

Project Portfolio Management: A Practical Guide To Selecting Projects, Managing Portfolios and Maximizing Benefits

**By Author: Harvey A. Levine
(A book review by R. Max Wideman)**

Introduction

In presenting this book review I must first profess a certain conflict of interest. You see, the author is not only a friend of mine of many long years, but I also wrote the forward to his book. That doesn't detract from the value of this book, but it might be perceived as detracting from my objectivity!

With all that has been written on and about project management over the last decade, you might be forgiven for thinking that surely there cannot be anything new to say. Indeed, some eminent practitioners have even stated categorically that little has advanced in these past ten years. But in the past five at least the management of projects has risen to a new prominence. Projects are now seen as critical to success in all three sectors: public, private and non-profit.

How is it that Project Portfolio Management has become necessary? Because project management has moved from the domain of capital infrastructure projects to any type of endeavor that qualifies as a "project". Then, with the advent of business automation systems through the use of computers and the concomitant software development, the opportunity for innovative value-added projects has burgeoned to the point where "only the sky is the limit".

Consequently, the impact of projects on contemporary society has become immense. Unfortunately, the evident wastage through improper selection of projects and/or their improper formulation and conduct is equally immense. Together, this represents a serious diminution of our collective capital assets and consequent drag on our economies. To deal with this challenge, there *is* something new, though it is still evolving. The solution to this wastage is to be found in effective *Project Portfolio Management*, ("PPM" for short), and this is not just another trendy label or fad.

It is true that some would like to view PPM as just another technique of project management, but it is not that either. PPM is literally "above and beyond" project management because it spans all the way from the vision of the executive suite, through project management to the actual realization of benefits, to the enterprise and consequent successful competitive positioning. Key to this new project portfolio lifespan is selection of the right projects in the first place.

So, it should come as no surprise that Harvey Levine, author of a number of books and literally hundreds of articles on almost every aspect of project management, has thrown himself into the fray on this one. As Harvey explains in his Introduction:

"The emergence of PPM as a recognized set of practices may be considered the biggest leap in project management technology since the development of Program Evaluation and Review Technique and Critical Path Method in the late 1950s."¹

Well, maybe not in the art of project management technology, but certainly in the practice of corporate governance where improved service and/or competitive advantage is key to acceptance and survival.

Book Structure

Harvey's book consists of an Introduction and thirty-four chapters organized into ten sections contained in two parts as shown below. In addition, the author introduces each section with a brief note on the chapters that follow.

Introduction

Part I One – A Practical Guide to Project Portfolio Management

Section One: What is Project Portfolio Management and why do we need it?

Chapter 1.1 - Why Do We Need Project Portfolio Management?

Chapter 1.2 - What is Project Portfolio Management?

Section Two – The Fundamentals of a Project Portfolio Management Process

Chapter 2.1 - Selecting Projects for the Pipeline

Chapter 2.2 - Maintaining the Pipeline

Chapter 2.3 - Executing Project Portfolio Management

Chapter 2.4 - Tools for Project Portfolio Management

Chapter 2.5 - Implementing Project Portfolio Management

Section Three: The Finer Points of Project Portfolio Management

Chapter 3.1 - Defining PPM: A Bridge or a Hub

Chapter 3.2 - A Pre-Qualification Process for Selecting Projects for the Portfolio

Chapter 3.3 - The Impact of Uncertainty on Projects and the Portfolios

Chapter 3.4 - Is there a Gorilla in your Portfolio? Turning Opportunity into Value

Chapter 3.5 - Work Breakdown Structures for Risk & Strategies

Chapter 3.6 - An Introduction to Earned Value Analysis

Part Two – Contributed Chapters and Case Studies

Section Four: PPM Techniques & Issues: Portfolio Planning

Chapter 4.1 - Linking Strategy and Project Portfolio Management – K. C. Yelin

Chapter 4.2 - How to Determine the Value of a Project – Ray Trotta, Christopher Gardner

Chapter 4.3 - Using the Analytic Hierarchy Process to Improve Enterprise Project Portfolio Management – James Devlin

Chapter 4.4 - The Efficient Frontier Technique for Analyzing Project Portfolio Management – Mike Gruia

Section Five: PPM Techniques & Issues: Organizing & Implementing

Chapter 5.1 - Making the Case for Project Portfolio Management – Clifford B. Cohen, Randall L. Englund

Chapter 5.2 - The Role of Executives in Effective PPM – K. C. Yelin

Chapter 5.3 - Project Offices Are Key Components of IT Governance – Matt Light

Section Six: PPM Applications: Information Technology

Chapter 6.1 - A Summary of First Practices and Lessons Learned in Information Technology Portfolio Management – Federal CIO Council, Best Practices Committee

Chapter 6.2 - The Backbone System of IT Management and Governance – David Hurwitz

Section Seven: PPM Applications: New Product Development

Chapter 7.1 - Stage-Gate® Idea-to-launch Framework – Robert G. Cooper

Chapter 7.2 - Portfolio Management for Product Innovation – Robert G. Cooper

Section Eight: Applications: PPM for Theory of Constraint Advocates

Chapter 8.1 – Applying the Theory of Constraints to Project Portfolio Management – Larry Leach

Section Nine: Case Studies

Chapter 9.1 - Managing Your Technology Pipeline Portfolio Management Process and Its Evolution over Time – Rebecca Siebert

Chapter 9.2 – Using PPM to Ease the Hewlett-Packard–Compaq Merger – Don Kingsberry

Chapter 9.3 – Developing a PPM Capability at America Online – Rich Dougherty

Chapter 9.4 –EW Scripps: A Media Giant's Portfolio Management Solution – Vanessa McMillan

Section Ten: What Others Are Saying About PPM

Chapter 10.1 - Beyond the Triple Constraints: Developing a Business Venture Approach to Project Management – Robert J. Graham, Dennis Cohen

Chapter 10.2 - From Overload to Productivity via Systematic Decision Making – James Schlick, Andrew Longman

Chapter 10.3 – The Seven Habits of Highly Effective IT Portfolio Management Implementations – Gil Makleff

Chapter 10.4 - Project Portfolio Management Basics – PMI Knowledge and Wisdom Center

Chapter 10.5 – Integrating Project Portfolio Management with Project Management Practices to Deliver Competitive Advantage – James S. Pennypacker, Patrick Sepate

What we liked

Harvey has spent the best part of two years researching this topic, gaining insight from knowledgeable people and finding out what companies actually do. He has surveyed the best of the best and collected their knowledge and wisdom. The result is this book. Since the availability of books on this subject is relatively sparse, certainly ones that provide profound, up-to-date and practical information, this one is an essential addition to the list.

Perhaps the first thing to understand is why all the fuss? It is interesting to follow the genesis of project management itself. Although not recognized as such, project management was clearly practiced in the great building endeavors of the ancient world. In the last century it emerged as a management discipline in its own right, essentially from the traditional heartlands of construction and engineering where it has a well-established process and track record. But the sizes of such projects are such that they generally tend to be not only truly unique but also relatively unconnected.

As we noted in the Introduction, the advent of business automation through the use of information systems, computer technology and software development, has brought immense change to business governance and operations. Consequently, there has been a tremendous upsurge in project-based work. This is typically associated with new challenges and opportunities brought about by other technological developments, shifting boundaries of knowledge, dynamic market conditions, environmental regulations, changes in organizational thinking, and in strategic directions. The challenges that these bring have been compounded by the drive towards shorter product life cycles, customer involvement, and increased scope and complexity of inter-organizational relationships.

Today, organizations have embraced project management, in principle at least, as the way to address these challenges. So, all these areas have entered the project management domain – indeed they have swamped it. Consequently, it is not unusual for larger companies to be faced with *hundreds of projects annually*, and still more to choose from. It can be shown mathematically that supposing you have, say, a mere fifteen projects to choose some, but not all, then you have around 30,000 choices.² Obviously the optimum selection within the constraints of the enterprise's

resources is a serious challenge.

Harvey's book provides insights into how to tackle this problem and the information you need to do so.

The second thing to recognize is that we are dealing here with three different groups of people who don't speak the same business language. You have the governance group, that is, the business executives such as CEOs, COOs, CFOs, CIOs, senior functional managers, or even strategic planners. These are the people that run the enterprise within which projects take place and are the ones responsible for keeping the organization afloat. Then you have the program/project group, who plan and implement designated projects, and finally, you have the operations group, the production or "business-as-usual" people that keep the organizing moving.

Each group has a different mindset. The senior executives in the governance group are interested in successful products and services. The program management group is interested in successful projects, and the operations group is interested in efficient, cost-effective product deployment. So, the primary project management issue for executive management is not "Will the project be 'on time' and 'within budget'?", important though that may be, but "What benefits will this project bring to the organization, when, and how risky is it?"

The important point here is that the answer to the first part of this question is typically beyond the purview of the average project manager. Certainly, timely delivery of the right product at the right level of quality is essential, but the correct deployment of that resulting product is what will determine whether the project is really successful. This is the essence and significance of Project Portfolio Management that Harvey addresses in his book. For all this to make sense, Harvey introduces the reader to a new idea, the *Project Portfolio Life Span* (PPLS). This PPLS encompasses five phased components as follows:³

1. Identification of needs and opportunities (effective governance)
2. Selection of the best combinations of projects (the portfolios)
3. Planning and execution of the projects (project management)
4. Product launch (acceptance and deployment of deliverables)
5. Realization of benefits (efficient operational usage)

The third lesson to be gained from this book is that it makes a cogent case for a consistent project management methodology. Without this it is not possible to generate and collect the requisite project selection and decision-making data. It makes an even stronger case for establishing a central project or program office to facilitate the collection and transfer of that data and provide unification of project direction, priority assignment of limited resources and so on. Such an office must also facilitate the transfer of requisite information back to the various project managers so that they have the information available for making rational *corporate-beneficial* decisions rather than just *project-beneficial* decisions.

Downside

At around 560 pages, this is a hefty tome. Given that the book title is Project Portfolio Management, that PPM is evidently different from project management, and that the latter is already well covered in the literature, the elaboration of project management topics seems superfluous. For example, work breakdown structures and earned value analysis might have merit in bringing structured approaches and

factual data to strategic planning and risk analysis. But these are clearly project management techniques and their inclusion suggests either a lack of confidence in management's analytical ability or in project management's integrity. Either way, if either exists the system will fail. If there is any doubt, other management techniques need to be brought to bear, such as management audits.

We even need some convincing that the Theory of Constraints can really be usefully applied to PPM and certainly to no greater detail than the scheduling of complete projects. This is not to deny the utility of such techniques but rather to observe their misplacement. Instead, we think that in a discussion of Project Portfolio Management it would be better to view project management as the proverbial black box, more than adequately explained in other literature. Indeed, in the context of PPM, project management is but one of many sophisticated disciplines in the overall profession of corporate management.

In our view, books containing chapters by different authors, such as in Part Two of this book, put themselves at a disadvantage. For one thing each author tends to have a different perspective of the subject at hand, sometimes at odds with the other authors, and frequently using different terminology. In this case, we were very intrigued by the description of the "Analytical Hierarchy Process" (AHP) by James Devlin.⁴ According to Devlin:

"AHP is a powerful and flexible methodology that improves project portfolio management (PPM) decisions in both commercial and government settings. Using AHP helps decision makers to think clearly about complex portfolio decisions, reach consensus on project priorities, and measure portfolio performance."

That does sound impressive.

All was well until we got to this section:

"Traditional portfolio management methodologies in many cases use outdated prioritization methodologies. [MW. No doubt true, assuming they use a methodology at all!] One such approach requires that evaluators use measurement scales that range from 1 to 5 or 0 to 10 to score projects. [MW. Also true.] Although this methodology is typical of many gate-based approaches, it suffers from an inappropriate use of numbers. The noted scales . . . are most frequently interpreted as ordinals, or at best intervals, and convey no information about the proportionality of the judgments being made. Moreover, it is inappropriate to perform any mathematical calculations on ordinal measures, even addition, because these numbers are not meant for calculation. (An ordinal scale is a set of numbers that is invariant under monotone increasing transformations. . . .)"⁵

We are certain that this explanation of "ordinal numbers" is of fundamental significance – if only we understood what it meant. But in any case, in project risk management we frequently assess probability and impacts this way and multiply the two together to get a relative risk criterion value.

In this book we seem to have a proliferation of techniques dealing with the selection of projects for a portfolio, i.e. the front end of the PPM process, and very little on the most important part – the back end, the actual deployment and realization of benefits during operations. And that is to say nothing about how to sample those actual results relative to the selected projects, and feed them back to the executive project selection decision-makers. That seems to be an area that still needs research, development, application and further study.

Summary

As Harvey says:

"What is so obviously needed is a basis for addressing project selection issues, deciding on project termination, facilitating reallocation of resources, changing of priorities, and evaluation of alternatives. And, without this capability, there is no Project Portfolio Management."⁶

Further:

" Periodically, we need to review [each] project to test assumptions, update givens, and monitor progress. We need to periodically examine alternatives and consider remodeling the portfolio."⁷

And:

"The core mistake is to think that PPM is fundamentally the management of multiple projects. This definitely is not so. PPM is the management of the project portfolio so as to maximize the contribution of projects to the overall welfare and success of the enterprise."⁸

Clearly, the recognition and structuring of PPM during the last five years or so has raised the value of projects and project management to a new level. We are now in a position to bridge the gap between the projects and the operations sides of our business. PPM enables us to not only do projects right, but to select and do the right projects in the first place. However, what still needs attention and development is how best to collect data on the project benefits that are *actually* realized by the operations groups and how these are related to the original projects selected in the first place. Without this essential feedback and linkage, we shall not be able to determine the success of our project portfolio management efforts and effect *continuous PPM improvement*.

Throughout his book, Harvey tackles the many problems associated with PPM such as; how to implement PPM; ranking value and benefits; the size of the portfolio pipeline; the impact of uncertainty on projects and portfolios; and the benefits/risks relationships. As we noted earlier, the book is divided into two major parts: the first containing the results of Harvey's own findings, and the second containing chapters contributed by major players in the field. A significant part is devoted to a practical look at precise details for effective PPM implementation.

The majority of chapters represent a valuable and instructive read, especially for those at the corporate executive level. That is, for those who are responsible for the corporate governance of an organization involved in the selection and direction of many concurrent projects, carried out by their own project people, for the organization's own operational benefit.

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¹ Levine, H. A., *Project Portfolio Management: A Practical Guide to Selecting Projects, Managing Portfolios and Maximizing Benefits*, Jossey-Bass, 2005, p1

² Wideman, R. M., *A Management Framework: For project, program and portfolio integration*, Trafford Publishing, 2004, p181

³ Levine, H. A., *Project Portfolio Management: A Practical Guide to Selecting Projects, Managing Portfolios and Maximizing Benefits*, Jossey-Bass, 2005, p21

⁴ Ibid, Chapter 4.3

⁵ Ibid, p168

⁶ Ibid, Chapter 1.1

⁷ Ibid.

⁸ Ibid, Chapter 2.4