BREAKTHROUGH PROJECT PORTFOLIO MANAGEMENT

Achieving the Next Level of Capability and Optimization

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FOREWORD

It gives me great pleasure to write the foreword for Murali Kulathumani's new book, *Breakthrough Project Portfolio Management*. Throughout my career in information technology and presently as chief information officer (CIO) of a Fortune 500 company, I have always found the discipline of portfolio management to be a valuable aid in choosing and monitoring investment choices. I've found that portfolio management can make the difference between mere project activity and meaningful achievement of capability.

Part of the challenge for me has been to visualize a road map of capabilities for the discipline of portfolio management so that we can plan to take our organizations to the next level of maturity. In my opinion, while there are many good volumes about portfolio management in the market today, this new book is one of the first to propose an easy-to-use model of portfolio capabilities and the different levels of attainment.

Another aspect of portfolio management where I have felt there could be a more detailed exploration has been the gap between portfolio theory and the realities or constraints encountered in real life. While the theory of portfolio management is well established, there remains a considerable gap in applying this theory to the varied situations that are encountered in organizations today. Every organization is in a different place in terms of process maturity, and I believe there is always a need to address the gap between theory and practice. This is where this book plays a valuable role in making the reader aware of how to navigate the space between the *ideal* and the *real*, while delivering on the promise of portfolio management.

A third aspect of this readable book that appealed to me was its adaptation of earned value management tailored for portfolio management. While the discipline of earned value management has been a proven workhorse in the defense and construction industries, the perception of high rigor and effort around this technique has prevented it from being more widely adopted. This book has approached this standard technique in a new way, distilling the most essential aspects into a simple set of artifacts that should be easy for most organizations to use. The use of this modified form of earned value management to serve as an objective indicator for project and portfolio performance is useful in providing executive decision makers with the tools to make data-driven choices. The book not only introduces this simplified technique, but also goes on to build upon that same foundation, an extensive methodology to aggregate data for easy visualization by executives. I also found it valuable and thought provoking to peruse the detailed chapter on providing concrete metrics on transformational strategy attainment using the modified earned value method.

From a CIO's perspective, perhaps the most compelling feature of this book is the detailed exploration of how the portfolio office and the CIO are connected in the delivery of value to the organization. Several aspects of this topic gave me pause for thought and are worth exploring for any CIO to optimize the output from their portfolio office.

Although dealing with technical topics and detailed methodologies by which to approach these topics, the book has been written in an easy-to-follow manner, with handy illustrations aiding readers in their comprehension of the ideas and techniques. I believe this book stands apart from similar works in the field and that it is a must read for anyone interested in portfolio management, as well as decision makers who look to achieve strategic transformation through portfolio management.

Sean Perry
CIO, Robert Half International

This book is dedicated to my dear family,
Appavu, Abirami, Vidya, and to my dear parents."

PREFACE

> *"If there's a book you really want to read but it hasn't been written yet, then you must write it."*
>
> —Toni Morrison

The genesis of this book could be characterized along similar lines to the above quote. As a practicing portfolio manager, I was always in search of books that could help me improve my craft. Barring a few exceptions, I was always stymied by the chasm between theory and practice; by the difference between the idealized treatment of topics in the portfolio management books and the cold hard reality of the workplace.

Eventually, I devised mechanisms that helped me bridge this divide and make portfolio management successful in the different companies where I had the opportunity to work. However, I realized that this knowledge deserved a wider reach and that this could be an opportunity for a new generation of portfolio managers who were grappling with the very same issues that I had solved through trial and error. That realization eventually led to the creation of the book you hold in your hands now.

I had three main goals in writing this text:

- Sequentially cover the essential capabilities of an effective portfolio and provide a logical construct of how the different capability areas interact
- Provide a complete understanding of all the building blocks of a portfolio, the critical success factors needed to achieve desired results, and the nuances involved in implementing them
- Introduce a pioneering *mEVM* methodology and articulate various strategies for implementing it within an organization

Having covered the above in sufficient detail, I felt that there was still something to be said about the "team sport" nature of portfolio management. An effective portfolio always works in partnership with other functions such as Finance, the office of the CIO, and the business. And it usually takes more than one person to implement an effective portfolio—it takes a whole team (hence the chapter on the portfolio office).

Most books, and certainly this one, do not take shape in a vacuum. A whole host of people were instrumental in the creation of this text. Foremost among them are mentioned below, but many more were involved in the interactions that enabled this text. First, Drew Gierman at J. Ross Publishing, for taking a chance on a first-time author and his ample patience in waiting for me to deliver the promised manuscript. Thanks are due to Sean Perry, CIO of Robert Half, who is the kind of CIO a portfolio manager would love to partner with and work for. Much of the chapter on the CIO's role is modeled on my interactions with Sean. The community of portfolio managers at Robert Half also deserve thanks for their collegial spirit in helping each other and displaying a high degree of competence in this field.

When it comes to the art of portfolio management, mention must be made of Jennifer Cheng, Sr. Director at Kaiser Permanente, who exemplifies many aspects of the ideal portfolio manager. I learned many useful portfolio management techniques from Jennifer and her encouragement was foundational in my creation of the mEVM technique. I would also like to thank Fidelis Atuegbu, former Director at Kaiser Permanente, for showcasing the ideal partnership between the finance department and the portfolio office.

Admiration and thanks go out to Murali Chemuturi and Dr. Prasad Kodukula, both stalwart fellow authors in the J. Ross Publishing family, for the inspiration I received from them. Finally, thanks are due to the production staff at J. Ross Publishing, specifically Jackie Lininger and Steve Buda. Their patient and meticulous edits turned my sometimes telegraphic prose into meaningful and readable content.

Ultimately, portfolio management is the "art of the possible". In the face of change, in the face of adverse developments and unforeseen risks, the portfolio manager is still expected to navigate the portfolio to the safe harbor of impactful strategic results. If this book assists in that endeavor, I will consider my efforts to be successful.

Murali Kulathumani

HOW TO USE THIS BOOK

INTRODUCTION

The aim of this book is to enable you to transform your current portfolio into a world-class portfolio. Whether you already have a portfolio, or are starting to build a portfolio from scratch, the contents of this book will inform you about the capabilities of a high-performing portfolio and help you get there. The goal is to provide the reader with a complete understanding of all the building blocks of the portfolio and then understand the nuances involved in implementing the same. The chapters, which sequentially cover the essential capabilities of a portfolio, are structured in a simple, intuitive way and also cross-reference each other to provide the reader with a logical construct of how the different capability areas interact.

PREREQUISITES

This book assumes very little in terms of prerequisites on the part of the reader. A basic knowledge of projects, coupled with a passing understanding of finance terms and modern organizations are all that it takes for a reader to understand and start implementing the concepts explored in this book.

OVERVIEW OF THE BOOK STRUCTURE

This book is divided into four parts. Part I covers all of the key components of a portfolio management process. Chapter 1 describes the mission-critical role of the high-performing portfolio. Chapters 2 and 3 deal with the mechanics of managing the portfolio intake and orchestration of the annual planning process, respectively. Chapter 4 delves into funding strategies for the portfolio, while Chapter 5 deals with monitoring the performance of the portfolio and its constituents. Chapter 6 covers the important task of balancing the portfolio and Chapter 7 concludes Part I by exploring the management of realization of project benefits.

Part II of this book covers a central theme of the book—namely, the utilization of a simplified version of earned value management (EVM) to objectively measure and manage a portfolio of projects. Chapter 8 starts off with an introduction to the concept of modified EVM (*mEVM*) and Chapter 9 builds on the concept with more tactile artifacts of the mEVM system. Chapter 10 introduces the concept of data aggregation and describes a variety of scenarios where this could be deployed for the benefit of portfolio governance and other executives. Chapter 11 takes an unconventional approach to measuring strategic attainment using the mEVM concept, while Chapter 12 addresses the implementation of mEVM by describing various strategies to roll out mEVM to the enterprise successfully. Finally, Chapter 13 rounds out Part II by explaining why mEVM works.

There is a world of difference between theory and real life. Part III of this book grapples with implementation strategies for the real world and starts with Chapter 14, which directly addresses the most common problems faced by portfolio managers as they try to roll out capability enhancements in their organizations. Chapter 15 underscores the importance of having systems and tools that actually work in making portfolio management possible. Chapter 16 addresses the dominant factor that can make or mar portfolio performance—namely, the politics at work in organizations—and how to successfully navigate those politics. Chapter 17 brings Part III to a close with a detailed look at portfolio governance and how to ensure that it successfully provides direction for the portfolio.

No successful portfolio operates in a vacuum. Part IV explores in depth the support systems that play a huge role in making the portfolio successful. Chapter 18 explores the important relationship between the chief information officer and the portfolio office, while Chapter 19 follows up on the relationship between the finance department and portfolio office. Chapter 20 highlights the critical role played by the change management function in preparing the organization for changes rolled out by the portfolio office. Chapter 21 explores the characteristics of an ideal portfolio manager, strategies for staffing the portfolio office, the typical composition of a portfolio office, and the ideal reporting structure and place in the organizational hierarchy. Chapter 23 concludes Part IV with an exploration of the role played by the business in enabling the success of portfolio management.

CHAPTER STRUCTURE

Every chapter begins with an introduction to the central topic of that chapter. As an element of the introduction, a summary listing of the chapter's contents is provided to enable the reader to get a bearing as to how the chapter unfolds. This is typically followed by another section that elaborates on the introduction with an informative, more detailed discussion. Some chapters will also have a section that describes the need for the topic that chapter is based upon. Several chapters employ the technique of progressive elaboration of the topic at hand, using tables and diagrams as appropriate. For most chapters, there typically follows an explanatory section that deals with how to set up the building blocks of a certain capability. Finally, there is also a section that describes the levels of capability maturity for that topic and the attendant characteristics of each level. The chapter summary provides a synopsis of each chapter, and at the end of the chapter is a listing of references or notes, if any, to sourced content used in that chapter.

COMPARISON WITH FINANCIAL PORTFOLIO MANAGEMENT

A singular difference between this book and most other volumes on portfolio management is the use of financial portfolio management to introduce some topics in project portfolio management. The author believes that most people are familiar with financial portfolios for the simple reason that they are likely to own one or more. It is therefore reasonable to expect people to grasp project portfolio concepts when they are introduced as a variant of the already familiar financial portfolio concepts. However, this comparison is applied judiciously and, where appropriate, the differences between the financial and project portfolio concepts are highlighted.

THE PORTFOLIO OFFICE AND THE PORTFOLIO MANAGER

Although the portfolio office consists of more than just the portfolio manager, it needs to be remembered that many organizations only have one person—namely, the portfolio manager, managing the portfolio. This is especially true for organizations that are still starting on their portfolio journey. Where there is a larger portfolio office, the portfolio manager is understood to be the prime driver within the portfolio office and that the other members of the portfolio office function under his or her direction. Therefore, the two entities of portfolio office and portfolio manager are used interchangeably, unless expressly indicated otherwise.

FOCUS ON mEVM

Although this book can be used as a complete text on portfolio management, Part II—which covers mEVM—can be used independently for portfolios that already have a sufficient measure of capability in place. With its detailed chapters on the subject—from introductory to advanced uses—Part II contains all of the necessary information for an organization to adopt this powerful technique and to transform their portfolio to the next level.

THE CONTINUOUS JOURNEY OF PORTFOLIO MANAGEMENT

Every portfolio is at a different level in terms of capability as a result of many factors, including the context of the larger organization. Consequently, it's natural that every portfolio manager will approach this book a little differently, based on their current place in the journey. To aid in this approach, references have been inserted in each chapter that enables the reader to look up other chapters where a topic may have been explored in greater depth.

ACCESS TO TEMPLATES

This book was written with an emphasis on impactful implementation in the real world. Accordingly, the tables and figures used in the various chapters have been made available in their original form as a resource to jump-start the reader's implementation journey.

CONCLUSION

Portfolio management can be a challenging endeavor. It can also be a rewarding journey—especially as the organization begins to become aware of the potential of this field of application. This book tries to enable the readers and their organizations to become successful in that journey by listing out the different components that make a portfolio work as well as the subtle nuances that have been proven effective by observation and experience. It is the fervent hope of the author that the readers are able to deploy the content of this book to create high-performing portfolios in their own organizations.

Murali Kulathumani

ABOUT THE AUTHOR

Murali Kulathumani, PMP, has over 20 years of information technology management experience. He has successfully managed large project portfolios at leading Silicon Valley firms such as Cisco, Symantec, and Kaiser Permanente. Murali has extensive experience with the full spectrum of portfolio capabilities. This leading expert also pioneered a simplified form of earned value management, called *mEVM*, which has been well received by industry practitioners and various organizations. In fact, it has become the standard at a billion-dollar business unit of a leading health care provider in the United States.

Mr. Kulathumani has a technical degree in Electrical Engineering from Bangalore University and an MBA from Purdue University. Murali earned the Project Management Professional (PMP)® designation from the Project Management Institute and he is a Certified Scrum Master. He is a published author, consultant, trainer, professional speaker, and has also taught courses as an adjunct professor at Purdue University and the University of Phoenix.

Murali has witnessed firsthand the turnarounds that can take place with proper guidance. This motivated him to share his expertise and to formalize the body of knowledge that he has gained in the form of a book that explains in detail how to effectively manage project portfolios in real-world practice. His goal is to help the many practitioners and companies that have been struggling to implement portfolio management simply because there hasn't been enough guidance about which success factors deliver the greatest impact.

This book has free material available for download from the Web Added Value™ resource center at *www.jrosspub.com*

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Downloads for *Breakthrough Project Portfolio Management* include various tables and figures found in the text and a set of Excel files which constitute the Capability Maturity Tool Kit.

Part I

Key Components of a Portfolio Process

1

THE MISSION-CRITICAL ROLE OF THE HIGH-PERFORMING PORTFOLIO

INTRODUCTION

A chief information officer's mandate is essentially that of a change agent. He or she is expected to effect a change for the better in systems, performance, and capabilities of the organization. The time-tested way to effect change is through a well-managed portfolio of projects—a project being a temporary endeavor that results in an end product, capability, or service.

However, a well-managed project portfolio is one of those mythical information technology (IT) beasts—often bragged about and rarely bagged. An optimized, high-performing portfolio is an ensemble of optimized parts, coming together to deliver a whole that is greater than the sum of its parts. This chapter will explore the characteristics of an optimized portfolio and outline the strategic impact of having such a portfolio. It will also depict the key components of an optimized portfolio, which are then elaborated on throughout the rest of Part I. This chapter also delves into the importance of the maturity level in each portfolio capability along with the net impact of portfolio capability maturity on the pace of strategic transformation.

CHARACTERISTICS OF THE OPTIMIZED PORTFOLIO

An optimized, high-performing portfolio has the following characteristics:

- ***Transformative***—The portfolio is able to describe and execute a road map from where the organization is today to where it needs to be tomorrow. It's able to manage all the components and show what they add to the strategic journey from the capabilities of today to those of tomorrow.

- ***Adaptive***—The portfolio is able to deal with changes in funding and direction. It's able to pick up additional funds as they become available and put them to work in furthering the strategic agenda. In a dynamic business environment, it enables the organization to pivot as necessary.
- ***Transparent***—The portfolio can show all the projects and what their key parameters are at a glance. It enables decision makers to make the right decisions based on data.
- ***Efficient***—The portfolio allocates resources to projects in the most efficient way possible. It maximizes the benefits accrued to the organization by ensuring optimal distribution and use of resources.
- ***Predictive***—Beyond the factual reporting of current and historical project performance, a high-performing portfolio is able to look ahead and predict what is likely to happen, giving executive management a distinct advantage in making the right decisions.
- ***User Friendly***—A high-performing portfolio is also a user-friendly system. It makes every user interaction with the system as quick and painless as possible.
- ***Impactful***—A well-run portfolio can clearly demonstrate the value delivered by the portfolio both to IT and the business. It is also able to show progress along the strategic road map and quantify strategic attainment and correlate that to the resources expended.
- ***Operationally Sound***—For a portfolio to do all of the above, it must be run well on a day-to-day basis. The portfolio office should be equipped with the right tools, staffed well, and be responsive to the needs of the stakeholders and the organization.

THE STRATEGIC EFFECT OF A WELL-RUN PORTFOLIO

Let's look at what a portfolio adds to an organization at a high level—beyond the management of dollars and cents. Figure 1.1 is a simple graph with the y-axis depicting the strategic capability/scale/capacity of an organization; while the x-axis depicts a combination of time and money. The graph also shows the organization's modest strategic capability at the present (marked as *Today*). Figure 1.1 also depicts a high-performing portfolio at work, managing a stream of well-chosen projects that align with the strategic direction of the organization. Furthermore, the portfolio can spot and remediate projects in trouble. While every project is managed by a project manager, the portfolio office is able to harness the transformative power of a portfolio and ensure that, over time, the organization will make significant strides in its strategic road map to achieving new capability, scale, and capacity. This *new* state of the enterprise's strategic capability in the future (marked as *Tomorrow* on the x-axis) is shown as the bigger tower representing enhanced capability and capacity.

In contrast, Figure 1.2 depicts the same amount of time and resources spent in pursuing a disparate collection of projects that are not managed under an effective portfolio. Although every project is still managed by a project manager, there isn't the overarching oversight provided by a portfolio office, thus, projects are left to police themselves. In this case, it's hard to predict the net effect of the projects in achieving strategic goals, but in all likelihood, the net output over

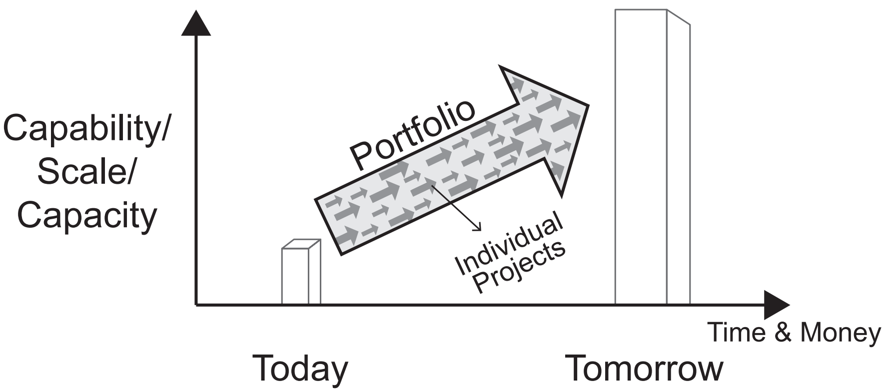

Figure 1.1 Growth in strategic capability over time when projects are managed in a high-performing portfolio

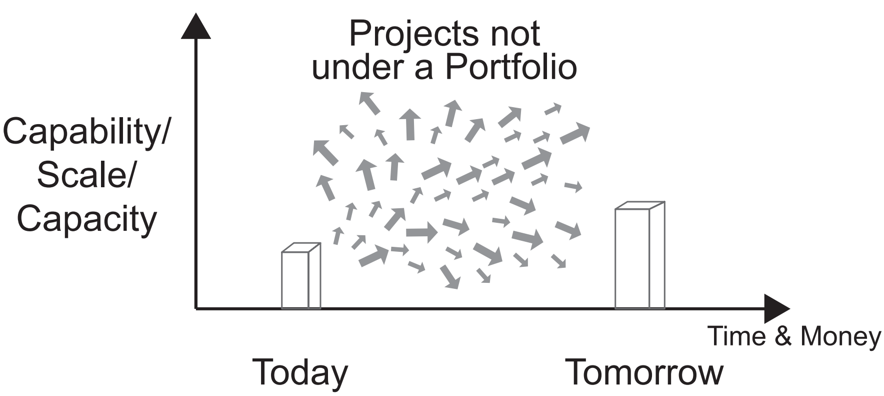

Figure 1.2 Growth in strategic capability over time when projects are *not* managed in a high-performing portfolio

time will be far more modest, as shown at the far right of Figure 1.2. Without a portfolio office, strategic goals could still be achieved, but definitely as a more random function—what's undeniably missing is the predictability, control, and assurance that is obtained by having an effective portfolio in place. The biggest risk in Figure 1.2, from an executive's point of view, is that there is no feedback about the pace of the strategic journey and, hence, little room for correction until it's too late.

THE CONCEPT OF PORTFOLIO CAPABILITY MATURITY

Given the audience of this book, the importance of portfolio management is an accepted conclusion. The widely shared view is that portfolio management is indispensable in today's organization—whether business or IT. Accordingly, most organizations have a portfolio or are in the process of implementing one. But, of course, all portfolios are not equally successful and this leads to the question of what it takes to assemble an effective portfolio. Here we introduce the concept of portfolio capability and the different levels of maturity in each capability. The following section explores the concept of portfolio capability and also illustrates how the level of maturity in each capability can make a difference in the overall effectiveness of the portfolio from a strategic transformation perspective.

Figure 1.3 shows a graph with each axis representing a particular portfolio capability. For each capability, there are levels that denote the respective maturity of that capability. For example, Level 1 is indicative of a modest or rudimentary achievement in that capability, while Level 3 represents a high degree of attainment in that capability. It's also worth noting that a portfolio may have different levels of attainment in different capabilities.

Against this backdrop, let's consider two portfolios—Portfolio A and Portfolio B. Portfolio A has a Level 2 of attainment in Capability 1, but only a Level 1 in Capabilities 2, 3, and 4. Connecting these points gives us a quadrilateral that is shown in Figure 1.4 by a dotted outline. This dotted-line quadrilateral is then mapped over to a *pipe* of IT strategic transformation, with the outline of the quadrilateral forming an aperture of the pipe. Figure 1.5 shows how the quadrilateral formed by the levels of Portfolio A maps into the aperture of the IT strategic transformation pipe. We see that the modest capability of this portfolio creates a modest aperture in the pipe of IT strategic transformation.

What would happen if a portfolio had high levels of attainment in every capability? Consider Portfolio B, another portfolio which has an attainment of

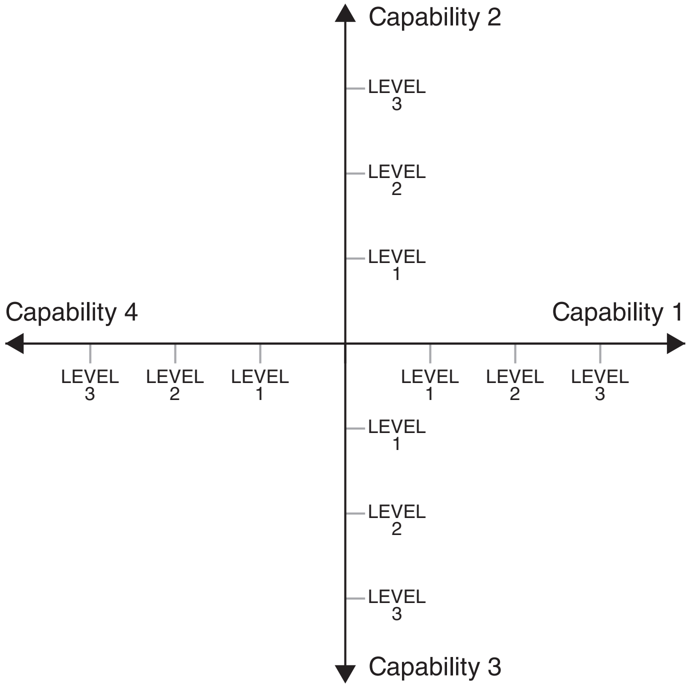

Figure 1.3 Graph with each axis representing a particular portfolio capability

Level 3 in Capabilities 1, 2, 3, and 4 and could be termed as a high-performing portfolio in all respects. As in the previous example, a quadrilateral is formed by connecting these points and then mapped over to the pipe of IT strategic transformation. First, we see that a much bigger quadrilateral is formed in the case of Portfolio B when the portfolio has a Level 3 attainment in each capability. Second, we see that this bigger quadrilateral maps into a correspondingly bigger aperture in the transformation pipe. Figure 1.6 shows the mapping of the quadrilateral formed by the capability levels of Portfolio B into the aperture of the IT strategic transformation pipe.

What is the impact of having a bigger aperture in the strategic pipe? Simply put, a bigger aperture translates to a larger amount of strategic throughput. Figure 1.7 examines the strategic throughput produced by the two portfolios—A and B. We can see that Portfolio B, the high-performing portfolio, has a significantly higher strategic throughput. The takeaway is that higher levels of attainment in each portfolio capability correlate directly with increased strategic throughput and value delivered to the organization.

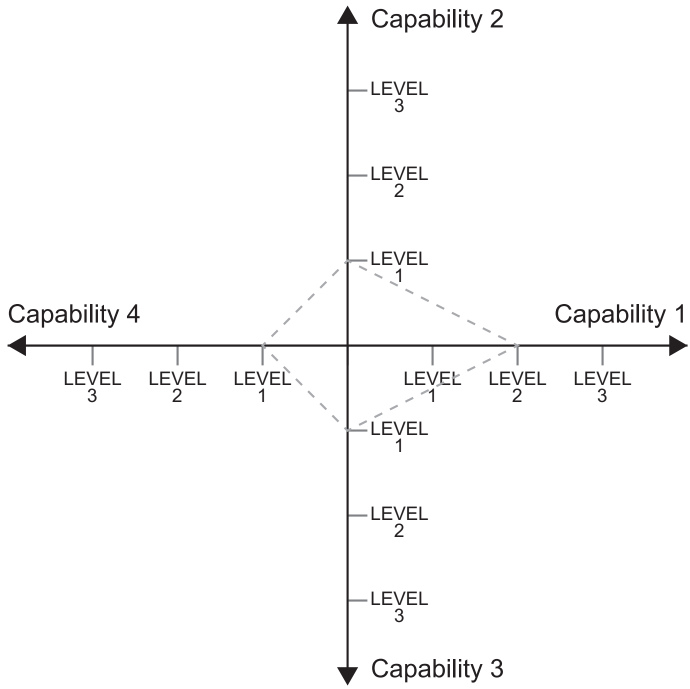

Figure 1.4 The connection of capability levels of Portfolio A to form a quadrilateral

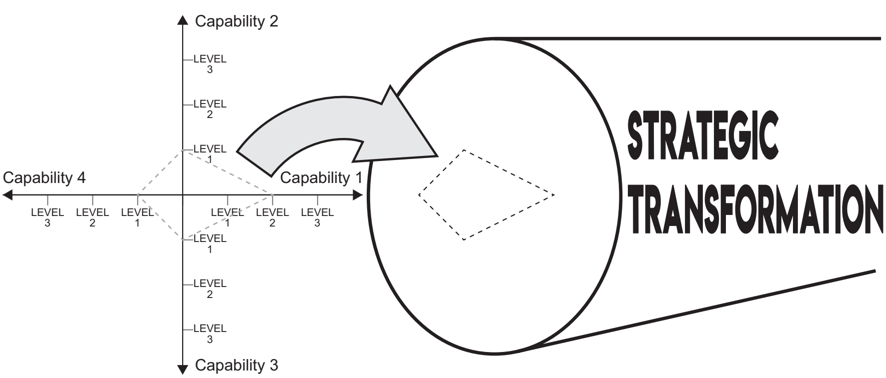

Figure 1.5 The quadrilateral formed by the levels of Portfolio A into the aperture of the IT strategic transformation pipe

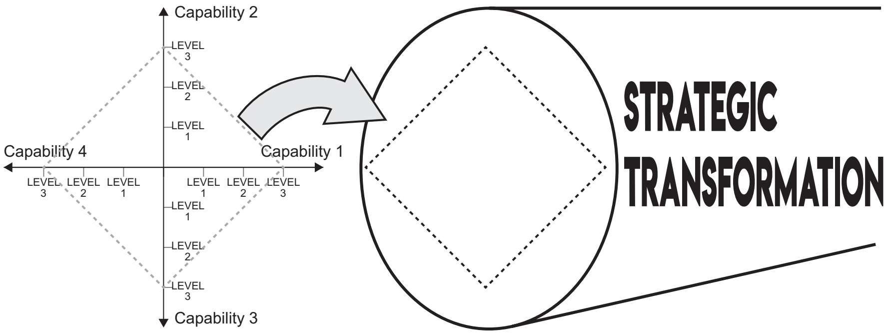

Figure 1.6 Mapping of the quadrilateral formed by the levels of Portfolio B into the aperture of the IT strategic transformation pipe

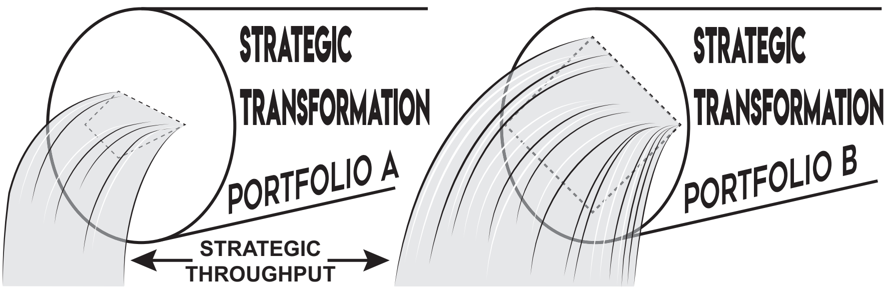

Figure 1.7 Comparing the strategic throughput produced by the two portfolios—A and B

RELATIONSHIP OF THE MATURITY OF PORTFOLIO COMPONENTS TO OVERALL PORTFOLIO MATURITY

Figure 1.8 shows how the capability of the portfolio components affects the overall capability of the portfolio. The important components of the portfolio are as follows:

- Portfolio intake management
- Portfolio funding management
- Portfolio benefits management
- Modified earned value management (*mEVM*) process management
- Portfolio rebalancing management

- Portfolio information systems
- Portfolio annual planning management
- Portfolio rollout/change management

Each of these is explored in detail in respective chapters in this book. Also, note that each of the component processes have levels of maturity from Level 1 to Level 3. From Figure 1.8, it can be seen that the level of maturity of the overall portfolio (the big cylinder in the center) is a function of the levels of maturity of the smaller cylinders in the periphery. When the portfolio processes represented by the peripheral cylinders tend to have a higher level of capability, so will the overall portfolio represented by the central cylinder. The key to a high-performing portfolio is to increase the levels of maturity in each of the portfolio processes.

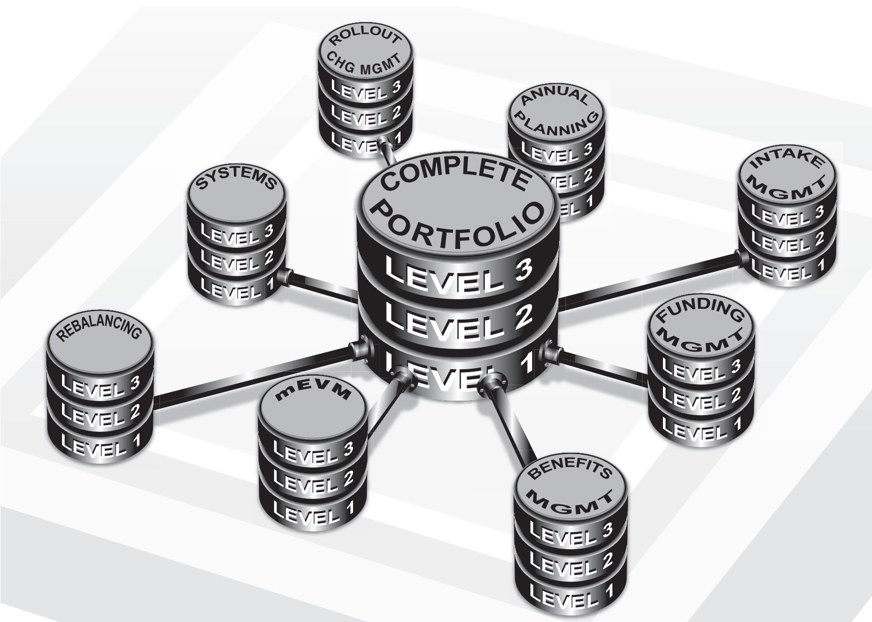

Figure 1.8 How the capability of the portfolio components affects the overall capability of the portfolio

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