwing our money at projects that just aren't producing the expected results.

The world is dynamic. PPM is as well. And just as it's important to know how well projects are performing according to plan, it is also necessary to know how well PPM is performing—how mature, efficient, and effective PPM practices are in our organizations. To understand our PPM performance, we need to assess where PPM is now in our organization and what pieces are missing. Equally important is creating a clear view of this current state and gap assessment to ensure that we can progress on a defined path in adding those missing pieces. Ideally, the assessment results will show that our organization is on a process improvement path with ever increasing effectiveness toward the governance of our portfolio.

Foundational Tool

The Project Governance Process Map

One approach to establishing the clear path is the development of a Project Governance Process Map (see Chapter 5 for an example). Simple process workflow tools, such as Visio[®], are underappreciated tools in the arsenal of the PPM professional. (We've heard practitioners claim to be able to "conquer the world" of PPM practice with just Excel[®] and Visio[®].) A Project Governance Process Map is a diagram that depicts all the funding and governance steps and checkpoints that our organization has currently established for the project funding lifecycle. The completion of the map enables us to understand where we can improve the process. We discovered, for instance, that the business case for a specific project can be compelling, but unless we can see the pipeline of projects, it is difficult to make the best decision for the company in the long run.

Lesson Learned

Individual project business cases can be compelling, but we need to look at the entire portfolio pipeline to determine the best course of action for the company.

We'll look at the Project Governance Process Map in more detail in Chapter 5.

“Can we absorb all the changes?”

Ideas for new changes to our business processes, products, organizations, computing systems, and so on simply seem to have no end. However, not every idea is a good one. And not every good idea should be implemented right now.

This is what the fourth question in PPM addresses. Given the limitations of what resources we have, as we talked about in question two, and the need to track performance against plans, discussed in our considerations of question three, PPM allows us to determine what the right thing is to do at just the right time for the biggest benefit.

It gets back to having the facts in order to make good decisions.

What we have seen all too often is that we decide to move forward with a project solely on the merits of the individual project, while hoping the business can do the job. Without a way of looking at the landscape of projects, it is virtually impossible to know if a new project can even be done given the availability of our current resources for it to gain the company any benefit at all.

Another way to look at it is from a nautical standpoint. As an admiral of a fleet of ships, I make the decisions on when to launch my ships and where to send them. Oh yeah, one little detail: we haven't yet invested in a tracking system for the fleets—but we're considering it! So I have no way of tracking where all the ships are at any given time. Now back to my plans: I can look at my ships and crew for launch whenever they are ready, and then give the order to launch. Or I can look at the whole of my fleet, review my strategy and purpose for the fleet, and then deploy the right ships to the right places to effectively execute the desired job. Oh, that's right—I don't have a way to know where my

ships are; . . . oops, we're definitely going to have to give that tracking system another look!

Through experience, we have found there are several different types of change we need to consider when looking at whole portfolio as well as individual projects. There's change that impacts technology, there's change that impacts physical assets (such as real estate), and then there's change that impacts people. It's this last category that really matters, as it's only people who get unsettled by change. Technology and physical assets don't have emotions. So our focus needs to be on the types of change we're driving onto people, and over what timeframe. There's clearly a world of difference between people undergoing change once a year compared to once a month.

Lesson Learned

Change may impact technology, physical assets, or people. People are the ones who get unsettled by change.

Chapter 6 outlines a fact-based methodology that enables us to look at change in terms of *what* (the degree of disruption), *when* (the timing of these changes), and *who* (both individuals and groups of people) is impacted. This methodology allows us to present our change analysis, along with recommendations, to our decision makers. Once we've started the change process and controlled the impact of change across our business, we will be able, slowly and controllably, to increase the capacity of the entire organization to handle more change.

We'll explore this question further in chapter 6.

"Are we realizing the promised benefits?"

Now that we've launched our projects, the payoff to all our hard work will just happen! What? You say that isn't necessarily so? Why not? Didn't we know what the benefit of doing the project would be? Didn't we have a way to keep tabs on the project's impact on the object of change? Didn't the money just roll in?

This brings us the final key question that PPM addresses. Or as the lady said in the old television commercial: "*Where's the beef?!?*"

Effective PPM enables us to know what benefits to expect from a project and to track the realization of those benefits as the project progresses. Realizing benefits in practice is dependent on deliberate management action: staffs need to be trained to use the system and to exploit its capabilities; business processes need to be reengineered; and resources need to be redeployed. Unless this happens, the full potential benefits of our investments may not be realized. It is this problem that benefits realization management seeks to address. Chapter 7 will explore this topic further, including examining the “benefits puzzle” and “The 10 principles of effective benefits realization management.”

The 10 principles of effective benefits realization management

- Benefits must be placed at the center of the portfolio management and investment appraisal processes: funding should be linked to benefits forecasts, and key stakeholders should be clear about what benefits they are buying.
- Benefits realization starts with the Business Case: ensure that the business case includes all activities and costs required to realize the forecast benefits.
- Funding allocations should be incremental, and continued funding should be directly linked to the latest benefits forecast: regular check-points (stage gates and portfolio level reviews) should be built in so that if benefits fall away, budgets can be adjusted accordingly.
- Where possible, “book” the benefits early: by cutting budgets, limiting headcount, and targeting unit costs, and by including them in divisional and individual performance targets.
- Optimism bias is a reality: benefits tend to be *overstated* and are often little more than unsubstantiated assumptions. Such claims must be robustly scrutinized and challenged.
- Benefits should be validated wherever possible to ensure they are realizable, by making sure that the recipients and those who will be responsible for delivering the business changes on which benefits realization is dependent agree that they are truly benefits.
- Capture all forms of value added: efficiency (both time and financial savings), effectiveness (improved performance), foundation/potential opportunity value, and the value represented by the avoidance of “things gone wrong.”
- Benefits need to be *actively* managed, to ensure that forecast benefits are realized (especially important where those benefits are

dependent on business change) and to capture benefits that were not anticipated at the Business Case stage.

- Plan and manage benefits realization from a business rather than a project perspective: benefits are usually dependent on business change and may not be realized until after project deployment has been completed and the project team has disbanded.
- Utilize summary documentation and leverage the Pareto principle: short summary documents (business cases, benefits reports, and so on) convey the salient facts far more effectively than long documents.

PROJECT PORTFOLIO MANAGEMENT DEFINED

Okay, enough with the questions. So just what *is* project portfolio management? Rather than reinvent the wheel, we'll draw on what exists in the literature today for a succinct definition (Project Management Institute, 2006):

The centralized management one or more portfolios, which includes identifying, prioritizing, authorizing, managing, and controlling projects, programs, and other related work to achieve specific strategic business objectives.

PPM accomplishes its purpose by adhering to some fundamental actions. PPM:

- Ensures that projects and programs align with the strategies, goals, and objectives of the business
- Communicates project and program details, including costs and benefits
- Manages projects and programs as a whole, providing a holistic, systems approach to business projects

Foundational Principle

PPM ensures the alignment of projects with strategies, communicates project details, and manages projects holistically.

Now wait a minute, you say. You've heard about portfolios, but have you heard about the different types of portfolios that can be found in business? And how are they different? Quite simply, from a management perspective, they aren't different. The bottom line is that it's all about effectively managing the work a business is doing that costs money with an eye toward fulfilling the strategic goals and bringing financial and nonfinancial benefits to the company.

The following are some of the many variations on the theme of portfolio management found throughout organizations today:

- Project Portfolio Management (naturally!)
- Application Portfolio Management
- Product Portfolio Management
- IT Portfolio Management
- Asset Portfolio Management
- Enterprise Portfolio Management
- Investment Portfolio Management
- Investment Management
- Resource Portfolio Management
- Options Management
- Pipeline Management
- Software Portfolio Management
- Governance Process

PPM is about action, so that's what we'll focus on. This book will not delve into how business strategies are developed. There are plenty of books and articles to help you do that. PPM acknowledges that strategy development is not just a linear process, and that strategy makers need feedback on how the strategy is working. This is one of the critical roles of PPM. By informing strategy makers, PPM makes strategy development and maintenance a more interactive process.

Foundational Principle

PPM is about action.

In performing its role in capacity management, PPM provides information on resource allocation and its impact and affect on strategy and the other projects in the portfolio.

As mentioned before, implementation of PPM is not easy. We hope this book will help the reader to identify blind spots when attempting to implement PPM through the authors' sharing the lessons we have learned through the school of hard knocks. This book will not go into the detail of planning a project, but should provide some critical success factors (our "aha" moments) to effectively implement PPM.

THE PPM PLAYERS AND ROADMAP

Now, you may be saying to yourself, "Yeah, I can see how PPM would work, but I can't get the whole company to agree to use it." Well, that's why we wrote this book—to help you build your story about why PPM works and, in particular, how it has worked in our organizations. We can say, without qualification, that PPM can work at an organizational, business unit, or enterprise level. Ideally, we know it works best if it can be implemented enterprise-wide, but we have not seen this happen very often in real life.

In fact, this brings up a topic we will cover more in Chapters 8 and 9—there is, and is not, just one portfolio. "*What?!*" You heard right. From the perspective of the enterprise, all projects are in the one enterprise portfolio. However, each business unit and organization has a piece of that portfolio that they manage using the PPM process, and each of those pieces is a portfolio as well (the business unit and/or organizational portfolio). Most companies do not attempt to run all their projects at the enterprise level; that would be crazy. It turns out that PPM is actually a set of tiered portfolios (as opposed to what some might say are really "teared" portfolios, given the work involved). What determines the movement of projects from one portfolio to another is thresholds (see Figure 1.2).

Foundational Principle

There is and is not just one portfolio. It's a tiered thing.

The critical factor to understand here is that you don't need to implement PPM at the enterprise level to see the benefits of PPM. Sure, it may be easier if everything is aligned throughout the enterprise, but running a company would be easy if things never went wrong. We'll get into the details of how this all works a bit later. If you want to see right now, just turn to Chapters 8 and 9 and it will make more sense.

Project Tiers

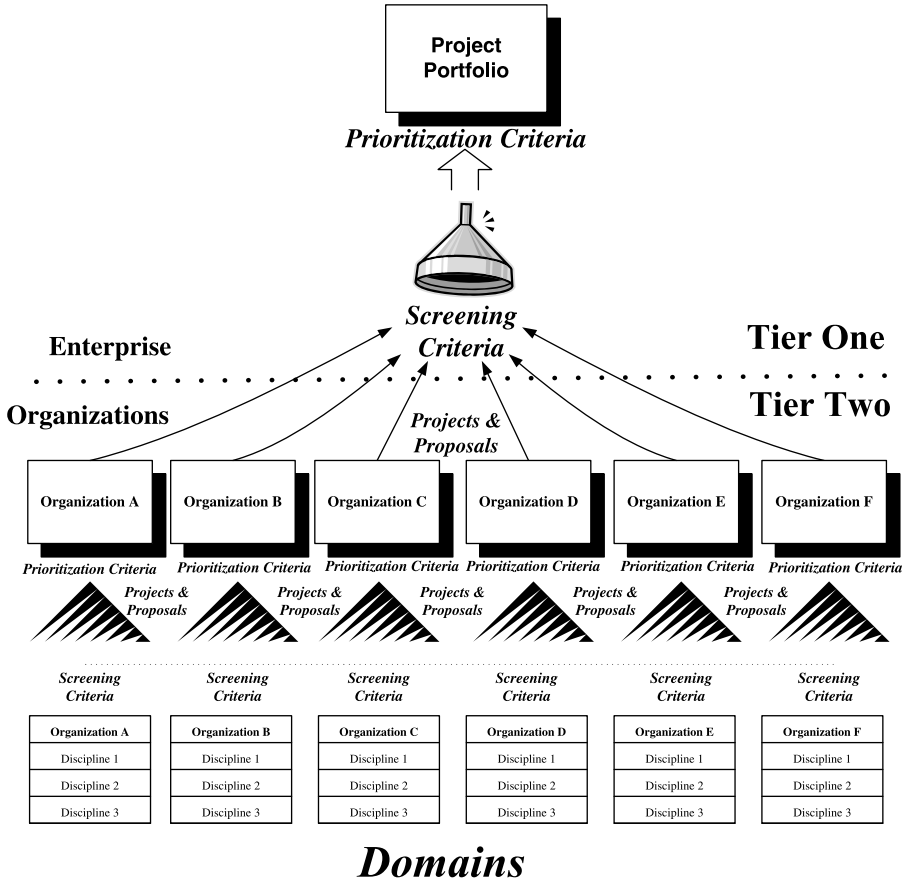


Figure 1.2 Projects are screened and selected in tiers, first at the business unit or organizational level, and then at the enterprise level (assuming the organization practices enterprise PPM).

Foundational Principle

You don't need to implement PPM at the enterprise level to see the benefits of PPM.

THE PPM PROCESS VIEWS

We may view the PPM Process from several different angles. We earlier looked at some of views of portfolios with relation to the enterprise. Now let's take a look at the process itself. Figure 1.3 shows the PPM Process in a general flow without specifying roles and responsibilities. As you can see, the process is iterative until we get to the closeout of the projects. Figure 1.4 shows the PPM Process in a "swimlane" format detailing specific products and deliverables, as well as responsibilities. We will go over the swimlane chart in more detail in chapters 8 and 9.

A FEW MORE QUESTIONS TO GET THE MENTAL SYNAPSES FIRING

Whenever you read a newspaper or magazine article you will see the author attempt to answer six key questions, also known as the "Five Ws and One H."

- Who?
- What?
- When?
- Where?
- Why?
- How?

It only seems appropriate in exploring what PPM is that we look briefly at the "Five Ws and One H." Here goes.

Who?

Who can really use the PPM process? The answer:

- The "C-Level" executives
 - CEOs: Chief Executive Officers
 - CFOs: Chief Financial Officers
 - CIOs: Chief Information Officers
 - CTOs: Chief Technology Officers
 - CSOs: Chief Strategy Officers
 - CPOs: Chief Portfolio Officers

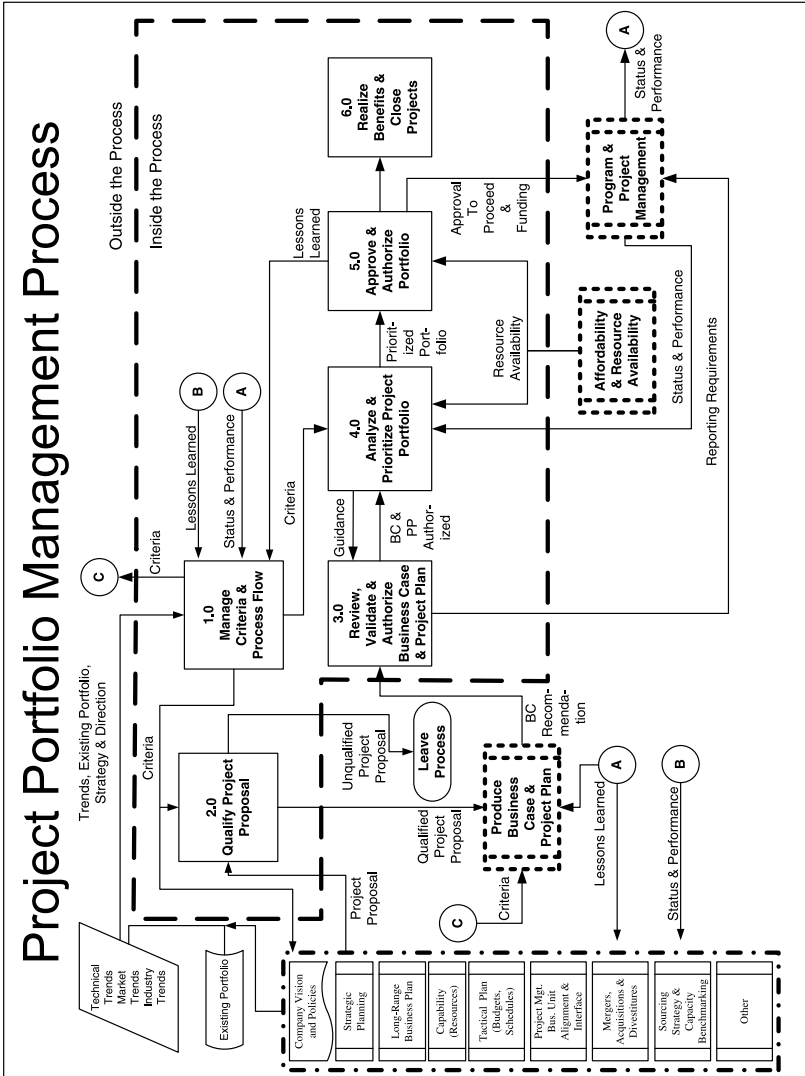


Figure 1.3 The PPM Process in a general flow without specifying roles and responsibilities. As you can see, the process is iterative until we get to the closeout of the projects.

PROJECT PORTFOLIO MANAGEMENT PROCESS SWIMLANE CHART

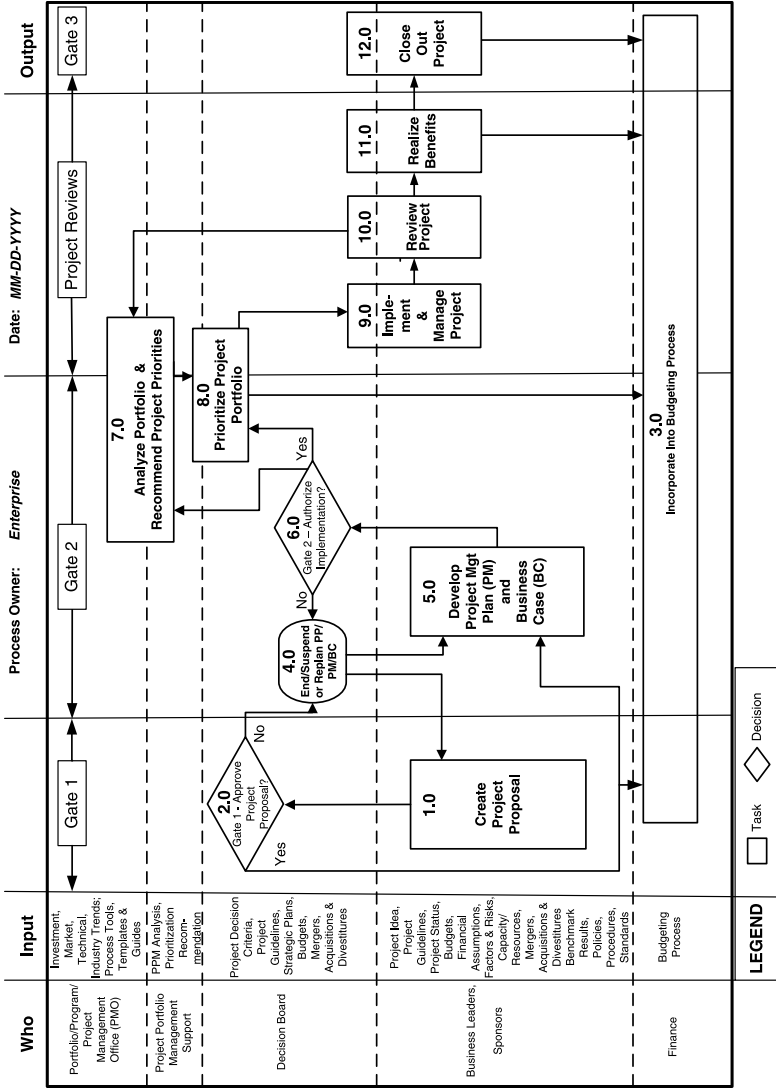


Figure 1.4 The PPM Process in a "swimlane" format detailing specific products and deliverables, as well as responsibilities.

- Non-C-Level executives
- Department heads
- Managers
- Supervisors
- Portfolio managers
- Senior project managers
- Project managers
- Program managers
- Lead engineers
- Systems engineers

What?

What should you use PPM for? The answer, managing:

- Multiple projects
- Multiple programs
- Assets
- Software applications
- Investments
- Resource allocation
- Capacity
- Products

When?

When should PPM be used? The answer:

- You have more than one project or program
- A decision needs to be made about:
 - Ideas or proposals moving to the business case and detail planning phase to compete for a slot in the portfolio as a project or a program
 - Projects or programs going forward
 - Projects or programs being “killed” or put “on hold”
 - Resource allocations are at issue between projects or programs
 - Strategies change
 - Business conditions change
 - The market changes
 - Mergers
 - Acquisitions

- Divestitures
- Joint ventures
- Buying, building, decommissioning, or disposing of facilities, equipment, or material

Where?

Where is PPM used? The answer:

- Nonprofit businesses
- For-profit businesses
- Government agencies and departments
- Universities and colleges
- Utility companies
- Investment firms (naturally!)
- Law firms
- At the enterprise level
- At the business units level
- At the organizations level
- At the discipline level

Why?

Why use PPM? The answer:

- PPM accomplishes its purpose by adhering to some fundamental actions. PPM:
 - Ensures projects and programs align with strategies, goals, and objectives of the business.
 - Communicates project and program details, including financial costs and benefits.
 - Manages projects and programs as a whole. It's a holistic, systems approach to business projects.

How?

How do you decide whether to use PPM or not?

- Engage in conversation and discussion with:
 - Executives
 - Managers

- Project managers
- Program managers
- Subject matter experts
- Develop a business case with options for managing the items under “When?”

CHAPTER SUMMARY

Foundational Principles

- Demand-side resource management must balance with supply-side resource management.
- PPM ensures alignment of projects with strategies.
- PPM communicates project details.
- PPM manages projects holistically.
- PPM is about action.
- There is and is not just one portfolio. It’s a tiered thing.
- You don’t need to implement PPM at the enterprise level to see the benefits of PPM.

Foundational Tools

- The business case
- The project governance process map

Lessons Learned

- Even “mandatory” projects have options.
- Engaging business leaders in an open, fact-based dialogue is a key outcome of PPM.
- When seeking to implement resource management for the first time, focus on a staged approach, using quick wins to build momentum and buy-in.
- Individual project business cases can be compelling, but we need to look at the entire portfolio pipeline to determine the best course of action for the company.
- Change may impact technology, physical assets, or people. People are the ones who get unsettled by change.