CENTER FOR BUSINESS PRACTICES®

Seven Steps to Strategy Execution

Integrating Portfolios, Programs, Projects and People for Organizational Performance



J. Kent Crawford

with

Jeannette Cabanis-Brewin

James S. Pennypacker

Foreword by Art Kleiner, editor-in-chief, strategy+business *magazine*

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Headquarters
Center for Business Practices
410 Township Line Road
Havertown, Pennsylvania 19083 USA
tel: 484.450.0100

World Wide Web
www.cbponline.com

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Contents

Foreword	Tinkering with the Living Organization	7
Acknowledgements		9
Preface	Remind Me Why We Are Doing This?	11
Introduction	Governance	23
Chapter 1	Strategy Management	39
Chapter 2	Project Portfolio Management	53
Chapter 3	Program/Project Management	93
Chapter 4	Structure	115
Chapter 5	Culture and Change	145
Chapter 6	People	165
Chapter 7	Information Technology	203
Chapter 8	Performance Management	225
Afterword	SPM Tools	245
Appendices	A. *Strategy & Projects* (excerpt)	249
	B. Measuring Performance	257
	C. A Unified Overview of Project Portfolio Management	269
	D. *Project Portfolio Management Maturity Model* (excerpt)	279
	E. Role Descriptions for the SPM-Enabled Organization	287
References and Resources		309
About the Authors		315
About the Center for Business Practices		316

FOREWORD

Tinkering with the Living Organization

OVER THE PAST 30 years, the idea has been floated again and again that organizations are "living systems:" they aren't mechanistic and shouldn't be thought of as machines. Among the writers who have put this idea forward are Gareth Morgan (in *Images of Organization*), Arie de Geus (in *The Living Company*), Peter Senge (in *The Fifth Discipline*), and Eric Trist (in his various papers). And there's good reason to believe they're right. After all, as anyone who has ever tried to intervene in an organization can tell you, they don't react as machines would when you try to fix them.

When approached with change, in other words, they do not respond like clocks, automobiles, engines, telephones, or even computers. They do not either start working better or stop working at all. Instead, they respond like animals, plants, families, and communities. They shift course and react in unexpected ways, often rejecting the measures and approaches that you thought would be most helpful.

But if the idea that organizations are living systems makes sense, there's far less of a complete understanding about how to translate that into effective interventions.

None of this is surprising. After all, large managerial organizations, separate from the state or the church, have only existed since the mid-19th century. They began with the railroad

and the telegraph. We have only had 175 years or so to begin to understand them. And it took a long time to recognize that they are living systems. But if they are living systems, where would we look first to learn how they work?

Back in the 1980s, W. Edwards Deming and others wrote about seeing the "organization as a system:" or as Rummler and Brache put it, managing the "white spaces in the organization chart." Like Eric Trist and many others, they were concerned about the actual flow of work and knowledge about work through the organization: goods, services, throughput, money, and anything tangible that ultimately reached a customer. Indeed, some of the most effective organizational work of the past 50 years, from the quality movement to sociotechnical systems to reengineering (when it worked) to lean production has all been interventions in the domain of processes and workflow.

The Center for Business Practices has entered the fray of those trying to understand how the living system of the organization works, with its Strategy Performance Management model, a "thought experiment" that is an attempt to synthesize processes and workflow throughout the system that is the corporation. By breaking down artificial barriers between functions, and removing the mental barriers thrown up by the differing languages of the executive suite and "the projects," this model (which, in graphic form, looks a lot like a web or a molecule of some living substance) proposes to ease the flow of value through the organization's white spaces. Like any model, it is only as real as the practice of people in living organizations will prove it to be. Welcome, reader, to the ongoing experiment.

—Art Kleiner
Editor-in-Chief
strategy+business

Acknowledgements

It's fitting that "knowledge" is at the heart of the word acknowledgements. The work, study and writings of many members of our organizations (PM Solutions, the PM College, and the Center for Business Practices) have, over the years, contributed to the knowledge base from which this book was born.

The SPM model is the brainchild of Jim Pennypacker, but has been field-tested by many in our consulting practice. And, over the years since 1999 when the Center for Business Practices began publishing research and writings on the human and organizational side of project management, associates too numerous to list here have written on aspects of organizational life that are covered in these pages. You will find their names and credits in the References, but our thanks for their brilliant work is on this page.

Thanks once again to Jeannette Cabanis-Brewin, the editor of all our books, for tying all the threads of investigation and practice together into a readable whole.

And thanks to our families for putting up with distraction, absence, and computer keyboards clattering at midnight.

—J. Kent Crawford

PREFACE

"Remind Me Why We Are Doing This?"

"A poor strategy executed well is always better than a great strategy executed poorly."

— *Michael Porter*

IF YOU WORK in an organization of any size, you have heard this line before—maybe even uttered it yourself. A disconnect between corporate strategies and the activities conducted by the organization's staff is a widespread problem. In fact, a survey conducted by the Society for Human Resource Management and the Balanced Scorecard Collaborative found that 73 percent of polled organizations said they had a clearly articulated strategic direction … but only 44 percent of them communicated that strategy well to the employees who must implement it. So it's not surprising that, as *Fortune* magazine has reported, nine out of ten corporate strategies devised on the executive level never come to fruition. To quote one expert, these companies "are like a body whose brain is unable to tell it what to do."

The inability of organizations to effectively execute their corporate strategies is one of the major factors limiting their success. Recent management research and literature has thoroughly documented the importance of strategy execution in creating corporate value. The time and money spent on stra-

tegic planning is wasted, in the absence of a way to execute planned strategies. Therefore, sound execution is critical: a focus on making strategy work results in a healthy organization.

Execution: Turning Ideas into Action

Given that execution is critically important, why don't more organizations develop a disciplined approach to it? Simply because it's very difficult to do. Turning strategies into reality requires constant investment in management resources. It's particularly difficult in large or more complex organizations, where the distance between those who formulate strategy and those who carry it out can be significant. Research has revealed numerous barriers to effective strategy execution, including:

- Inflexible processes and organizational structures, which lead to difficulty in adapting to rapidly changing business environments
- Inadequate performance measurement tools, which leads to poor improvement practices
- Poor communication of strategy and performance, which leads to strategic misalignment
- No strategy-execution focus, which leads to poor delivery of results
- Poor change management practices, which leas to execution failure
- No execution roadmap, which leads to inefficiencies and wasted effort
- No understanding by employees of their contribution to execution outcomes, which leads to lack of motivation to succeed
- Poor resource allocation, which leads to inefficiencies and lost opportunities

- Unclear strategy management policies, which lead to confusion and poor decision making.

That execution is of paramount importance to companies today can be seen from the wide variety of recent books on the topic, and innumerable business press articles. Numerous studies have shown the correlation between the ability to execute strategy and company success, while other work concentrates on the negative side, concluding that strategy execution is often less than satisfactory, with failure rates ranging from 30 to 90 percent. (See References and Resources for a list of publications consulted in the writing of this book.)

The consensus of all the recent buzz about execution has, not surprisingly, centered around the increasingly crucial role of integrating strategic plans—which are developed by a relative few individuals in most companies—with the work of the many, at all levels of the company. Because, like a game of "telephone" where much of a message can be lost as it is transferred down the organizational ladder, across functions, and from project to project, writers on execution agree that companies must establish coherent and logical processes for the transformation of strategies into actions. This cannot be left to chance.

Although the terminology may differ, most writers on execution hit on the same critical success factors for strategy execution. Clarity of purpose; accuracy of data about performance; transparency of communication; and a "systems thinking" perspective that strives to optimize all the strategic activities of the organization, rather than put out fires in one initiative at a time—these attributes of the "excellent execution" culture are universal. The role of information technology in keeping information flowing up and down the organization is also agreed to be paramount.

"The next decade," warns George Veth, writing in *DM Review,* "will be marked by an increased focus on strategy execu-

tion as the key determinant of market leadership." In today's fast-paced competitive climate, it's no longer enough to have strategy creation (*thinkers* doing analysis, planning, visioning) in the board room and implementers *doing* the follow-through, somewhere far down the corporate hierarchy. Says another *DM Review* columnist: "In recent years, these worlds have merged as traditional planning efforts have proven too costly or time-consuming, and many major top-down strategy initiatives have failed. Today's challenge is how to build execution into strategy."

This level of integration, for most organizations, will require a serious culture change, and a real commitment to implementing processes that both engage people from every level of the organization, and apply a rigorous decision-making process to every investment of time, resources and money.

Yet, while strategy execution can be difficult, it is not impossible to achieve. A carefully planned approach to execution is needed to overcome these barriers to attain organizational strategic goals and objectives.

Strategy Performance Management

Seven Steps to Strategy Execution describes such a planned approach and offers organizations a framework against which to map their progress in creating what we call Strategy Performance Management. SPM is an approach to business success that integrates aspects of the organization that too often operate asynchronously. An organization operating under the SPM framework links governance and performance management to each of seven key areas, which are described in the following chapters:

1. Strategy Management
2. Project Portfolio Management

3. Program/Project Management
4. Structure
5. Culture
6. People
7. Information Technology.

This approach, based on Center for Business Practices research and field-tested by PM Solutions' consulting practice, gives organizations a logical framework to help them communicate strategy to the people and processes that make it a reality. And, it further builds organizational capability by continually recording performance against the organization's selected strategy performance metrics. Using SPM, strategies generate real initiatives for change, and usable information flows back into the strategy planning process, allowing decision makers to forge ahead or change course as necessary.

SPM Defined

In its simplest state, an organization's Strategy Performance Management context begins with corporate strategies (including objectives) which cascade to business units or equivalent organizational entities (IT). These business units, in turn, develop aligned strategies (see Exhibit 1). Program and/or project teams develop strategies that align with business unit and corporate strategies using project strategy or similar processes. Strategy performance feedback measured against objectives is used to adjust the elements of this SPM context—strategies (objectives), portfolios, programs, and/or projects may change as events unfold that impact the organization's strategic intent. Strategy Performance Management is a dynamic process that requires information sharing, coordination, and effective control and feedback mechanisms throughout this hierarchy of

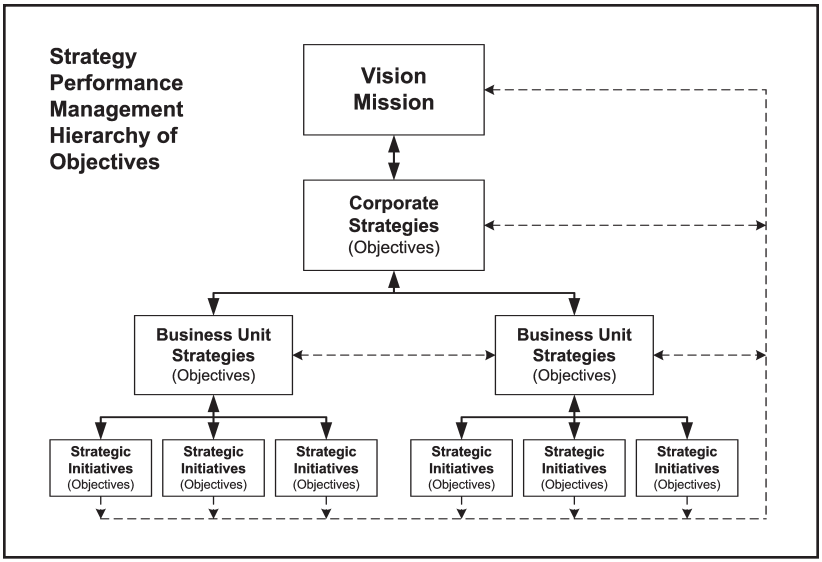


Exhibit 1. This model of a simple Strategy Performance Management hierarchy of objectives shows how strategy is driven from the top down, yet aligned across business units and strategic initiatives (top-down arrows). As strategic initiatives are executed and the business environment changes, performance information moves from the bottom up and may require changes in strategies and objectives, as well as strategic re-alignment (bottom-up arrows).

strategies and objectives to enable the organization to make its strategy work.

Understanding SPM requires an understanding of the organization's hierarchy of objectives and strategic initiatives. To help in this, we developed the SPM framework, a strategic organizational context that includes process, governance, information technology, structure, people and culture (see Exhibit 2). Each of these elements must be strategically aligned for effective execution.

Strategy Performance Management, then, is the comprehensive and integrated set of processes and tools that enable

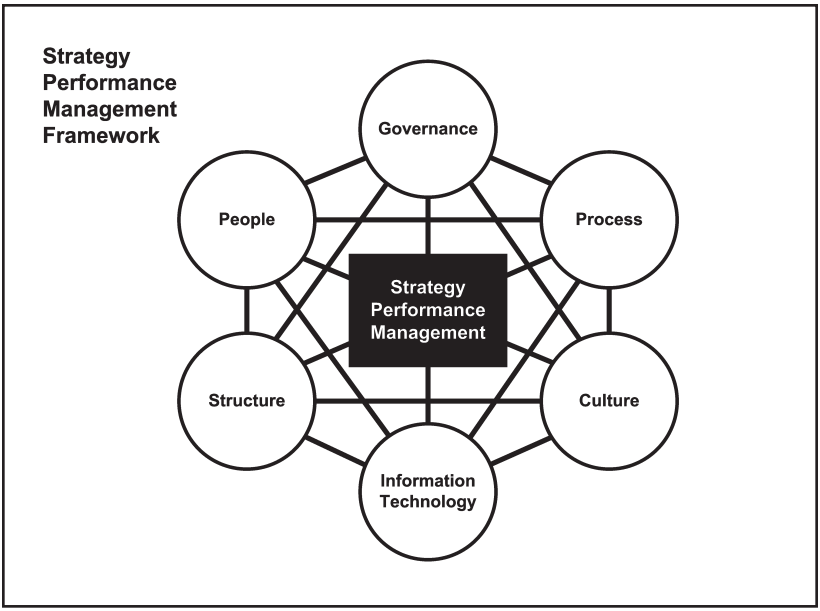


Exhibit 2. Strategy Performance Management operates within the context of six elements: culture, structure, process, governance, people, and information technology. These elements are highly interconnected and influence each other. Organizational success, therefore, requires the alignment of these contextual elements in support of strategy execution. SPM focuses on integrating these elements—and on integrating the key processes of strategy management, project/program management, portfolio management, and performance management.

the effective execution of organizational strategy through sound portfolio, program, project, and performance management. SPM focuses on aligning the elements of the strategic organizational context in order to overcome the barriers to effective strategy execution. SPM is used to monitor whether or not the set of strategic choices made by the management team continue to be the right ones, and that the initiatives planned to achieve them are being executed efficiently.

What Do Projects Have to Do with It?

Ideally, organizations execute their strategies through the creation of "strategic initiatives," comprising portfolios of programs and projects, which become the vehicles for executing the organization's strategy, as shown in Exhibit 3.

In practice, however, most companies, far from having a coherent model for managing the projects as a portfolio, have at best a vague idea how many projects they have in the pipeline, how much they will cost, how they will be staffed, or who is qualified to run them, making strategic planning an exercise in fantasy. Studies of the failure of customer relationship management systems, for example, confirm that lack of knowledge about one's own company is a primary reason for project failure. Companies who do not know their starting position build future corporate plans not on a solid foundation, but on shifting sand. Furthermore, their leadership often does not understand what is wrong, or how to distinguish what needs fixing.

A glance at the impact that the Balanced Scorecard has had upon businesses gives us some clues. The BSC emphasizes the linkage of measurement to strategy. A tighter connection between the measurement system and strategy elevates the role for non-financial measures from an operational checklist to a comprehensive system for strategy implementation. For the first time, the details of the project portfolio (what the Balance Scorecard creators Kaplan and Norton call the "strategic initiatives") become important to a company's strategic thinkers.

At the same time, alignment resolves some thorny project management problems. Many studies have cited the lack of executive support as a key contributor to project failure. Project managers complain that their projects do not receive the resources they need. Projects completed "successfully" by project management standards (on time, on budget, to spec) have been

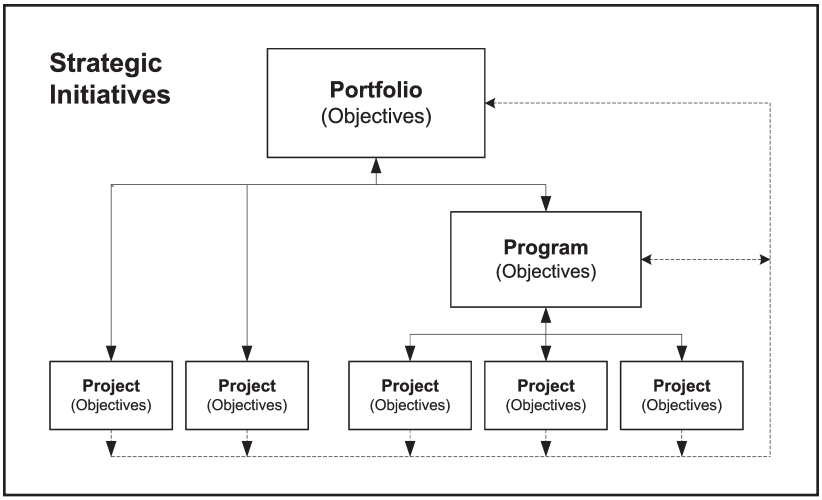


Exhibit 3. Strategic initiatives comprise any number of portfolios, programs, and projects. Again note that strategic alignment (top-down arrows) is necessary among projects, programs, and portfolios, and that performance information (bottom-up arrows) feeds the decision-making process regarding which projects make up the programs and portfolios. Note also, that project strategy and objectives must be logically linked from the bottom to the top of the Strategy Performance Management framework, and need to be taken into account when determining the capability of the organization during strategy formulation.

considered failures because they did not address a business need. All these issues are alleviated in a company that ties strategic planning to portfolio selection and project execution.

Strategy & Projects: What the Research Says

In order to ascertain the extent to which integrating corporate strategy with project portfolio management contributes to organizational success, the Center for Business Practices conducted a survey in November 2005, targeting a broad spectrum of organizations.

An extensive review of management literature on the integration of strategy execution, portfolio, program, project, and performance management yielded a set of best practices related to the alignment of projects and strategy. These best practices were organized according to the SPM framework, and respondents indicated how often their organization used each practice on a 7-point scale.

At the same time, responding organizations rated themselves on a number of measures related to performance. Two kinds of performance measurement are key for determining whether an organization is functioning at a high-performance standard: Measurement of *project* performance and measurement of *organizational* performance. For purposes of analysis in this survey on *Strategy & Projects,* we measured project and organizational performance using the following eight measures:

- Strategy execution performance
- Shareholder satisfaction
- Organizational financial performance
- Strategic alignment
- Project schedule/budget performance
- Project customer satisfaction
- Resource allocation
- Project portfolio performance.

The results allowed us to differentiate high performing organizations from the crowd (see Exhibit 4).

The results: companies using the identified best practices for aligning strategy, projects, and people most consistently also had the highest rates of project and organizational success. Low-performing organizations consistently under-utilized the best practices in all areas. (Further details about the research can be found in Appendix A.)

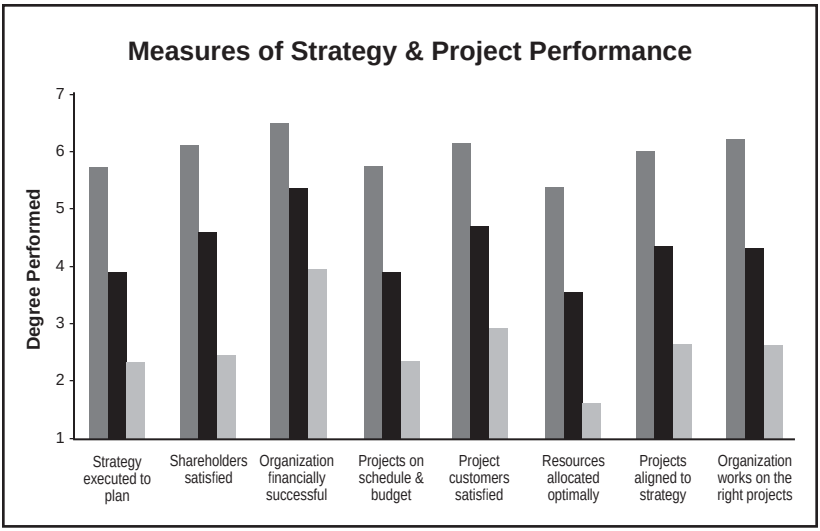


Exhibit 4. Performance Indicators. This graph displays the wide divergence between the top performing organizations and the low performers on the eight performance statements used in the survey. The left bar indicates the frequency with which each measure was reported by the top-performing companies in the survey; right bar indicates frequency with which that measure was reported the low performers in the survey. Central bar expresses the mean of all companies. The top performers as measured by these eight performance indicators also scored the highest on the consistent use of strategy and projects alignment best practices, across all areas of the SPM framework.

In other words, companies that are skilled at integrating strategy with their project processes, their people management processes, their organizational structure, and their performance management processes reap the benefits. In such companies, each player knows how his or her role serves the corporate strategy; the business units and programs are balanced to optimize the enterprise's progress against strategic goals; waste and confusion are minimized. The brain and the body are in sync, and, like top athletes, they execute their planned moves to a high standard of performance.

INTRODUCTION

Governance

The SPM Framework in Action

GOVERNANCE IS A concept that is infiltrating the organization from both directions. On the enterprise level, Sarbanes-Oxley regulation has driven the development of corporate governance policies, re-engaging top executives with issues of risk, ethics and finance that had become obscured by layers of bureaucracy. Meanwhile down in the trenches, IT and data governance policies proliferate as technology personnel struggle to keep massive amounts of information organized while doing too many projects with too few people. It's an understatement to say, as one IT governance website does, that there's a "considerable grey area" between business and IT. The SPM model strives to connect these two pressures for better control throughout the organization, bringing clarity to the grey area between vision and task.

The Canadian Institute on Governance (IOG) says that the central component of governance is decision-making, which directs the collective efforts of people in organizations. Strategic decision-making must occur within a policy framework that lays out clearly defined roles, accountabilities, and processes. Governance is that framework. It assists the organization's leaders in making the strategic decisions to fulfill the organization's purpose—as well as the tactical actions to be taken at the level of operational and project management. In addition, such a framework helps workers and teams to understand the actions

they need to take to deploy and execute the organization's strategy. And, it ties everyone in the organization together around consciously-chosen purposes.

Or, to put it simply, governance is integration … with clout.

Defining Governance

Any time people come together to accomplish work, some sort of governance is needed. The word "governance" as a business buzzword seems relatively new, but the concept is well-established in nonprofit organizations, and their experience with governance holds many lessons for the for-profit world. The *Oxford English Dictionary* defines "governance" as "the act, manner or function of governing," and governing is further defined in part as "regulating the proceedings of a corporation." Many people, at least in U.S-based businesses, are more familiar with governance as an IT term. The Gartner Group defines governance as the "assignment of decision rights and the accountability framework to encourage desirable behavior in the use of IT."

But why stop in IT? Shouldn't the entire organization—across all departments and projects—have a policy framework to encourage "desirable behavior"? And should it be the *same* framework—not one for IT, one for Finance, and another for HR? Defining the rules by which the enterprise operates should be done once, for the entire enterprise: not piecemeal, department by department.

The IOG gives a simple definition of governance as "the art of steering … organizations," specifically "the more strategic aspects of steering, making the larger decisions about both direction and roles."

"Steering" is a great metaphor for governance, as anyone experienced in sailing can attest. There's no simple straight

ahead in either governing an organization or in sailing (the IOG calls it "tentative, unpredictable and fluid"). And, like a sailboat, the organization is somewhat at the mercy of the environment, no matter how skilled the helmsman. It's important to leave port with all the machinery of the organization—the processes and tools—in place and in good repair, but that alone isn't enough. Good governance requires that those steering the organization be alert to all aspects of the internal and external environment and have risk plans in place in event of emergency. Yet, as the IOG notes, governance is complicated by the fact that it involves multiple actors—the organization's stakeholders—not a single helmsman.

An initial step in the formation of governance is the absorption of input from the business environment and from stakeholders within and external to the organization. This input can come in various forms, for example:

- As process maps of existing processes and/or maturity assessment of those processes
- As existing role descriptions for groups within the organization (descriptions at the level of individual roles are too granular a level for a governance policy)
- From a knowledge base such as a lessons-learned database
- From focus groups with employees, managers, vendors, customers or other crucial stakeholders
- From best practices resources, such as benchmarking forums or reports.

Management—whether executive or middle, operational or project—provides the link between governance policies and the actual work: the organization of tasks, people and technology to get the job done. A conceptual map of the place of governance in the organization is shown in Exhibit 5.

It's important to remember that "good governance" means not only achieving the desired results—but achieving them in the right way. That "right way" is shaped by the needs, values and culture of the organization, so even governance frameworks based on the SPM model will vary widely from each other in practice. While there is leeway—another sailing term!—for differing values to be accommodated in the definition of good governance, some universal norms do apply. For example, consider these characteristics of good governance from a list published by the United Nations:

- Participation—providing all stakeholders with a voice in decision-making
- Transparency—built on the free flow of information
- Responsiveness—of organizations and processes to stakeholders
- Effectiveness and efficiency—processes and institutions produce results that meet needs while making the best use of resources
- Accountability—of decision-makers to stakeholders
- Strategic vision—leaders have a long-term perspective.

The practice of governance with such characteristics, according to the IOG, leads to a number of positive consequences, including:

- People trust your organization
- You know where you're going
- Executives are connected to stakeholders
- You get good decisions; people value your work
- You have the ability to weather crises
- You achieve financial stability.

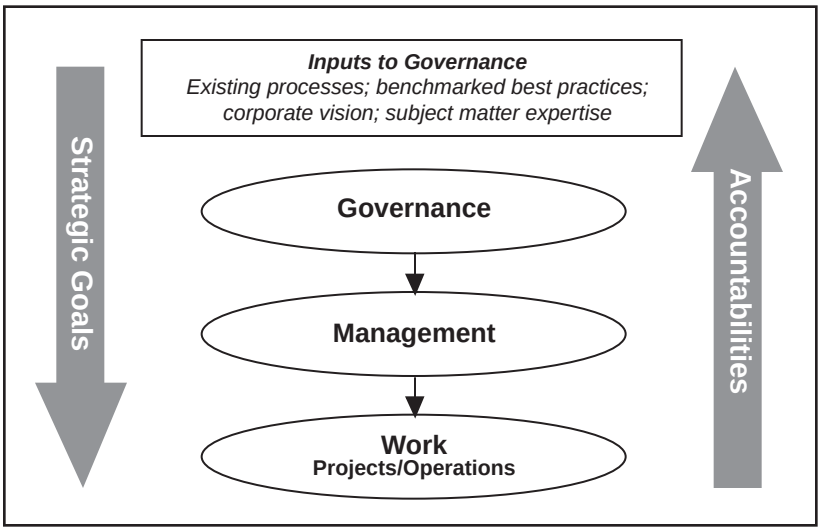


Exhibit 5. With input from stakeholders and the application of knowledge from within and without the organization, a governance policy provides guidance to management (executive, project, and operational) so that the work of the organization is accomplished in a setting of coherence between planned strategy and completed deliverables. Adapted from figures on the website of the Institute on Governance, Ottawa, Ontario, Canada: www.iog.org.

Other benefits of good governance include:

- Standardized process and procedures
- Maximized return on investment
- Alignment with corporate objectives
- Accountability and transparency in decision making.

Of course, IOG research focuses on the nonprofit and public sphere. But there is a growing body of evidence linking governance and overall organizational performance in all types of organizations, across the spectrum. The SPM model

is designed for use in any organization—for-profit, not-for-profit, or governmental.

Many organizations struggle to for a definition of governance that is both comprehensive enough to achieve its purposes, yet simple enough to be easily put into practice. Most experts on governance agree—although they may use differing terms—that there are two major aspects to defining governance: defining processes, and defining roles and responsibilities in carrying out the processes. To discuss these two aspects, we'll borrow terms used by British IT writer Neville Turbit on his IT governance website.

Process Governance

Agreed-upon processes, described at a high level by the organization's governance document, should flow from the top for consistency throughout the organization. Often, when seeking to set forth governance, companies do just the opposite, describing what's already accepted practice in the departments and attempting to roll it up to the enterprise level. In setting forth governance, take it from the top: defining first how strategy is made, and then how that results in the evaluation of ideas, their justification, approval and prioritization, the commissioning of projects and programs, the roles of the departments in those programs, and of the personnel on those projects. This is the only way to shed light on the famous "grey area."

Methodology and Standards

Process standards—such as the *PMBOK® Guide* for project management—may be stipulated in a governance document but should not be described in detail. Instead, it is common for a governance document to refer to a more detailed document. It may say, for example, that the organization's project

management methodology must be followed for projects in any function area that exceed a certain dollar value or resource threshold. Governance development can also drive the development of standards, identifying where a needed standard doesn't exist and stipulating that this lack should be addressed.

Naturally, governance is also about setting up a system for assuring compliance with the policies: there's no point in having rules unless there's some process to ensure that people are following them. This can be formal, as in a governance audit, or informal, as in periodic reviews. The important thing is that the right metrics are collected so that performance and compliance can be monitored. The purpose here is not to punish, but to tweak processes, develop personnel, and change strategic course if needed. Governance, while being serious, should not be come so heavy-handed that the members of the organization view it with dread. The purpose is to create a more smoothly-operating organization, one that is more successful and in which people are not frustrated in trying to achieve their goals. Overall, participating in a well-governed organization ought to be a rewarding experience.

Which brings us to the second area that must be addressed in governance.

People and Structure Governance

In order to execute strategies effectively, people need to understand their roles in making strategy happen. A strategically focused culture is one in which the organization structure, and the defined roles of groups and individuals, are designed specifically to smooth the way towards goal accomplishment. Many organizations, due to inchoate strategies or the buildup of obsolete roles or functions over time, actually have elements in the management and work layers of the structure that

hinder and impede progress towards strategic goals instead. When putting a new governance structure in place, it's a good time to clean house: to examine the organization's structure, processes and roles for outmoded and unhelpful aspects.

Given that strategy is executed through initiatives (programs and projects), the SPM model proposes that the ideal structure for the organization is one built to maximize project and program management effectiveness. We'll discuss that in more detail in Chapter 4.

But even within the ideal structure, roles and responsibilities cannot be left to chance. Since governance is all about accountability for results and methods, defined roles are the basic building blocks. A role means there's someone accountable for a specific task or group of tasks: his or her responsibilities. As Turbit notes, "Responsibilities mean the role must be doing something. The 'doing something' implies there is a methodology or process for doing whatever is being done … By defining [roles and responsibilities, then rolling them up as part of a structure, it will become clear where gaps exist. [I]t also shows the poor fits in the organization."

Turbit also notes that, while it is generally a good principle to only have one person accountable, in defining governance this is not always practical. For the purpose of defining governance, it is sometimes better to define at a group level. The types of roles, and the supporting people-management practices that help them to succeed, will be discussed further in Chapter 6.

The SPM Governance Framework

The SPM governance framework defines the set of responsibilities and practices exercised by the board and executive management with the following goals:

- Strategic direction is clearly understood throughout the organization and business units and levels of management are all focused on aligning to this strategic direction.
- Strategic objectives are achieved. This is controlled by establishing a continuous loop process for measuring strategy performance, comparing to objectives, and redirecting activities or changing objectives where necessary.
- Appropriate and effective processes are in place to monitor risk and that a system of internal control is effective in reducing those risks to an acceptable level.
- Verification that the enterprise's resources are used effectively and efficiently.
- Decision-makers have the information necessary for making decisions.

SPM promotes a governance framework whereby all strategic decisions throughout the organization are made in the same manner. Each level within the organization must apply the same principles of setting objectives, providing and getting direction, and providing and evaluating performance measures. A common governance framework ensures that decisions are made the same way up and down the organization and that there is an appropriate mix of people making decisions.

SPM Governance Tools

The processes in four key management functions must be integrated for effective strategy execution—strategy management, portfolio management, program/project management, and performance management. It is critical to the success of an organization that these processes are integrated to support the alignment of the organization's strategic objectives. Exhibit 6 depicts those processes and sub-processes.

Strategy Management Processes

Strategy is the integrated vision and direction of the organization, including the manner in which it determines, communicates, and implements that vision and direction. It answers the question: how will we position ourselves in the market to secure a sustainable competitive advantage. It's the roadmap. And although it's not highly detailed, it provides a framework for decision making. Strategy management is discussed in detail in Chapter 1.

Portfolio Management Processes

A project portfolio is a collection of projects or programs that are grouped to facilitate effective management of the work to meet strategic objectives. Project portfolio management provides a consistent way to evaluate, prioritize, select, budget for, and plan the right projects—those that offer the greatest value and contribution to the strategic interests of the organization. When used effectively, project portfolio management ensures that projects are aligned with corporate strategies, that the portfolio contains the right mix of projects, and that resource allocation is optimized. It bridges the gap between the strategic planning process and program/project execution. Portfolio management is discussed in detail in Chapter 2.

Program/Project Management Processes

Program/project management is the application of knowledge, skills, tools and techniques to program/project activities to meet program/project requirements. Programs are collections of projects that unify and leverage the contributions of projects in the portfolio; a program of projects may be established to meet a key strategic objective.

Good project management is a fundamental building block of good program management. Program/project management is covered in Chapter 3.

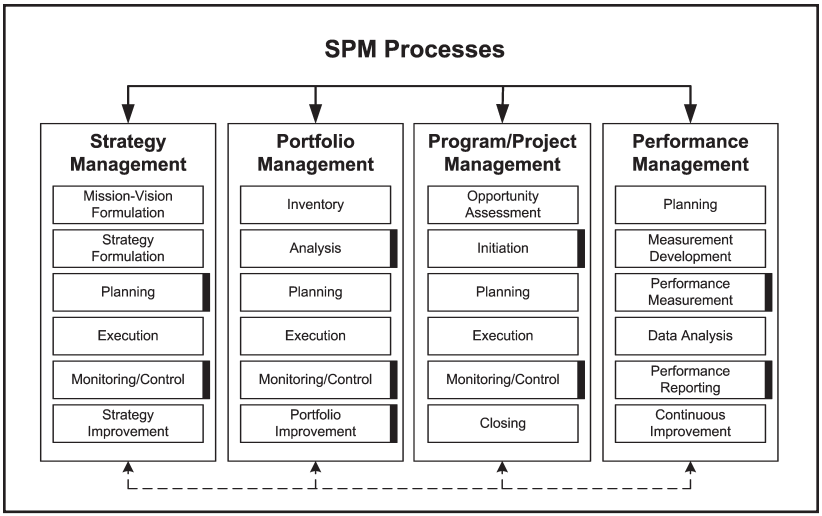


Exhibit 6. SPM processes must be integrated to support the alignment and effective execution of the organization's strategic objectives. Integration of the highlighted processes (black bar on right) is, in particular, a key success factor of strategy execution. Once more note that strategic alignment (solid lines) is necessary among SPM processes, and that performance information is shared (dotted lines) to optimize the comprehensive SPM framework.

Performance Management Processes

Making strategy work requires feedback about organizational performance and then using that information to fine tune strategy, objectives, and the execution process itself. There is a learning aspect to strategy and execution as organizations adapt to changes in the environment. Because business unit strategies flow from corporate strategies, the foundation for performance management should be laid first at the corporate level. Corporate performance measurement is augmented by business unit performance measurement, focusing on the business unit contribution to executing strategies. Portfolio, program, and project performance measurement follows and is logically linked to business unit performance measurement.

Because it is via the performance management processes that accountability and actionable information about all aspects of the organization flow back up to the strategic planning level, we discuss performance management in the final chapter, Chapter 8.

Implementing SPM

Implementing Strategy Performance Management requires the integration of disparate management tools and practices that are currently implemented in today's best practice organizations, including corporate performance management, business process management, business intelligence, strategy management, portfolio management, and enterprise program/project management. The key is to use these tools wisely, guided by an integrated SPM framework, to enable effective strategy execution. The results are worth the effort.

Results

The most successful organizations integrate key SPM processes, establish a strategy execution focus, and implement the tools required to make this approach sustainable and agile. What value can the organization achieve by undertaking SPM? Simply put, SPM helps organizations overcome the barriers to effective strategy execution, optimizing their total return to shareholders. The new organization, focused on executing strategy, features:

- Organizational processes and structures that are flexible and adaptive, optimized for today's rapidly changing business environments
- Effective management tools to measure the performance of strategy execution and, therefore, improve that performance
- Clear communication of strategy and strategic performance throughout the strategic management hierarchy, leading to organizational strategic alignment

- Focus on achieving corporate strategies, with managers trained and motivated to execute strategy
- The ability to manage change effectively
- A roadmap to guide strategy execution efforts
- Employees who understand their contribution to important execution outcomes
- Effective allocation of resources leading to efficient strategy execution
- Clear strategy management policies, especially those regarding responsibility for execution decisions.

This governance framework must also be understood as part of a larger organizational context that includes structure, information, people and culture. Each of these elements, discussed in later chapters, must be strategically aligned as well for effective execution.

SPM focuses on aligning the elements of the strategic organizational context in order to overcome the barriers to effective strategic execution. SPM is used to monitor whether or not the strategic choices made by the management team are the right ones, and the extent to which the initiatives planned to achieve them have been undertaken and are working as expected.

Best Practices in Governance

The Center for Business Practices' 2005 research study, *Strategy and Projects,* identified six best practices related to governance that had been proposed in management research. They were:

- The organization has a well-defined strategy.
- A documented strategy execution plan guides strategy execution efforts.

- Strategy is communicated clearly to those developing portfolio and program/project plans to ensure that those initiatives support the organization's strategy.
- Portfolio, program, and project managers feel a sense of ownership about the organization's strategy execution plans.
- Appropriate and effective processes are in place to monitor and manage risk.
- Decision makers have the information they need about the execution of their organization's strategy to make optimum decisions.

Responding organizations were ranked according to the performance indicators discussed in the Preface into high performing and low performing organizations (see Exhibit 7). Not surprisingly, the research results indicated that:

- High-performing organizations use governance best practices more than other organizations, consistently and significantly.
- Low-performing organizations consistently under utilize governance best practices.
- The most often used governance practice by high-performing organizations is having a well-defined strategy.
- High-performing organizations are significantly better than average at having project managers feel ownership of their strategy execution plans, followed by having appropriate and effective processes in place to monitor and manage risk.
- Low-performing organizations are significantly poorer than average at having strategy communicated clearly to those developing portfolio and program/project plans.

For many years, proponents of project and program management have decried the disconnect between executive

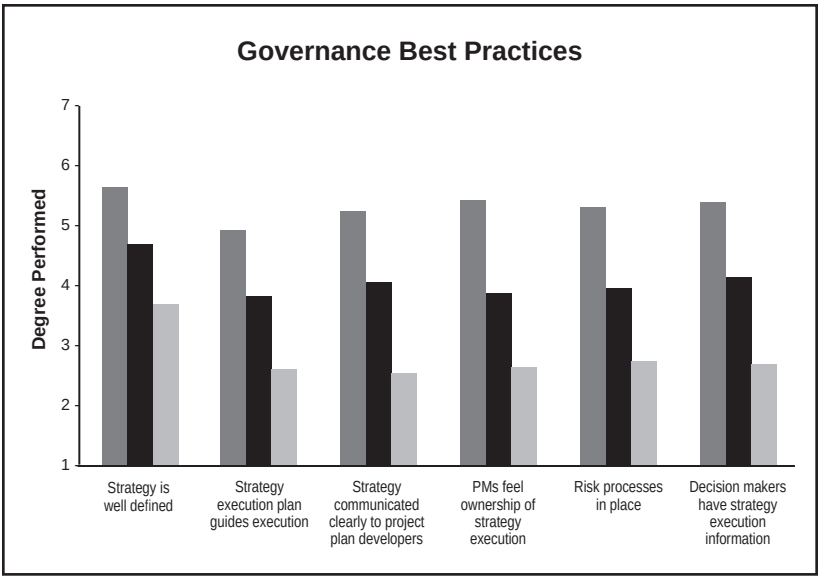


Exhibit 7. This graph displays the wide divergence between the top performing organizations and the low performers in terms of the frequency of their use of governance best practices. The left bar indicates the frequency with which each measure was reported by the top-performing companies in the survey; right bar indicates frequency with which that measure was reported the low performers in the survey. Central bar expresses the mean of all companies.

decision making (strategy and governance) and the project/program level of the organization. It has often been proposed that, if there were better communication and coordination between the executive level and the project level, organizations would be able to execute their planned strategies more effectively. But a model for the integration of the key processes in the organization has been lacking. SPM is that model; it brings the discipline of project management to strategy execution, and the vision of strategic planning to project teams. Together, strategy and projects can create a powerhouse organization.

CHAPTER ONE

Strategy Management

Key Process #1

"If you don't know where you are going, any road will do."

— Anonymous

STRATEGY IS THE organization's game plan. And although that plan does not precisely detail all future moves of the organization, it does provide a framework for managerial decisions. Without such a framework, it's easy for an organization—even a small one—to spin towards chaos. A business is presented with new opportunities and challenges each day; without some guiding point of reference to anchor present decision making to the future, various functions in the organization can wind up working at cross-purposes to one another.

A strategy reflects an organization's awareness of how, when, and where it should compete; against whom it should compete; and for what purposes it should compete; it is the integrated vision and direction of the organization, as well as the manner in which it derives, articulates, communicates, and implements that vision and direction. Strategy answers the question of how a company will position itself against competition in the market over the long run to secure a sustainable competitive advantage.

Far from being an exercise in fantasy or some sort of "soft" fluff, strategic planning is where risk management is born.

"Strategy" has, alas, become something of a buzz word: many companies claim to have strategy that have, in fact, noth-

ing but a wish list of outcomes or a shopping list of tactics. Often, companies fail to distinguish between *operational effectiveness* and *strategy*. Targets for productivity, quality, sales, efficiency or speed masquerade as strategies. These targets, while essential to superior performance, do not move an organization towards a strategic position in the marketplace. As a recent article in the *Harvard Business Review* states, "Operational effectiveness means performing similar activities better than rivals perform them. … In contrast, strategic positioning means performing *different* activities from rivals' or performing similar activities in *different* ways."

Vague strategies cannot easily be translated into the measurable objectives or metrics so vital to achieving these kinds of stretch goals. Unclear corporate and business plans inhibit integration of objectives, activities, and strategies between corporate and business levels. Poor strategies, simply, result in poor execution plans.

The strategy management process is about moving the organization from its present position to a future strategic position in order to exploit new products and markets. It consists of two sub-processes—strategy formulation and strategy execution. The strategy formulation process focuses on investigating the current and future positions and planning the trip, its duration and effort. The strategy execution process is about getting the organization to move. The literature on strategy management is vast; we won't try to compete with it in this chapter. Let's just take a quick overview of the essential elements of strategy.

Strategy Formulation

Vision-Mission Development

Which comes first—mission or vision? In a new start up business, or if an established company is undergoing a sea change in the way they do business, the vision may guide the mission

statement and the rest of the strategic plan. But for many companies, mission guides the creation of a vision statement—an expression of where the mission may lead in the future. This is particularly true for nonprofit and governmental entities, where the mission is central to all decision making. Either way, organizations need to know where they are and where they want to go so they can develop a rational plan for getting there.

A vision statement provides a mental model of a future state for the organization and reflects an optimistic view of the possibilities ahead, while the mission statement defines where the organization is now, describing the purpose for which the organization exists. These are high-level statements and should never be more that a few sentences long: shorter is better. If employees are to become the "execution engine" of the organization, they will need to be able to remember these core statements of the company's values and direction so that they can be inspired by the vision and guided by the mission. These statements must be so regularly heard or viewed that they become assimilated into the organization's culture. Leaders have the responsibility of communicating the vision regularly, creating narratives that illustrate the vision, acting as role-models by embodying the vision, and creating short-term objectives compatible with the vision. Such assimilation can be as simple as a subtle but constant visual presence. For example,

> The Center for Business Practices promotes effective strategy execution through sound portfolio, program, project and performance management by capturing best-practice knowledge and integrating it into actionable, fact-based information expressed in research reports, books, and benchmarking events ....

is the mission statement that greets both readers and staff members each time our own website is accessed. It lets newcomers to the site know, in a flash, who we are and what we do—and reminds us to stay on track when contemplating new projects.

The Analysis Process

Strategy analysis is the advance work that must be done in order to formulate and implement effective strategies. When strategies fail, it is often because executives try to pronounce strategies without a careful analysis of the organization's external and internal environment.

Most readers will be familiar with the SWOT model of identifying the Strengths, Weaknesses, Opportunities and Threats confronting an organization. This model and others like it assist us in going through the thought experiment of strategic analysis.

Aspects of the external environment include:

1. Customers
2. Competition
3. Technology
4. Suppliers
5. Labor markets
6. The economy—both local and global
7. Politics—notably the regulatory environment.

All these factors should be assessed in terms of both the present situation and potential future situations. For example, these days it would be foolhardy for a company to count on the present workforce demographics, as we face the mass retirement of the Boomer generation and the social and economic changes that will bring.

Rarely will all seven of these factors be equally critical. Customers and competition are almost always key aspects of the business environment and are probably the first things addressed in an environmental scan. Companies can be woefully short-sighted, however, when it comes to political, economic

and human resource issues on the national and international horizon. Demographic, technological, and economic trends and events can have a dramatic impact on the organization.

The internal environment includes every step in the organization's value chain: projects and programs, operations, marketing and sales, human resource management, logistics, etc.). No internal environmental scan can be complete without involving employees and other stakeholders in the data-gathering process. Their input can be a means of uncovering potential sources of competitive advantage for the firm. Likewise, sources of threat or weakness—for example, a disgruntled technical workforce—may be identified that, if left unaddressed, can impede any new strategic direction.

Strategic Planning

Knowing the desired end state (the vision) and having a values-based sense of itself (the mission)—and aware of its internal and external environments, the organization is at last ready to define a strategy, and make the decision on allocating resources—both monetary and human—to pursue this strategy.

The outcome, the strategic plan, becomes the guiding document that is used to define functional, divisional, and project plans. Some sources suggest that, for every minute spent in planning, ten minutes are saved in execution. The numbers may vary from organization to organization, but the purpose of strategic planning remains: to increase the return on the capital, energy, and ingenuity the organization's stakeholders have invested.

For this reason, it may be a mistake for strategic planning to take place in a "retreat" environment. Too often, what executives and managers create in an offsite retreat environment stays there, disconnected from the daily life of the organization. In the "execution environment," strategic planning and

tracking of goal achievement towards those plans is incorporated into the work environment. This is done by involving the largest possible sample of organizational stakeholders in gathering input for the strategic plan and by linking the resulting goals and objectives to departmental and personal goals and objectives in a concrete way.

Goals and Objectives

There are a number of methodologies for strategic planning and all require mapping a possible route to the envisioned state. This is done through the development of goals and objectives. In formulating a strategic plan, it is critical to identify not only actions that will need to be taken, but processes that will support those actions in goal attainment. In addition, there must be systems in place to monitor the strategic plan to determine whether or not the goals and objectives are being pursued; whether the processes are being followed; and what adjustment to the plan may be necessary as conditions change over time.

Goals and objectives—in project management parlance, the "deliverables" of the strategic planning exercise—provide a means of allocating resources effectively. They bridge the gap between intention and follow-through.

It's common to organize objectives as hierarchies of ranked means and ends as shown in Exhibit 1-1.

Using one goal as a stepping-stone to the next in this way involves goal sequencing. Most organizations define short-term goals, medium-term goals, and long-term goals. Short-term goals should be fairly easily attained, while the long-term goals appear very difficult—"Big Hairy Audacious Goals" (BHAGs) in strategic management jargon. A person or group starts by attaining the easy short-term goals, then steps up to the medium-term, then to the long-term goals. Goal sequenc-



Exhibit 1.1. A Hierarchy of "Nested" Objectives. From any rank, the objective in a lower rank answers to the question "How?" and the objective in a higher rank answers to the question "Why?" The exception is the top ranked objective—in which case the why is defined by its necessity to the strategic plan.

ing can create a "goal stairway" shown above. It also provides a concrete format in which to assess the congruence of the nested goals: whether they conflict with each other in any substantial way. (Resource conflicts are more likely to show up at a more detailed level of analysis: see Chapter 2 on Portfolio Management Processes).

This all seems very obvious on paper, and yet we are all familiar with organizations in which "the left hand doesn't know what the right hand is doing." Such clichés have entered our lexicon simply because they express common truths. In the absence of structured strategy management processes such as these, entropy will set in and departments—even people within departments—will be working on conflicting objectives.

Processes to Support Strategic Execution

Strategy must be designed to meet the organization's circumstances: its competitive environment, resources and capabilities, a situation referred to as "strategic fit." Recent research on strategy has zeroed in on the problem of non-execution of strategies by examining why the "strategic fit" is so often misjudged. One issue, as it turns out, takes us straight into the realm of complexity theory.

Complementarity

Organizational performance is dependent on the interaction among a wide range of management practices. In fact, the adoption of any particular management practice will fail to improve performance, studies have found, unless every other complementary management practice is adjusted. For example, a quality management program is likely to be of little value unless it is accompanied by adjustments in incentives, recruitment policies, product strategy, and budgeting practices. This concept, termed complementarity, is at the heart of the SPM model.

In practice, the implications of complementarity are that, while every organization is unique, there's a limited number of ways that organizations can structure themselves for success. In fact, in a study (cited in *Contemporary Strategy Analysis, Sixth Edition*) of large European companies, successful adaptation was associated with a small number of configurations of organizational structure, processes, and boundaries. The SPM framework connects structure, processes, and practices in a way that creates complementarity among the various practices and programs of the organization. Armed with this framework for the integration of the enterprise, strategy management moves on to the next step. The SPM model helps everyone in the orga-

nization to understand the demands of strategy, their effects on organizational resources and capabilities, and the impact of the resources and capabilities on execution.

Strategy Execution

Strategy is the first essential ingredient in the execution process. Having a good strategy is essential to effective strategy execution.

However, a strategy is just a piece of paper without the essential follow-on activities of:

- **Communication.** Clear communication of the operational components of strategy and the measurement of execution results to all stakeholders in the organization. Such communication brings its own rewards, both in terms of increased engagement of employees, which yields bottom-line results. The powerful tactic of engaging people in strategy execution is discussed in Chapter 6.
- **Monitoring/Controlling.** Systems for linking strategies to departmental and personal goal achievement, metrics to record progress toward goal achievement, and a compliance structure to make sure the identified strategic processes are being used. The Project/Program Processes discussed in Chapter 3 are ideally suited to this type of monitoring and control.
- **Strategy Improvement.** An iterative process whereby the strategic initiatives that support the goals and objectives are periodically reviewed for progress and adjustment; and, a related process for revising and updating the strategies themselves. The Portfolio Management Processes discussed in Chapter 2 provide a way to review and adjust the entire enterprise's strategic initiatives.

Strategy Management: The New Support Function

Writing in the *Harvard Business Review,* Balanced Scorecard creators Kaplan and Norton called for a new organizational entity to oversee the execution of strategy. They argued that under "The Old Strategy Calendar," with its periodic activities related to strategy being carried out at various times in various silos, most activities take place largely in isolation and without guidance from the enterprise strategy. This widens the gulf between an organization's strategy and its processes, systems, and people. The authors note that surveys revealed that "HR and IT departmental plans rarely support corporate or business-unit strategic initiatives. Budgeting is similarly disconnected: Some 60% of organizations do not link their financial budgets to strategic priorities. Incentives aren't aligned, either: The compensation packages of 70% of middle managers and more than 90% of frontline employees have no link to the success or failure of strategy implementation. Periodic management meetings, corporate communication, and knowledge management are similarly not focused on strategy execution."

The answer, they propose is an Office of Strategy Management. Such an office would:

- provide an organizational lens for the focusing of a strategic lens on each and every initiative
- provide a process for executing the strategic choices by means of budgeted resource allocations
- focus on getting the work of the business done efficiently and effectively
- monitor and control via a process for tracking a strategy as it's executed, detecting problems or changes in its underlying premises, and reporting to appropriate management levels

- provide a process for strategy improvement; a way of making necessary adjustments based on monitoring and control information and strategy performance review.

The Office of Strategy Management would oversee the Planning Integration for strategy. Strategy management planning includes developing annual objectives and specific initiative plans that are logically linked to the results of strategy analysis.

And, the Office of Strategy Management would be in charge of the Monitoring/Control Integration, tracking the performance of a strategy as it's executed.

Fortunately, many organizations already have such an office, although they may not yet realize it. Any organization with an enterprise-level project management office has the capability to oversee the execution of strategy at their fingertips. The SPM model capitalizes on this—in many companies—already existing structure and processes to move organizations from planning to execution.

Performance reporting from portfolios, programs, and projects are necessary to understand how well the organization's strategy is working. This information may reveal problems in the strategy or in its underlying premises, or it may reveal errors in strategy formulation, where organizational capability and environmental analysis informed the strategy selection process.

To insure effective strategy execution, the SPM approach requires that strategy be communicated clearly to those developing portfolio and program/project plans, to ensure that those initiatives support the organization's strategy. At the same time, portfolio analysis and program/project initiation processes must be integrated with the strategy management planning processes to provide the information needed for effective strategic planning.

The key processes for execution: project and program processes, portfolio processes, and performance management processes, are presented in detail in the chapters that follow.

Best Practices in Strategy Management

The Center for Business Practices 2005 study, *Strategy & Projects,* identified the following best practices for strategy management:

- Strategy performance is measured, compared to objectives, and activities are redirected or objectives changed where necessary.
- There is an understanding of the impact of projects or project management activities on the creation and implementation of strategy.
- The organization's strategic plans cascade down from corporate strategy to business unit strategy to portfolio, program, and project strategy.
- Corporate and business units assemble a strategic portfolio of programs and projects and measure the strategic contribution of a program or project and adopt or reject programs/projects based on this information.
- As strategy cascades down the organization, performance measures are established at each level (business unit, portfolio, program, project) to link up with the strategic performance expectations of the entire company.

The most often used practice by high-performing organizations is having strategic plans that cascade down from corporate strategy to business unit strategy to portfolio, program, and project strategy. High-performing organizations are significantly better than average at having performance



Exhibit 1-2. Strategy Management and Projects. The left bar in each set indicates the frequency with which that metric was reported by the top performers in the survey; right bar indicates the reported use of that best practice by low performers. The central bar expresses the mean. Note the dramatic difference between high and low performers on each measure.

measures established at each organizational level (business unit, portfolio, program, project) to link up with the strategic performance expectations of the entire company. Exhibit 1-2 shows the dramatic difference between the frequency of use of these practices by high performing companies in the sample, and low performers.

Looking at the spread between high and low-performers in the sample, a quote from Seth Godin comes to mind: "The right strategy makes any tactic work better. The right strategy puts less pressure on executing your tactics perfectly."

Obviously, the companies in the low-performing column do many things right. Yet on the eight key performance mea-

sures (see Appendix A for a full explanation of how we determined high and low performance) they fell far behind their peers who used these alignment practices. This demonstrates the truth of Godin's comment. You don't have to have perfect projects every time, if you have an overall project alignment to a good strategy. Strategy energizes the workforce, eliminates busywork, and surfaces duplications of effort. It's time for organizations to stop trying to optimize their operational effectiveness and their project-level performance, and optimize the entire organizational system by instilling an "execution environment." The SPM model provides a roadmap for the way.

Chapter Two

Project Portfolio Management:

Key Process #2

Whenever corporate leadership shifts from a long-term common vision and stretch goals to a short-term horizon, the organization suffers. Short-term goals must be balanced with vision, values, plans for market leadership, and management commitment to long-term growth. The absence of long-term goals and vision are particularly unhealthy for the firm's future—breakthrough projects, R&D, and the competitive horizon, according to Gary Tritle in the Research Technology Management. So it's a positive thing when leaders do strategic planning and visioning.

But corporate strategy remains just a pipe-dream unless projects are initiated to move the company towards those strategic goals. Like players on a team, moving the play towards one goal, these projects must be coordinated with each other and with organizational realities and objectives. This coordination is known as Project Portfolio Management (PPM). Joan Knutson, a noted writer, lecturer, and coach in the field of project management, has said that portfolio management is the way that decision makers align projects with the organizational strategy … just as strategy is the way the organization aligns itself to the wider marketplace.

When used effectively, PPM ensures that projects are aligned with corporate strategies and priorities and optimizes

resource allocation. It is the practice that bridges the gap between the executive decision process and project execution.

Noted writer on strategic execution George Veth calls PPM "initiative management," and this is perhaps an effective way to think of it when discussing the important role that PPM plays in execution. The key components of initiative management that tie into strategy management (discussed in Chapter 1) are:

- explicit funding of the investment in strategic initiatives
- the adoption of a formal and rigorous project management methodology
- a periodic review of the measurable impact of initiatives on the business.

Thus, the strategy management process uses the tool of portfolio management to close the loop between strategy and action.

PPM can also be defined as a decision-making process, in which a set of alternatives is evaluated against defined priorities and critical tradeoffs are intentionally considered and determined. This definition highlights three important aspects of the PPM: generating a pipeline of ideas, establishing priority criteria and making trade-off decisions.

A few years ago, it wasn't uncommon to read or overhear arguments about whether or not there was a difference between managing multiple projects and project portfolio management. That conversation seems to have come to a natural end, as both project management practitioners and executive leadership begin to realize that, while managing projects well (both individually and collectively) is critical to the organization, managing the project portfolio is another set of skills altogether. Think of it this way: if each project is an instrument

in your organizational orchestra, you have programs made up of the strings, the percussion, and the wind instruments … but someone—the conductor—has to optimize the whole system, and turn it into something greater than the sum of its parts.

The Evolution from Project to Portfolio

Project management's focus on planning and controlling the activities of a project sufficed organizations in the past because most identified projects were large-scale, long-duration, single projects: a skyscraper or a legacy computer system. With the shift to knowledge-based wealth creation, today's projects have a shorter, market-driven life cycle and more intangible deliverables. Companies have projects of all sizes, projects that involve all areas of the organization in some capacity and often involve people outside the organization as well, in the form of outsourcing suppliers, contract labor, consulting firms, or public stakeholders. While there still are some instances in which a company is almost entirely focused on one or two major projects at a time—small software development firms or capital construction firms—the reality in most businesses is that dozens of projects exist throughout the company in various stages of completion (or, more commonly, of disarray). It wouldn't be at all uncommon for a company to have several new product development projects in process, along with a process reengineering effort, a TQM initiative, a new marketing program in the works, and a fledgling e-business unit. Widen the scope of your thought to take in facilities, logistics, manufacturing, and public relations and you begin to understand why most companies have no idea how many projects they have going at one time. And, when you consider that technology plays a role in almost all changes to organizations these days, and that technology projects have an abysmal re-

cord of failure, the light begins to dawn: unless all the projects that a company engages in are conceptualized, planned, executed, closed out, and archived in a systematic manner, it will be impossible for an organization to keep a handle on what activities add value and which drain the resources. It isn't surprising that a disconnect has developed between companies' ability to manage projects on the project level, and their ability to strategically align them on the organizational level.

You can't manage what you can't measure, the old saying goes, and unless all the projects on the table can be held up to the light and compared to each other, a company has no way of managing them strategically, no way of making intelligent resource allocation decisions, no way of knowing what to delete and what to add. Project portfolio management brings order to this situation in two important ways:

1. It brings realism to an organization's planning processes by aligning what an organization wants to do with the resources—the money, hours, people, time, and equipment—required to get it done.
2. It brings rationality in the allocation of resources, both human and financial.

Project managers take a lot of heat when project management doesn't deliver organizational nirvana, but the truth is that the business of selecting which project to invest in must be carried out at the executive level—at the level of managing by projects, rather than of project management.

As project management knowledge and practice has matured over the years, organizations have gotten more skilled at the management of projects, and in a natural evolution, their focus has begun to shift, from intra-project planning and execution to the front-end of the project management life cycle:

how to choose the correct projects, how to prioritize them, how to track the prioritized projects, and how to ensure that there are adequate resources to staff those priority projects. This front-end work is PPM, and it is as necessary to projects as projects are to the portfolio. Even projects that succeed in meeting their requirements can be failures if the project requirements don't match up to the business realities faced by the company. For project management to live up to its promise, projects must be selected with care.

While most decision making on the project level is concerned with tactical issues (How can we do this thing right?), decision making on the portfolio level is concerned with strategic issues (How can we be sure to do the right things?). Today's emphasis on PPM is part of a general trend towards systems thinking in organizational life. Instead of tweaking the parts (individual projects, departments, or processes), systems theory encourages us to look first at the whole: the enterprise.

A frequent refrain in the business press is that projects must develop more of a business focus. The same might be said of business: that a project focus is required. Without a project focus at the highest level of the business, projects seem to pop up at will across the organization, generating confusion. There's a lack of clarity as to how projects align and link to organizational strategy; often there's no business process for selecting projects, and senior management is unaware of the number, scope and or benefits of the projects being undertaken. As a result, people both on projects and on the business side feel they are working at cross-purposes with each other.

Giving projects a strategic focus goes a long way towards resolving these concerns. Combining a strategic focus with a business process for selecting and prioritizing projects is an important step in creating an environment for successful projects.

And project portfolio management should be an easy sell: Research by Cooper, Edgett and Klienschmidt reveals that, for R&D portfolios, the top 20 percent of companies had an explicit, established method of portfolio management, consistently applied across the organization. The same research showed that even rudimentary portfolio management processes created a spike of benefits almost immediately. The move to PPM is therefore a necessary step up the ladder of organizational maturity. The place of portfolio management in a mature organization is depicted in Exhibit 2-1.

What are the Fundamental Components of PPM?

Within PPM are fundamental practices that include linking strategy to project prioritization and selection, and balancing an organization's portfolio to achieve the best results. Also included, typically, are stage/gate models, a process for defining and estimating new projects, communication and review processes for the portfolio, project tracking and reporting, and continual portfolio re-alignment. Organizations need to apply these fundamental processes and develop a standardized approach to create and manage a diversified portfolio of projects. The stakeholders for the PPM process include financial management, senior business executives, and ultimately the stockholders of the organization, as well as employees, vendors and customers. It is a holistic view of all the work taking place and work planned for in an organization.

PPM consists of a number of fundamental components that must be integrated to successfully implement and institutionalize the process. These components can be grouped in various ways. Following are a few ways to conceptualize these; while somewhat overlapping, they all address different aspects of this complex set of processes.

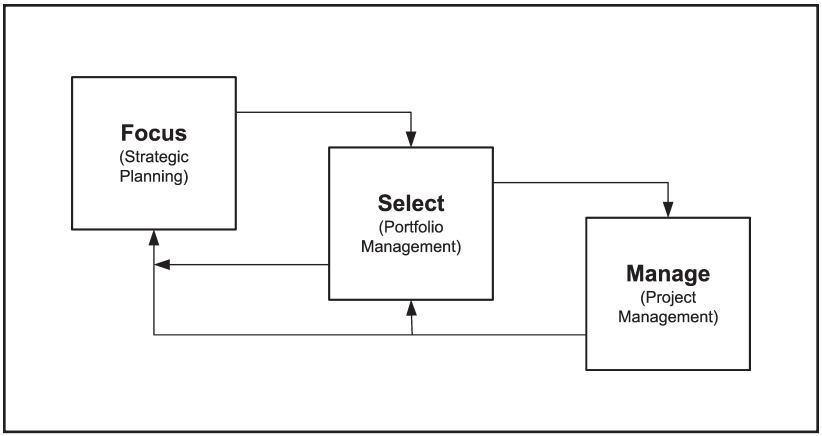


Exhibit 2-1. Selecting the right portfolio is only one element of success. First, the organization needs to focus, via strategic planning and strategy management. The strategic focus of the organization becomes the foundation for selecting research, new product development, information technology, and business improvement projects. Second, the right projects need to be selected. Third, after selection, the projects/programs need to be managed well.

Six Key Processes

Portfolio management is accomplished through the application and integration of portfolio management processes such as:

- Inventory—a process for capturing project data and organizing for portfolio analysis
- Analysis—a process for aligning projects to business strategy, examining business and project risks, then selecting and prioritizing projects in the portfolio
- Planning—a process for approving and funding the project business plans; allocating resources and scheduling projects. Funding and resource allocation must be based on the identified priority of the project.

- Execution—a process for executing the portfolio of programs and projects by means of budgeted resource allocations; focus on getting the work done efficiently and effectively (see Chapter 3 on Project and Program Management Processes for more detail on this process). In order to execute quickly, in the correct sequence, the organization must adhere to its project capacity. Any organization that is overloaded with too many projects sees a dramatic increase in resource multi-tasking or sharing with a devastating slowdown in project flow. Quick execution also demands that PPM effectively monitor project execution to ensure that out-of-control situations are speedily recognized and acted upon.
- Monitoring/control—a process for tracking a portfolio as programs/projects are executed, detecting problems or changes in underlying premises, and reporting to appropriate management levels (see Chapter 8 on Performance Management Processes for more detail on this process).
- Portfolio improvement— a process for making necessary adjustments to the portfolio, not once but iteratively and formally so that re-balancing and analyzing the portfolio becomes simply the way business is done.

Four Areas of Integration

Budgeting and Forecasting, Prioritization, Resource Allocation, Portfolio Review and Communications are four areas that must be integrated in PPM. Under the SPM model, the PPM process is also integrated with strategic planning processes, as well as yearly business planning and budgeting processes. Exhibit 2.2 provides an example of integration between business and PPM processes.

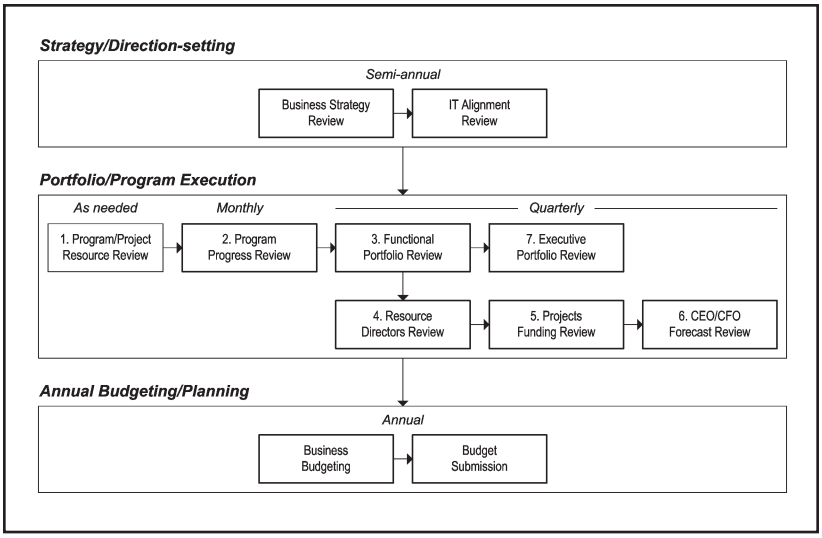


Exhibit 2-2. Integrated PPM and Business Processes. The timing of the reviews shown vary from organization to organization—but one key to good PPM is that the project mix is adjusted as necessary in a timely fashion.

Budgeting and Forecasting

An important step in creating and executing a PPM process is to identify all current projects or programs, establish budgets (dollars and human resources), and define start and end dates for these initiatives.

The first step is to *collect* all initiative or project ideas. For organizations already up and running with PPM, this constitutes a regularly refreshed pipeline of ideas for business innovation and improvement. For those new to the process, it is often necessary to inventory and collect all initiatives currently running in the organization, along with proposed projects, so they can be truly prioritized from a strategic perspective. Which projects can be considered strategic? Gener-

ally, they are projects that support innovation, organizational improvement or mandated corporate or regulatory priorities. As Gerald Kendall notes, "If the list is greater than 50 projects, this is a red flag that the organization is not focused." Collect any project plans associated with those projects, including resources allocated, budgets, earned value information, and document who the sponsor is. Determine the justifications for each project and get a status on each active project (this should be high-level, for example: red, yellow, or green).

Future projects or programs are also forecasted and added to the organization's potential portfolio of work. Through years of observation we have noted that this process is best implemented through careful design of a process that includes the business sponsors, managers providing the staffing for the projects, subject matter experts associated with each project or program, and often a liaison group that ensures that the portfolio meets the business needs of the organization.

Prioritization

Priorities represent a filtering system for evaluating initiatives. For companies using the SPM governance model, mapping initiatives against strategies is the first step in identifying viable candidates. Establishing strategic fit can save significant resources (financial and organizational), as projects that are nonstrategic are dropped.

Ranking the strategic initiatives according to their business value (George Veth's equation for this is "benefits less costs, adjusted for timing") requires analysis of the business case. This step is also the basis for assessing the impact of initiatives on budgets and financial forecasts.

The final selection of projects represents an intentional decision to commit resources to fund or staff projects and should reflect the best use of resources based on management's agreed-upon criteria. All this sounds very orderly. But, as Ger-

ald Kendall notes, there are three common problems with the way projects are sanctioned in most organizations:

1. Goals set by senior executives are *not measurably tied* to projects. For example, a VP claims that a project is essential to meet a goal, but the percentage of the goal that the project will accomplish is often not identified.
2. The collection of active projects is *not formally tracked* to see if it is meeting goals (on time and magnitude of improvement promised). Many projects, even in major companies, lack valid, resource-based project plans.
3. Organizations breed *many projects that are not sanctioned* by any executive. In a 2004 study cited by Kendall in the *AMA Handbook of Project Management,* this was a problem stated by 70 percent of respondents.

To address these problems, Kendall recommends the following set of considerations for portfolio balancing:

- A focus on market and customer needs (as opposed to internal improvements). If the company has cash flow or other serious financial issues, internal improvements might be the desired "imbalance." However, an organization cannot cost-cut itself to long-term health. It must grow its business.
- Short-term vs. long-term gains. When too many projects spend money this fiscal year without bringing benefits until the next fiscal year, or sometime in the future, this is a red flag. A portfolio manager should be asking tough questions about benefits realization.
- Research vs. development. To have a secure future, every organization must invest some of their project resources into research—market research, experimentation with new methods, tools and processes, training and human development, motivation and other areas.

- Focusing project dollars and human resources on strategic assets. Assets are not just bricks and mortar. They may include a web site, customers, external sales agents, distribution channels, and so on. The distribution of project investments to the organization's top five strategic assets, and determine whether or not the distribution makes sense.
- Balanced sponsorship (IT vs. other functional areas). In some organizations, 70 percent or more of projects in the portfolio may be sponsored by IT. This is a red flag indicating a lack of balanced ownership of project initiatives.

The use of financial criteria is recommended in most academic discourse on the subject, since calculation of these financial factors involve considering all strategic factors in estimating the project profit potential. In practice, however, estimating profit from projects many times is difficult, especially for projects that involve a new concept, market area, technology, etc. For these instances, the use of a carefully crafted decision model that is used to prioritize projects based on important strategic criteria is more effective. Two such models—though by no means the only approaches—are described below.

The Fit, Utility and Balance Model

Portfolio selection and prioritization is concerned with fit, utility, and balance (see Exhibit 2-3).

Fit

The first major element of portfolio management is to identify opportunities and determine if those opportunities are in line with the corporate strategic direction. This may be the identification and initial screening of projects before more in-depth analysis is conducted. What is the project? Does the project fit within the focus of your organization and the business strat-

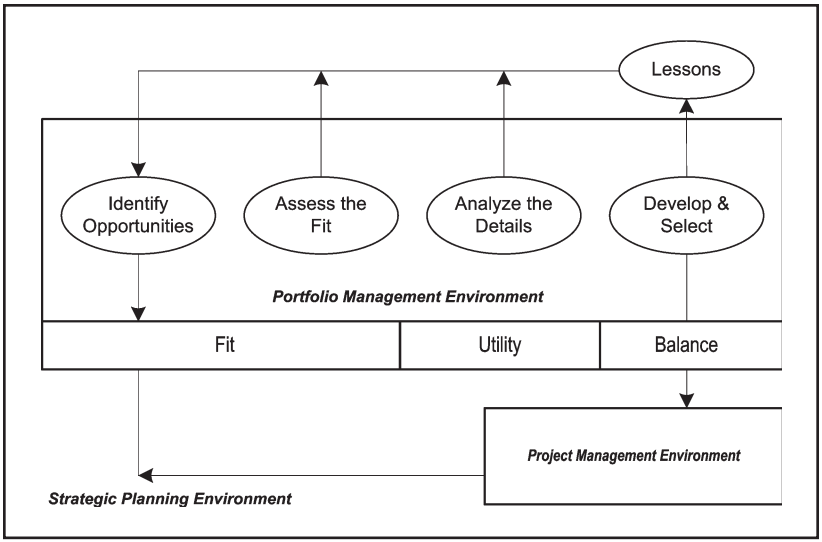


Exhibit 2-3. How Portfolio Planning Steps Merge with the Fit, Utility and Balance Model. Almost every organization will flow through this thought process to build a portfolio of projects. The organization may first identify opportunities; then assess the organizational fit; analyze the costs, benefits, and risks; and finally select a portfolio. The methods and techniques employed differ. Invariably, at some level of sophistication, all organizations will understand the fit and utility of their projects and make some attempt to establish a balanced mix of projects.

egy and goals? Some recommended actions associated with determining Fit would be:

- First, make sure clear strategic direction and business goals have been established, since, in an "execution environment, strategic focus becomes the foundation for selecting projects.
- Develop a process to identify opportunities and make it simple and easy to use all of the time. Many individuals have an aversion to complex processes and bureaucratic paperwork. Establish an avenue for communicating ideas

versus a paperwork nightmare. Identify a team to review the opportunities and assess the fit within the strategic direction and business goals.

- As part of the process, establish a template for project justification. The ideas need to have some substance and content; otherwise it will be difficult to screen the projects. The template may include things such as a description of the project, the sponsor, the link to strategy and business goals, and a high-level description of the project's costs, benefit, and risks.
- Establish minimal acceptance criteria. The individuals submitting ideas and the review team should understand the minimal acceptance criteria. There should be basic requirements a project must meet before they are considered for further analysis and funding. Such requirements may include the link to strategy, business threshold minimums (e.g., return-on-investment or cost/benefit ratio minimums), compliance with organizational constraints (e.g., existing technology architecture), and completion of the project justification template.
- Reward ideas and suggestions. Most employees love recognition for their ideas and suggestions. Take the time and interest to formally acknowledge ideas that meet the "fit" test. Always give credit where credit is due.

Utility

The second major element of portfolio management is to further define the project (if needed) and analyze the details surrounding its utility. The utility of a project captures its usefulness, its value, and is typically defined by costs, benefits, and associated risks. Why should this project be pursued? What is the usefulness and value of the project? Several things to consider:

- Establish criteria to support decision making. Multiple projects vie for resources and funding, and somehow a decision has to be made on which ones to select. To help in the decision-making process, establish common decision criteria and measure each project against the criteria. Since most decisions are based upon multiple factors, weight each criterion to establish its relative importance. This will identify what is most significant to the organization, and allows you to calculate a score for each project using its value for each criterion and applying the relative weights.

Balance

The third major area of portfolio management is the selection of the project portfolio. Which projects should be selected? How does the project relate to the entire portfolio, and how can the project mix be optimized?

- Establish a process that will help optimize the portfolio, not just the individual projects. Industry approaches for developing portfolios range from simple ranking based on individual project financial returns to more complex methodologies that take into account the inter-relationships between projects. Regardless of the chosen method, the objective should be to optimize the portfolio, not necessarily the individual projects. The appropriate method depends upon an organization's strategic direction, guiding principles, capabilities, limitations, and complexities.
- When selecting the portfolio, consider all types of projects—research, new product development, information technology, business improvement … and so on. Remember that relative comparisons are being made, not specific comparisons.

Using a Portfolio Scorecard Model

In order to make relative comparisons between projects, some intellectual framework is required. The Balanced Scorecard measures the health of the organization by looking at what's already in place; doesn't it make sense to use a Portfolio Scorecard (see Exhibit 2-4) also as a framework for selecting what will be done? A Scorecard for Selection might include (each item corresponding to a quadrant in the Scorecard):

1) Resource availability: Do we have the people, the funds, and the technology to carry out this project? If not, is it worth it to us to develop them?
2) Profitability: What are the short-term benefits, usually measured in financial metrics?
3) Social Value: What will this project add in terms of image, morale, intellectual capital, and "social equity." Are there intangible benefits internally, for employees and shareholders, or externally, for customers and the community at large?
4) Strategic Value: What long-term good do we hope to gain from this project? How does it feed into the vision of the company?

And, in each quadrant of the scorecard, another two questions should be asked: What are the risks associated with this project (also measured in terms of resources, profit, social value, and strategy)? And, what is the learning value of the project in each area?

Viewing projects by means of this scorecard, a company can more simply make relative judgments. A project with high short-term profits that carries a high risk of alienating personnel, and not much learning value, may find itself outranked by

Resource Availability People, money, technology, equipment ...?	**Profitability** Short-term good or **Necessity** Regulatory or "lights-on"
Social Value Internal: Employees, shareholders External: Community, customers, partners	**Strategic Value** Long-term good Support of "horizon" goals

Exhibit 2-4. A Scorecard Approach to Portfolio Selection and Balancing.

a project with lesser short-term profitability but great learning value, as an investment in the future.

There are many other decision methods and tools to help organizations compare a project against the decision criteria, develop a relative score for comparison against other projects, and build a portfolio. Meredith and Mantel's *Project Management: A Managerial Approach* and Pennypacker and Dye's *Project Portfolio Management* are two resources that discuss the different types of models, and provide a variety of mathematical techniques and examples of how they are used in organizations.

Resource Allocation

Resources include capital, expenses, staff, time, or anything that is consumed in the planning and execution of a project. Once an organization prioritizes its projects it must decide how to assign these limited resources to the projects. Two approaches are in use today. The first approach arranges projects in descending order of priority and funds projects starting with the highest priority moving down the list until all resources are consumed. Essentially, this technique can be visualized as drawing a cut-line under the final project where resources are fully expended. This approach is often described as the "Cut-line Approach.".

Another method used for allocating resources strives to optimize the benefits to the organization. It involves allocating resources to the group of projects that yield the highest total benefit within the current resource constraints. Specialized techniques can be used in this approach such as linear programming and cost-benefit analysis. This method is often described as the "Optimization Approach."

Another important consideration in resource allocation is the importance of allocating resources across a diversified portfolio. Modern portfolio theory, first described by Harry Markowitz, economist at the University of Chicago, advocates investment in a diversified portfolio to reduce risks and maximize expected return. Additionally, businesses invest in a variety of different types of projects, which are often very difficult to compare with each other with respect to business benefits. For example, comparing investments on infrastructure or projects that are targeted at "keeping the business running" are difficult to compare with strategic projects that may provide new markets to the organization. Therefore, an important consideration in the resource allocation process is to define and use different investment categories to help align the total portfolio of investment with the needs of the enterprise.

Portfolio Review and Communications

No process, technique or tool alone is capable of selecting the best portfolio of projects for an enterprise. Processes, techniques and tools are used in conjunction with senior management's insight, knowledge and decision making ability to select the right portfolio of projects. The process, techniques, and tools help to formulate the problem and facilitate the analysis of alternative solutions. Senior management uses this information to select the appropriate projects and to communicate the portfolio to their organization. Because review and communication is so important to the process, organizations should carefully plan project reviews, program reviews, portfolio reviews, and resource planning activities. These reviews provide a forum for studying the alternatives and help to build organizational buy-in for the selection. To establish standards for this process a number of organizations have developed enterprise calendars that are used for scheduling the reviews at monthly, quarterly, or yearly intervals.

Establish Portfolio Decision meetings to make decisions. After analyzing the project information and validating it, through application of the decision criteria, the ball should be punted to senior leadership. Separate decision meetings and teams should be established to make portfolio decisions, using the validated project information. These meetings and reviews are normally held in conjunction with the corporate planning schedule.

Even after selecting the route, it is easy to get distracted along the way: things may not unfold as originally planned, a competitor introduces a new product, the chief scientist makes a key breakthrough elsewhere, legislation is enacted causing industry-wide upheaval, or technology advances and matures. Your original selection is no longer the best. So, an adjustment is made and a better path for the future is selected. This is the art of portfolio management—doing the right thing, selecting

the right mix of projects and adjusting as time evolves and circumstances unfold.

Why Is PPM Important?

How work is done has changed faster than the way companies are managed, causing a disconnect between the ability to manage projects on the project level, and the ability to manage them collectively on the enterprise level. There are powerful arguments for eliminating this disconnect.

No one would think of building by turning 100 different construction teams loose to build 100 different rooms, with no single blueprint or agreed-upon vision of the completed structure to go by. Yet this is precisely the situation in which many large companies find themselves with regard to managing by projects. Companies routinely over-schedule their resources (human and otherwise), run redundant projects, and damage profitability by investing in off-topic activities that don't contribute to organizational health.

Applying effective PPM practices is becoming increasingly important to all business entities. Small or large, each organization must select and manage its investments wisely to reap the maximum level of benefits from their investment decisions. In the IT investment arena, IT executives are finding that senior management is demanding a tangible return from their large investment in information technology.

Organizations in many other industries are implementing project management practices to improve their ability to execute projects on time and within budget. Just as important as improving project management practices and organization, however, is the need to execute the right projects. Implementing an effective PPM process helps organizations select those projects, supporting business goals, diversifying the investment, and maximizing business performance.

Common Problems in Portfolio Management

- Too many projects "off strategy;" disconnects between spending on projects and strategic priorities.
- Too many unfit, weak mediocre projects.
- Poor projects are not killed but take on a life of their own.
- Resources are scarce, but unfocused.
- Too many trivial projects (updates, modifications) and not enough major breakthroughs.

Source: Cooper and Kleinschmidt

Exhibit 2-5. Is This Your Company?

The Business Case

On the negative side of the case, companies without good portfolio management are prone to a welter of problems (see Exhibit 2-5).

On the positive side, PPM provides a solution to many of the problems that commonly plague projects and the companies that depend on them.

Project Failure

Applying portfolio management to projects helps to resolve some of the key issues that lead to project failure. Of the top ten factors leading to project failure (as reported the The Standish Group's *CHAOS Report*), five—incomplete requirements; lack of user involvement; lack of resources; unrealistic expectations; and lack of executive support—are addressed by the implementation of a system that engages corporate leadership in a structured process of selecting and prioritizing projects.

Project failure rates have been widely reported throughout the business press, ever since the 1995 *CHAOS Report* was issued. Although subsequent Standish research has shown that failure rates in IT are decreasing—down from 31% to 28% between 1995 and 1998, and still falling—even 20% failure would represent a whopping amount of money. Assuming that projects in areas other than IT fail at even half that rate, the financial losses become staggering. Billions are at stake in moving projects from the "failed" to the "successful" column.

One immediate method is to choose and prioritize projects in such a way that responsible decisions can be made as to which projects to kill, and when. Jim Johnson, chairman of the Standish Group, has identified portfolio management as *the* process that can make the difference in project success. Said Johnson, "Companies need a process for taking a regular look at their portfolio of projects and deciding, again and again, if the investment is going to pay off. As it stands now, for most companies, projects can take on a life of their own."

Johnson stressed that continuous self-assessment should be built in, allowing earlier kill decisions on failing projects, with the associated cost savings. This frees up money and personnel for dedication to projects that are worth pursuing. Killing a project, said Johnson, should be seen as "successful resource management, not as an admission of failure."

Financial Performance

Proper portfolio management results in bottom-line yields—another reason why it's important for the executive level to champion this process. Research on portfolio management for R&D by Cooper, Edgett and Klienschmidt showed that the top 20 percent of companies, in contrast to poorer performers, had an explicit, established method of portfolio management, with top management buy-in and support, consistently ap-

plied across the organization. Of those in the top 20 percent, about 70 percent had used the portfolio management method for more than two years. So even businesses that are relatively new to portfolio management begin to see positive results very quickly.

Time to Market

Toney and Powers found that in large functional organizations that implement a project management group and its corollary practices (including portfolio management), lead times to market have been reduced by as much as 60 percent, development costs have declined, quality has improved, and forecasting accuracy has increased.

Risk Management

Assessing and managing risk becomes easier within the context of a project portfolio, according to research by E.L Jarrett. To deal with any significant risk, there must be diversification, along with other kinds of balance to ensure continuity and health for the enterprise, such as investing in lower-risk projects that provide a near-certain return, or investing in higher-risk projects, the path to extraordinary returns.

Apolitical Decisionmaking

In a 1998 interview in *PM Network,* Jim Johnson observed: "All failures are political." When projects are selected and planned in an ad hoc, chaotic environment, objectivity about value goes out the window. Johnson stressed that having a standard methodology helps to take the politics out of decision making. "Instead of opinion, we have process."

A *Research Technology Management* article listed the factors that can delay—or conceal—the need to terminate proj-

ects: first on the list was "personal pride." PPM methodology cleans up the project selection process by offering a checklist of criteria for project approval.

"Chunking" for Success

Big projects, simply, are more prone to failure. Jim Johnson credited the rising project success rate to "very small projects that get going very quickly … you get to the important milestones very quickly ... if you are failing you can tell quickly if you need to kill it. You can act to save time, money and resources." Susan Cramm, of *CIO Magazine,* describes the process necessary to reorganize around small projects: reframing big initiatives as a series of smaller, $1 million to $2 million initiatives. This cannot happen, she warns, in the absence of a PPM methodology.

Achieving Strategic Goals

Ideally, an organization would conceive of, fund, plan and monitor its projects through a "strategic lens." Without such a holistic view, it's easy to have lots of activity going on without much of it being of real value. (Value isn't necessarily profit, but can include the development of intellectual capital, the improvement of public image, or movement toward a long-term evolution into a new kind of business.) Mistakes, innovations, even losses can all come into focus through this lens. For project-oriented companies, that lens is PPM.

Better Asset Management

Portfolio management is just managing your assets. In a way the project management language/angle on portfolio management is a distraction: portfolio management has less to do with project management skills and more to do with strategic plan-

ning. Of course, in order to make sound decisions on a portfolio level, decision makers must have sound information on the project and program level.

Better Resource Management

Even if your company hasn't been downsizing in search of short-term profits, top-performing subject matter experts aren't exactly a dime a dozen. How can you make sure your smartest people are working on your top-priority activities? This is a two-sided issue: One side impacts corporate profitability. The other impacts employee morale (which, by the way, impacts corporate profitability, according to RHI's Human Capital Index).

Portfolio management is the action of a mature organization to gather all the pieces of the project value puzzle—human resources, technology, corporate strategy, and financial resources—into a coherent picture. That's why enterprise resource allocation is a key feature of PPM. It shows whether projects can be staffed with current resources. If the resources are not available or if they have been committed to more work than they can reasonably accomplish, project(s) will not be completed as scheduled. This may sound simplistic, but in practice, many companies do not know how many projects they have scheduled, or who is going to do them. PPM sheds light into this darkness.

Overall Benefits

The benefits of portfolio management—which apply across the board, to government, not-for-profit and for-profit entities—include:

- A structure to select the right projects and remove the wrong projects

- A system for placing resources where it matters and reducing wasteful spending
- A method for linking portfolio decisions to strategic direction and business goals
- Establishing logic, reasoning, and a sense of fairness behind portfolio decisions
- Establishing ownership amongst the staff by involvement at the right levels
- Avenues for individuals to identify opportunities and obtain support
- A way for project teams to understand the value of their contributions.

And, from research sources compiled by Kendall:

- 20-30 percent improvement in time to market
- 25-300 percent improvement in number of projects completed with the same resources
- Average project duration cut by 25-50 percent
- Over 90 percent project success rate, with double the profit margin
- 50 percent improvement in R&D productivity.

How Do Organizations Implement PPM Practices?

Typically, organizations need to progress through three distinct stages to establish and conduct PPM, as shown in Exhibit 2-6.

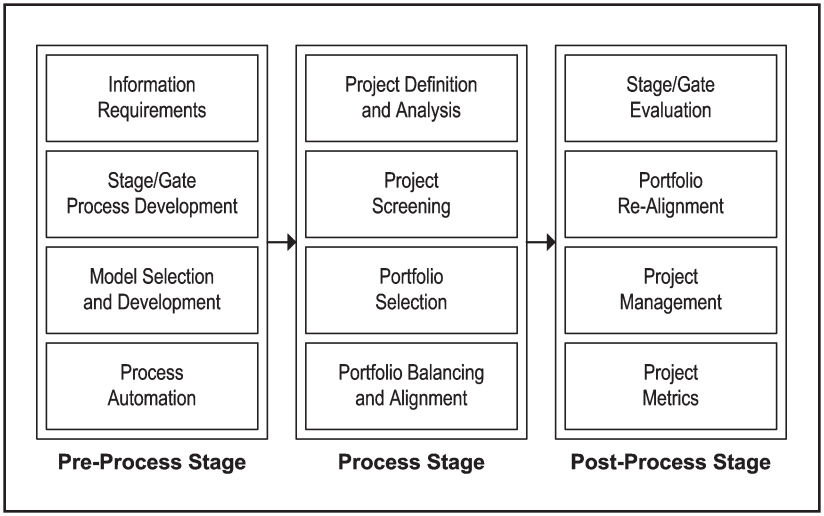


Exhibit 2-6. Designing and Implementing PPM Processes

Stage One: Pre-Process

In the Pre-Process Stage, organizations develop processes used to understand and articulate business strategy and to define, screen and prioritize projects. They define project characteristics and informational needs, develop prioritization models and criteria (e.g. financial, strategic, etc.), and establish stage/gate processes (Go/no-go decision points) for guiding the selection and initiation of projects. This stage involves input from executives, operations/business management and project-oriented staff. During this stage, facilitation techniques, workshops, and participatory design are used to develop the decision models and stage/gate processes associated with PPM. These decision and stage/gate processes must be designed to align with an organization's culture, functions, and

structure and are best-deployed using sound change management techniques. These techniques help to establish management buy-in and to institutionalize the processes.

Stage Two: Pilot and Refine

In the second stage, PPM processes are piloted and refined to meet the needs of the organization. The initial PPM process is typically conducted as part of the yearly planning exercises, or aligned with quarterly review cycles. Analysis tools and techniques and portfolio review sessions are further refined in this stage to support management's decision-making processes.

Stage Three: Iterative Evaluation

The last Post-Process Stage includes applying Stage/Gate Evaluation to iteratively assess how well projects are meeting objectives and to monitor the changing business environment. The Stage/Gate Evaluation may be used to terminate or delay projects at various milestones, re-scope the efforts, or articulate support to continue the project. Project Management Information Systems (PMIS), Project Management practices, and management review sessions directly support Stage/Gate Evaluation and Portfolio Re-Alignment in this stage.

Making the Commitment to PPM

How do you get started? The literature on portfolio management—while vast compared to what was out there even three years ago—is still new enough to be confusing, and in many cases, full of untried optimism and untested theories. Writers stumble over each other to offer the three elements, four phases, five steps, and so on. From the executive leadership point of view, all these checklists miss the point. (Neverthe-

less, we have attempted, in Appendix C, to do what Einstein never could: create a unified field theory.)

The question that must be addressed when an organization commits to PPM is not merely which tools to buy or which mental model to use. It's a question of maturity.

Assessing Organizational Readiness

Is your company actually mature enough to do portfolio management? An organization that is mature enough to do portfolio management has to have certain basic organizational attributes and infrastructure in place:

The organization has a coherent strategy. Portfolio management uses project activities to move the organization forward towards a goal. "Groups and individuals that conduct strategic planning," say Frank Toney and Ray Powers, "are consistently more successful at achieving goals than those who don't utilize it. Research also indicates that maintaining a constant focus on the goal of the group has a high correlation with goal attainment." Have a clear, shared vision.

The organization knows how to manage projects. Walk before you run. Trying to implement portfolio management before mastering the basics of managing individual projects is putting the cart before the invention of the wheel. Without project management methodology and practices in place, you don't have the most basic data to work with. Bad project management means cost and schedule estimates that are exercises in fantasy.

You know what you have. What's in the portfolio? Many companies don't know. A complete list of all the initiatives competing for resources is a baseline requirement to even begin portfolio management. Counting projects is a first step towards deriving value from portfolio management, because

certain realities are quickly revealed: if you schedule 130 percent of your project human resources to projects, for example, a lot of things will not get done (and valuable people will quit or go crazy). Some companies list only projects that surpass a predetermined threshold number: a schedule of 30+ days or 100+ hours; or a budget of at least $50,000, for example. a complete list of all the initiatives competing for resources is a baseline requirement to even begin portfolio management. This isn't as obvious a statement as it seems; in fact, for many companies have not gotten this far. Counting projects is a first step towards deriving value from portfolio management, because certain realities are quickly revealed: if you schedule 130% of your human resources to projects, for example, a lot of things will not get done.

The good news is that even this most basic step surfaces redundancies and dead issues, allowing a portfolio management initiative to create value for the company almost immediately. The inventory has to include *all* projects, since resources are working on all projects—not just on the high-profile ones. And it should include projects that are being carried out by outsource providers and consultants, as well, since even those projects have at least someone within the company as a liaison, contract manager, and/or project manager. These hours often get "lost" in the decision-making process, only to show up later as a cost or schedule overrun.

Projects are fully described. Once the parameters of the list are decided upon, each project on it must be described. Details such as technologies required; estimates of time, cost, and personnel required; and a basic risk/reward calculation give portfolio managers the data they need to compare and contrast projects. Companies skilled at opportunity identification on one hand, and at tracking existing projects on the other, have

a significant advantage at this stage. Their lists will be more complete, and their estimates more meaningful. Many questions must be answered in detail before you can begin to select and prioritize the projects in the inventory, and some of the answers won't come easy. Which projects make the most money? Which have the lowest risk? Which have subjective value, in terms of community image or internal morale? Which are not optional—projects dictated by regulatory requirements, for example? In the information-gathering process, a second level of shakedown will naturally come about. Some projects will be backburnered because human resources aren't available, some because the technology is immature, some due to looming external risks. Much, if not all, of the information necessary to populate the database about projects in the inventory is generated by the steps in the project management process: scope definition, risk management, scheduling. The software and peopleware required to generate, analyze, and deliver this information shouldn't be scattered all over the organization, but unified under the flag of the Strategic Project Office.

Project data is reliable. You won't make good decisions based on bad information. This is where the enterprise-level project management tools with portfolio management capabilities really earn their keep. Gathering data in such a way that it can be put into context and become information is where software reigns supreme.. How long will each project take? How much will it cost? What's the expected ROI? What's the status on the projects already underway? Being able to view the most salient information on each and every project in thumbnail-sketch form allows executives to compare apples to apples … and weigh the relative benefits of apples vs. oranges. What is less certain is organizational willingness to use these features, and train appropriately for them.

The organization knows who is available to work on projects, and when. A second part of the inventory process should be, literally, counting heads. Who are the project managers? Surprisingly, many large companies are only beginning to get a handle on who their project resources are and where they reside on the org chart. For some companies, the scarcest resource isn't money but project managers. A critical factor in project selection thus becomes: Do we have a project manager who can manage it?

How many project managers and project team members do you have? What is each one doing, right now? When will he/she be finished with it? What are his/her areas of particular expertise? In fact, without a system for knowing what each person in the pool of potential project personnel is capable of, and when they will be available, you cannot really be said to manage a portfolio. People do projects. Without them, all you have is ideas.

A Strategic Project Office is in place. If an enterprise-level project management office does not own the process of project inventory, prioritization, and selection, it cannot be done well. The META Group (now Gartner Group) recommends this strategy, and those companies that have put enterprise-wide PPM in place, such as Cabelas and Northwestern Mutual Life, have relied on it. In fact, while intra-departmental portfolios may perhaps be selected and balanced without involvement of a project management office, it's doubtful that anything on a wider scale can succeed … and you can't optimize the system by balancing only parts of it. This is undoubtedly why the Gartner Group predicted years ago that companies failing to establish a project office would experience twice as many major project delays, overruns, and cancellations as will companies with an SPO in place.

Getting Started

You don't have to wait until all the above criteria are satisfied, so long as there is an enterprise-wide recognition of the need to establish these conditions. Any improvement a company makes in managing the portfolio—even if it is as simple as taking inventory—will yield immediate value. Here are some suggestions from the experts:

Start small and keep it simple. Introduce new processes in a phased approach that addresses the most important activities, including estimation, selection, prioritization, developing performance metrics and defining a decision process. Smith and Reinertsen's research on the "fuzzy front end" indicated that even otherwise well-managed companies can fail abysmally at opportunity management, due to the complexity of their process for dealing with new ideas. In one example cited in their book, the fuzzy front end at a start-up company was 500 times faster than it was at the Fortune 500 company, where bureaucratic planning and budgeting processes "guaranteed defeat."

Establish a home for project management and PPM. PPM bridges the gap between the executive decision process and the day-to-day project execution that brings value to an organization. These two practices together make up Strategic Project Management. As shown in Exhibit 2-7, the place in the organization where these two practices meet most seamlessly is in a Strategic Project Office.) The development of an enterprise-level project office and the implementation of portfolio management go hand in hand, and that portfolio management may not even be possible in an environment that lacks some kind of enterprise-level project management presence. Just as project management can fail without senior leadership involvement, PPM can fail for lack of project manager input. J. Davidson

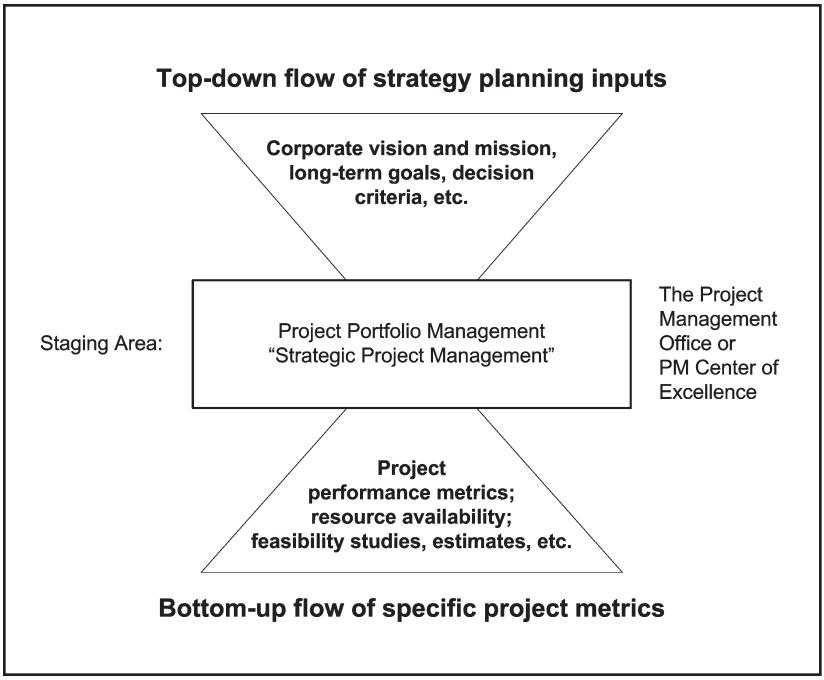


Exhibit 2-7. PPM's Organizational Home

Frame has reported that only 20 percent of project managers, according to his research, have input into selection decisions. Without the input and buy-in of project personnel, it is difficult to maintain continuity between the selection and execution phases. An enterprise-level project office answers this lack.

Governance and PPM

The term "governance" is often used in the context of portfolio management to refer to the ongoing process of decision making associated with keeping the portfolio healthy and with ensuring that the processes set up for identification, validation, and selection of projects are followed. This "portfolio gover-

nance" exists within the larger framework of SPM governance, which determines how PPM is integrated with the other processes in the SPM model.

Integration of Portfolio Management Processes

Since, as discussed in the Introduction, the primary role of Governance is as an integrator of methods and activities across the enterprise, it is worthwhile to note those areas of PPM that need particular attention to integration with the other three key processes (See Exhibit 6 in the Introduction):

Analysis Integration

The SPM approach requires strategy inputs to the analysis process, which is critical to ensure that the portfolio supports the long-term goals of the business and the portfolio is valued properly. The inter-relationships among programs/projects, including the timing which needs to be market-based, must be understood and managed for strategic balance.

Monitoring/Control Integration

In tracking the portfolio of programs/projects, metrics are captured to assess the performance of the portfolio. In the SPM approach, reviews of the portfolio involve a re-verification of the objectives of the portfolio. In addition, shifting business, technology, and market conditions can rearrange priorities. All of these factors can influence the strategies and objectives of the organization and require performance reporting to appropriate management levels.

Portfolio Improvement Integration

The iterative nature of portfolio optimization requires that reviews be held on a regular basis. In the SPM approach, these reviews of portfolio performance and changes in the busi-

ness environment may cause decision-makers to re-align the portfolio, which may or may not affect other projects in the portfolio. Portfolio and program/project re-planning may also be required, including changes in resource allocation and scheduling.

At the level of organizational governance, once the PPM processes that will be used organization-wide have been defined, an executive dashboard should be sufficient to keep work on track between Portfolio Decision meetings. It's important that key metrics associated with PPM be identified in order to make the dashboard as useful as possible while incorporating as few metrics as necessarily. One "death knell" for PPM lies in swamping C-level executives the project-level minutiae.

To carry out the role of liaison between executives and the portfolio, the role of Portfolio Manager has become more and more accepted. The role is discussed in more detail in Chapter 6.

Once roles have been defined for PPM, and the selection process codified, the primary role of governance in PPM is to promote the uniform application of the methodology across the organization. Finally, the approach used to analyze projects must be uniformly applied across the organization. The criteria and weights should be identified, defined, and completely documented. The process established should ensure that project teams consistently interpret the criteria and its related measures and/or probabilities. An analogy can be made to performance reviews and the use of criteria and performance scales. For example, different managers may have different definitions of an "excellent" rating. In order to ensure fairness for all employees, it is imperative the organization clearly defines all performance levels so managers consistently interpret and apply the scales. If this doesn't happen, employees may be unfairly evaluated and rewarded … just as projects

may be unfairly evaluated and rewarded. If the cost, benefits, and risks are identified for one project, they should be identified for all.

PPM and the Strategic Project Office

The SPO is the optimum organizational solution for aligning projects to strategy and tracking project and portfolios to ensure they continue to meet the needs of the business, even as these needs continue to change over time. It serves as the critical link between business strategy and execution of tactical plans.

In many organizations, the SPO owns the PPM process. The SPO ensures that an organization's projects are linked to strategic plans. It may be involved in facilitating the prioritization and project selection processes, and typically is intimately involved in resource allocation decision. The SPO also coordinates tacking of the current portfolio, analyzes portfolio performance and is instrumental in administering the stage-gate process for all projects. Implementing an SPO is discussed in more detail in Chapter 4.

Best Practices

The CBP's *Strategy & Projects* research study identified the following best practices in PPM. Organizations that consistently used these practices also ranked among the top-performing organizations in the study on organizational performance as well as project management performance metrics.

- A list of current projects (active, proposed, on hold) is documented.
- Projects are prioritized using a scoring system that uses strategic alignment as a criterion to determine the priority of the project with respect to other projects.

- Metrics are captured to assess the performance of the project portfolio.
- Performance results of the project portfolio are communicated to stakeholders.
- Reviews of portfolio performance and changes in the business environment may cause decisionmakers to realign the portfolio (killing projects or putting them on hold, re-allocating resources).
- Enough resources are in place to make the project portfolio achievable.

The most often used practice by high-performing organizations is having a documented list of the organization's current projects; they are also significantly better than average at having enough resources in place to make the project portfolio achievable.

The Buck Stops Here

Although PPM has long been languishing within IT departments among "those project management types," there is simply no way for top-level corporate leadership to hand off leadership on the project portfolio management issue. That's because choosing the groups of activities that create value is inherently a strategic activity. And, the basic issues that arise when developing a portfolio management system (not a software system, but a collection of processes … a PPM methodology) are issues that touch on organizational development. Writing in the *Harvard Business Review,* Jim and David Matheson identified some of the issues as:

- How can we aggregate our opportunities into manageable strategic projects?
- Who is the overall process owner? Who will facilitate the analytical process?

Have You Asked These Questions?

The following "quiz" will quickly reveal how well your company is managing the project portfolio.

- Does your portfolio reflect and support your business's strategy?
- Is each project consistent with business strategy?
- Does the breakdown of your project spending reflect your strategic priorities?
- Is the economic value of your total portfolio higher than what you've spent on it?
- Once projects start, is there very little chance they'll ever be killed?
- Are projects being done in a time-efficient manner?
- Are your success rates and profit performance results consistent with expectations?
- Is you project portfolio heavily weighted to low-value, trivial, small projects?
- How are opinions of senior people and key decision-makers in your business captured in order to make project decisions?
- Have you considered what the right balance of projects for your new product portfolio is?
- Are there redundant projects being performed?
- Have all the projects in play been justified on solid business criteria?
- And of those that were approved, are they still justified?
- Do the managers and team members know where the projects they are working on fit into the priority ranking that best supports the business?
- Are there enough resources to get the work done; and if there are not, what trade-offs need to be made?
- Which projects make the most money?
- Which have the lowest risk?
- Which have subjective value, in terms of community image or internal morale?
- Which are not optional—projects dictated by regulatory requirements, for example?

- How do we get top management and project leadership to buy in to the results?
- How will business and marketing units interact in the process? Should we use one cross-functional decision team for the whole portfolio, divide responsibilities by business or technical areas, or use a multilevel review structure?

These are not "project management" questions. The management of the corporate portfolio of projects is a strategic management issue. In summary, project portfolio management provides a consistent way to evaluate, prioritize, select, budget for, and plan the right projects—those that offer the greatest value and contribution to the strategic interests of the organization. When used effectively, portfolio management ensures that projects are aligned with corporate strategies and priorities that the portfolio contains the right mix of projects, and that resource allocation is optimized. It is the practice that bridges the gap between the executive decision process and project execution.

Chapter Three

Program/Project Management

Key Process #3

"100% of everyone's time should be taken up by projects."

—*Tom Peters in* Circle of Innovation

It's possible to enter into the SPM framework from several different angles. It is a tool for the implementation of corporate strategy, and the strategic view is one entry point.

SPM also is a model for the rational allocation of human resources, and so "people management" is another entry point.

And SPM is the logical outgrowth of the increasingly important role of projects, and project management, in today's organizations.

We make this point because of the baggage that "project management" carries for many executives—as well as for those who have worked on projects for many years. There is a distinct aura of low-level tactical concerns that hangs around project management, for many in the executive suite. Likewise, long-time project managers can be guilty of getting bogged down in the minutiae of the discipline and miss the important implications it carries for strategy execution.

The executive view can be witnessed in the widespread discussion of strategy in high-level business magazines like the *Harvard Business Review,* where hundreds of pages of text on strategy execution have been published without so much

as ever mentioning the words "project" "program" or "portfolio." Instead, we have initiatives, clusters of initiatives, strategic objectives, and tactical plans. One reason we wrote this book was to narrow the gap between what needs to be done (strategy) and the way it all happens (projects).

The New Project Management

What industries like construction have long known—that managing an endeavor with a fixed deadline, a unique product, and a budget cap is a very specialized art/science—is now being discovered by every industry where new products are the lifeblood of competition.

As industries work hard to compress product lifecycles, to reduce costs, and to improve the quality of their deliverables, they are increasingly turning to project management. A traditional part of the toolkit for construction and large government projects, project management now sparks interest wherever compressing time-to-market cycles is an issue—in other words, throughout the modern marketplace.

Today, multidisciplinary, team-based endeavors are recognized as the only way to stay adaptive and flexible enough to succeed in a changing marketplace. Many organizations that host projects now take a different tack: rather than forcing projects to fit within a bureaucratic structure, they embrace projects as an organizing principle. Projects are no longer "something extra"—they are the way work gets done at an increasing number of companies, from small start-ups to the likes of Hewlett Packard, IBM, USWest, Motorola, ABB and many others. More to the point, they are the way strategies are executed.

Yet many projects wind up in trouble. After nearly two decades of improving results, project failure rates rose in the Standish Group's 2004 *CHAOS Report* on software develop-

Projects are:

- Temporary endeavors undertaken to create a unique product or service.
- Activities organized to deliver something of value to a customer (and therefore to your organization.
- The building blocks in the design and execution of your organization's strategies.

Programs are:

Collections of projects that unify and leverage the contributions of projects in the portfolio; a program of projects may be established to meet a key strategic objective. Good project management is a fundamental building block of good program management.

Project management is:

The application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholder needs and expectations of a project. Meeting or exceeding stakeholder needs and expectations invariably involves balancing competing demands. These demands include scope, time, quality and cost; identified requirements (needs) and unidentified requirements (expectations) [Project Management Institute definition].

Management by projects or enterprise project management is:

A system—such as the SPM model—that integrates all the project activity within an organization and links it to organization-wide strategies, priorities, and resource pools. The most common infrastructure to support management by projects is the Project Management Office; at the enterprise level, where it is placed in the most capable organizations, we call this the Strategic Project Office.

Program/project management is accomplished through:

The application and integration of program/project management processes familiar to us all: opportunity assessment, initiation, planning, execution, monitoring/control, and closing, including lessons learned.

ment projects. Research by the Center for Business Practices in 2005 indicated that 1,660 out of 3,952 projects performed by the surveyed organizations were troubled—an average of $30 million of projects at risk per organization. America spends over $275 billion each year on about 200,000 software development projects, many of which fail. As IT moves out of the back office and into more mission-critical business processes like customer relationship management and e-commerce, the line between IT and other types of projects is blurring.

So the question is not "will our projects run into problems?" but "how can we devise an organizational structure that minimizes project problems, and helps troubled projects recoup effectively?"

In the drive towards more successful project delivery, there's been a shift of focus toward the business side of delivering products and services: a focus on the process and the business of managing projects.

Why Projects Fail

Infoweek magazine put it succinctly in their August, 1996 issue: "The major cause of project failure is not the specifics of what went wrong but rather the lack of procedures, methodology, and standards for managing the project." In other words, like any other essential organizational process, projects and programs need an official, institutionalized system of governance that will address the following common issues:

- Project managers who lack enterprise-wide multiproject planning, control, and tracking tools often find it impossible to comprehend the system as a whole.
- Ranges of acceptable project variances against key baselines are not established during project initiation or planning; thus a kill or recover decision is not made early enough.

- Poor project management/managers. Most of the reasons technology projects fail are management-related rather than technical. The old paradigm of promoting the best technical personnel to project manager level didn't work, since technical ability is a poor indicator of project management ability, yet many enterprises have no processes in place to ensure that project managers are appropriately trained and evaluated.
- There is a high correlation between lack of clear project sponsorship and failure. Executive support for/understanding of projects is lacking in many organizations.
- Accurate project resource tracking is imperative to successful project management, but many organizations are hampered by awkward or antiquated time-tracking processes.

But sound project management of individual projects is no longer enough. While there still are some instances in which a company is almost entirely focused on one or two major projects at a time—small software development firms or capital construction firms come to mind—the reality in most businesses is that dozens of projects exist throughout the company in various stages of completion (or, more commonly, of disarray). It wouldn't be at all uncommon for a company to have several new product development projects in process, along with a process reengineering effort, a TQM initiative, a new marketing program in the works, and a fledgling e-business unit. Widen the scope of your thought to take in facilities, logistics, manufacturing, and public relations and you begin to understand why most companies have no idea how many projects they have going at one time.

That's why, unless all the projects that a company engages in are conceptualized, planned, executed, closed out, and archived in a systematic manner—that is, using the proven

methodologies of project management—it is impossible for an organization to keep a handle on what activities add value and which drain the resources.

Why is it so important to institutionalize the program/project management processes? Imagine for a moment your organization without a financial management system:

- No documented procedures or systems
- No common understanding of processes
- No shared vocabulary
- No standards
- No data collection or reporting
- No knowledge transfer or management in the financial practice
- No history.

Definitely a nightmare, but this is how many organizations operate with respect to project management. In fact, in some ways the state of project management is even worse. Whereas our imaginary company with no financial processes in place would at least have entry-level employees with a four-year degree in accounting or finance, project managers are often crowned overnight, often with no clear training plan for the future in mind. Even if a company has standardized on a project management tool across the enterprise, they may have access to the methodologies inherent in that tool, but it's unlikely that everyone who works on project teams has had adequate training to make the best use of it. Thus the frustration of many project managers who bring projects in on time, on budget and to specifications—only to find they have a failure on their hands, since the customer requirements were wrong, or the market research was inadequate, or company strategy has changed since inception.

Best-in-class enterprises have a process of due diligence to turn ideas into projects, using a standard checklist, addressing such issues as sponsorship, project plan, roles and responsibilities and finance—in other words, a portfolio management process. They also have, set forth (at least at a high level) in their governance plan, standards for the management of projects and programs. Projects should be carried out in a standard, published way, with a project method that sets planning and control standards, review points, the nature and frequency of project management meetings and change control procedures.

How can an organization know whether or not their program/project management processes are sophisticated and standardized enough to support critical strategic initiatives?

Assessing Program/Project Management Process Maturity

Until just a few years ago, the concept of "maturity" was seldom used to describe the state of an organization's effectiveness at performing certain tasks. Today, we find this maturity concept being used increasingly to map out logical ways to improve an organization's services.

Existing capability maturity models originated in the software industry. Software development efforts typically include many more variables, unknowns and intangibles than many other types of projects. Because of this complexity, obtaining predictable results becomes a real challenge. Hence the extensive, government-funded research into how to measure and evolve an organization's effectiveness at developing software, which resulted in the Software Engineering Institute's Capability Maturity Model.

Applying project management concepts in any organization has many similarities to the complexities and intangibles

of software development. The evolution of project management typically lags behind development of other capabilities within a company. It isn't until the need for project management becomes critical that organizations pay attention to improving the project management skills within their organization. This lack of foresight frequently creates an environment where the project management systems and infrastructure are not in place to support the needs of the organization's strategic initiatives. Eventually, it becomes necessary to take a proactive look at the infrastructure necessary to progress in project and program management capability. In short, the need becomes so great that the organization must respond to growing business pressures.

Any model selected to measure project management maturity must point out a logical path for progressive development. It may not be so important to know you are a "Level 2" organization, but rather what specific actions you will need to implement to move the organization forward. Improving project management is a series of smaller steps, not giant leaps, and many organizations will never need to realize Level 5 in maturity. Many organizations will achieve significant benefit by reaching the repeatable process level area. In effect, a good model for the measurement of project management maturity creates a strategic plan for moving project management forward in an organization.

Model Description

The Project Management Institute's *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* is an excellent point of reference for starting an examination of project management capability. It is already an accepted standard, and there is a great deal of "best practices" information in existence around the knowledge areas outlined in the document. Unfortunately, this is a huge mass of knowledge to deal with.

Measuring an organization's effectiveness in any one of the areas requires that the area be broken down further into major components that relate that area to the successful implementation of project management.

The model that PM Solutions has developed utilizes the *PMBOK® Guide's* nine knowledge areas and is patterned after the SEI's CMM. The model has five distinct levels of maturity and examines an organization's implementation across the nine project management knowledge areas. Exhibit 3-1 shows the five levels from initial capability to optimizing, similar to the SEI CMM model.

Component Description

As mentioned previously, because the knowledge requirement is very large within each of the *PMBOK® Guide* knowledge areas, it was necessary to break down each of the nine areas into key components. This is where the real measurement of maturity takes place. For example, under the Scope Management knowledge area, there are six components that must be measured to effectively understand maturity:

- *Business requirements definition* is the assessment and development of processes, procedures, and standards relating to the collection of the business-related requirements of the project.
- *Technical requirements definition* is the assessment and development of processes, procedures, and standards relating to the collection of the technical requirements of the project.
- *Deliverables identification* is the process established to identify key items that are necessary to complete the project.
- *Scope definition* involves the processes in place to adequately define the scope, assumptions, and constraints of the project.
- *Work Breakdown Structure* component examines the formality with which an organization identifies the complete

Level I: Initial Process

- Ad-hoc processes
- Management awareness

Level II: Structured Process and Standards

- Basic processes; not standard on all projects; used on large, high visible projects
- Management supports and encourages use
- Mix of intermediate and summary-level information
- Estimates, schedules based on expert knowledge and generic tools
- Mostly a project centric focus

Level III: Organizational Standards & Institutionalized Process

- All processes, standard for all projects, repeatable
- Management has institutionalized processes
- Summary and detailed information
- Baseline and informal collection of actuals
- Estimates, schedules may be based on industry standards and organizational specifics
- More of an organizational focus
- Informal analysis of project performance

Level IV: Managed Process

- Processes integrated with corporate processes
- Management mandates compliance
- Management takes an organizational entity view
- Solid analysis of project performance
- Estimates, schedules are normally based on organization specifics
- Management uses data to make decisions

Level V: Optimizing Process

- Processes to measure project effectiveness and efficiency
- Processes in place to improve
- Management focuses on continuous improvement

Exhibit 3-1. Levels of project management capability maturity in the PM Solutions Project Management Maturity Model.

scope of work to be performed. This includes looking at the related dictionary.

- *Scope change control* looks at the process of incorporating additions, changes, and deletions to the project.

These six components are examined independently to determine the adequacy of defining and controlling the project scope. From a quick look at these six, it's easy to see that understanding the intricacies of project processes is a key element in determining project maturity. All the knowledge areas are similarly broken down and assessed.

In addition, there are three areas where PM Solutions has found significant influence on the adoption of project management practices. These three are project office, management oversight, and professional development. Each of these areas has special attention given it in the maturity model. In terms of the SPM governance model, the area of Management Oversight is of particular interest. The maturity level of this practice is both indicative of how successful projects can be, and indicative of whether management has made a commitment to creating the "execution culture. The amount of management oversight and involvement that key leaders of the organization have in the project management function to some degree determines how effectively strategy will be executed. The bottom line here is that if management isn't interested then it is unlikely that improvement will occur.

Setting Maturity Goals

How do you determine the present state of maturity? There are two kinds of assessments that can be conducted. The first assessment approach is the *independent assessment.* Project management experts, possessing a strong blend of project controls, organizational structure, project management, pro-

fessional development, and management skills, plus an in-depth understanding of the Project Management Maturity Model, would conduct the assessment. Using a prescribed set of tools and processes, these experts would determine your organization's maturity levels in the various knowledge areas and present the results to your management team. The management team and the assessors would then work together to develop your improvement plan. This independent approach is the preferred method when an external "expert voice" is needed to communicate to senior executives.

The second assessment approach is a *facilitated assessment.* A small team of experienced assessors team with representatives from your staff to conduct a "self-assessment." Following the same procedures that an independent assessment would follow, this team of individuals determines your organization's maturity levels in the various knowledge areas. The team would then work with your management staff to develop an improvement plan to achieve your desired maturity level. The primary challenge in the "self-assessment" approach is maintaining the confidentiality of individual findings. The assessment fact-finding activities include staff interviews. The quality of the information provided in these interviews can be skewed if staff members are not comfortable sharing "negative information" to other staff members. The "self-assessment" approach can also suffer from an inherent bias towards a higher level of maturity; no one likes to hear they are at Level 1 maturity.

The benefits of a structured assessment lie in setting direction, prioritizing actions, and beginning cultural change rather than in understanding the current level at which an organization is performing. The emphasis is on "structured." It is important that the assessment itself be repeatable, provide consistent measurements and results, and provide for some

degree of benchmarking with other organizations. This provides the basis for any assessment to be utilized as a "check-up" tool to measure progress, and identify the next logical steps forward.

Too often we see the implementation of new tools or techniques as a panacea that will solve all of our problems. Maturity models can be misapplied the same way. First, there is the possibility of error in the performance of the assessment. Determining the correct level of maturity in an organization is something less than science but more than art. There are many factors that go into determining this level including individual interviews, as well as evaluating artifacts, processes, standards, knowledge, and company culture. So there is a subjective nature to determining the level of maturity, although it's unlikely that a wide margin of error will occur. It is extremely important to use an assessment tool that has been tested and proven to achieve consistent and correct results.

Additionally, the results of an assessment can be misused. An assessment should really be aimed at providing a path forward for the organization in improving its project management capabilities. Typically, organizations start with a baseline assessment of their current situation. This is accomplished by performing a comprehensive assessment evaluating all areas where project management has an influence. From here, a periodic, abbreviated assessment can indicate where progress is being made in the application of project management methodologies. The baseline assessment enables an organization to identify those areas that will provide the greatest return on investment and will show where immediate actions will have an impact.

Striving to increase the maturity level just for the sake of having a higher level is an unwise use of the tool. In our experience, the benefits associated achieving a Level 5 maturity

in one knowledge area may be erased if the other knowledge areas are all at Level 2 maturity.

Level 5 maturity is not for everyone. Each organization needs to determine the minimum level of maturity at which the return on the investment is achieved, and then determine the ROI associated with achieving the next level. It is important to realize that these levels are evolutionary steps. We recommend that our clients establish an incremental improvement program with specific focus and measurable goals that allow your organization to realize some benefits within a short period of time. We recommend 6-month increments, whenever possible.

We have also found it beneficial to maintain project management maturity in synch with other corporate process maturity, including financial management, software engineering, etc. For instance, implementing mature project management processes such as earned value tracking is meaningless if the organization has not implemented time reporting processes. Experience shows that advancing project management practices far ahead of other corporate processes can cause turmoil and mistrust.

If the Strategic Project Office owns the project management capability improvement action, then the results of the assessment can be attributed to the actions taken by the SPO to improve project management capability. It is possible to use these measures as the basis of incentive rewards.

Key Findings from Project Management Maturity: A Benchmark of Current Best Practices

Research by the CBP on organizational maturity levels, reveals that improving the level of project management maturity results in significant performance benefits, especially

in customer satisfaction (30% of organizations showed more than 25% improvement). Yet, at this writing, organizations are fairly low in project management maturity—almost 90% of organizations are at Level 1 or Level 2. Nevertheless, overall project management maturity grew by 26% from 2001 to 2006, and the biggest improvements were in risk management, followed by procurement management and cost management.

What Sets High Performers Apart from the Rest

- High-performing organizations are significantly more mature (average level of maturity - 2.05) in their project management practices than organizations in general (average level of maturity - 1.49).
- The most significant difference between high and low performing organizations is in allocating resources optimally and in estimating accurately.
- High-performing organizations are very good at satisfying project customers and in completing projects on schedule.
- A significant percentage (23%) of high-performing organizations are at Level 5 maturity in quality management.

What Set Low Performers Apart from the Rest

- Low-performing organizations are significantly less mature (average level of maturity - 1.05) in their project management practices than organizations in general (average level of maturity - 1.49).
- Low-performing organizations are significantly less mature than other organizations in all project management knowledge areas, and they are particularly poor at risk management.

- Almost all (96%) low-performing organizations are at Level 1 in project management maturity.
- A significantly high percentage (66%) of low-performing organizations are at Level 1 maturity in quality management.
- No low-performing organizations are above Level 2 maturity in time management or risk management.

Integrating the Program/Project Processes

The Program/Project Management Processes are familiar to project management practitioners, but in the integrated, enterprise-wide environment promoted by the SPM model, there are a few key differences to note.

Opportunity Assessment. While usually thought of as a "project management process," this process for identifying and screening program/project ideas to meet minimal criteria based on alignment to strategy and feasibility, in the integrated enterprise, occurs at the interface between strategic planning and portfolio management. The projects and programs thus selected and prioritized then become inputs to the initiation process.

Initiation. This process, usually defined as "formally recognizing new program/project, verifying feasibility and strategic alignment, and documenting business objectives, business needs, and customer requirements" also takes place in part at the portfolio management level. In the SPM approach, program/project strategy management is part of the initiation process, and is critical to ensure that project definition and development are comprehensively considered and that they

properly relate to organizational strategies and objectives. Program/project strategy typically covers the entire project lifecycle, with review and optimization occurring at specific points as the strategy is progressively developed.

Planning. With the planning process, we enter the realm of project/program management. Project management excels at this process for stakeholder agreement of program/project objectives, scope, deliverables, approach and plans for carrying out the program/project. Planning deliverables become a part of the flow of information back up to the portfolio level, where they can be formally resourced and funded.

Execution. Now managers and teams carry out the work planned; manage the scope of work; and coordinate people and resources. After the portfolio of projects is selected, the organization needs to manage the projects well—conduct the research, develop the new product, design and implement the new information architecture, or develop the new business process. Simply selecting the right projects is not enough; the business needs to manage project execution and practice sound project management. Doing the right thing starts with strategic focus and ends with project selection. Doing the right things right (and quickly) is project management.

Monitoring and Control. This process for measuring program/project performance to identify variances from the plan; communicating status; assessing and responding to risks is key to individual projects; but in the enterprise-wide SPM model, information about all projects and programs must roll up to the strategy level as well. In tracking the programs/projects, metrics are captured to assess the performance of the program/project against the program/project plan. In the

SPM approach, each program/project must pass decision gate evaluations to determine whether or not to continue, to put it on hold, or to kill it altogether. Review of the program/project involves a re-verification of critical success factors—including resource availability and the continued validity of the business case—with the business sponsors. Program/project re-planning may be required, including changes in resource allocation and scheduling. These factors may also influence the strategies and objectives of the organization which requires performance reporting to appropriate management levels.

Closing. This process assures that all required work is complete and program/project information is captured, including lessons learned. In the strategy-focused organization, lessons learned become something more than history: they become inputs to the next round of strategy management, indicating needed changes in processes, opportunities for efficiency, necessary new improvement projects, and so on. Far from being a static library about past achievements, they must be pumped back into the process allowing the organization to learn more about itself, its capabilities, its capacity, and its processes. "Knowledge management" is a more descriptive term for the closing processes under the SPM model.

Best Practices In Program/Project Management

In the CBP's *Strategy & Projects* study, the following best practices were identified:

- The organization's strategic objectives are an input to the project initiation process.
- The organization has a process for identifying project opportunities and determining if those opportunities are in line with the corporate strategic direction.

- Review of the program/project involves a reverification of critical success factors—including resource availability and the continued validity of the business case.
- Project performance is monitored (schedule variance, budget variance, earned value).
- Program/project performance feedback is used for managing strategy execution.

The most often used practices by high-performing organizations are monitoring project performance and having a process for identifying project opportunities and determining if they are in line with the corporate strategic direction. Organizations identified as top performers by the study also were significantly better than average in using program/project performance feedback for managing strategy execution.

In a 2004 study, Gerald Kendall gathered the following best practices related to "multi-project management"—a term that, under the conditions of the study was an umbrella for both programs and portfolios of projects by a group of organizations that claimed to achieve 70 percent or better of their projects completed on time and within scope:

- Visibility of the processes to senior management, with their involvement, which includes regular and timely status reporting to senior management and program management, and which is used to facilitate multiple business unit and product integration
- Stage/gate project reviews, especially those conducted by the Governance board with staged funding, which brings "faster kills and better clarity on risks" and also helps to prioritize new projects early on
- Prioritization of all projects, based on their value proposition with tangible ROI

- Much better resource management and allocation
- Consistency of applying best project management practices to all projects.

Finally, according to the UK Office of Government Commerce, there are nine key differentiators for organizations that carry out superior program management

- The executive level has overall responsibility for governance of project management.
- The roles, responsibilities and performance criteria for the governance of project management are clearly defined.
- Disciplined governance arrangements, supported by appropriate methods and controls, are applied throughout the project lifecycle.
- A coherent and supporting relationship is demonstrated between the overall business strategy and the project portfolio.
- All projects have an approved plan containing authorization points at which the business case is reviewed and approved; decisions are made at authorization points and recorded and communicated.
- Members of delegated authorization bodies have sufficient representation, competence, authority and resources to enable them to make appropriate decisions.
- The project business case is supported by relevant and realistic information that provides a reliable basis for making authorization decisions.
- The board or its delegated agents decide when independent scrutiny of projects and project management systems is required, and implement such scrutiny accordingly.

- There are clearly defined criteria for reporting project status and for the escalation of risks and issues to the levels required by the organization.

In summary, while organizations cannot hope to achieve their strategic goals without sound management on the project level, at the same time, project and programs are managed most effectively in an organization where strategy is well managed. The SPM framework sets up a system where synergy between these levels of the organization can thrive.

CHAPTER FOUR

Structure

Building the Execution Environment

AS EARLY AS 1916, Henry Fayol, in his book *General and Industrial Management,* emphasized the importance of structure—of creating the lines of authority and responsibility for the organization.

Corporate strategy affects the choice of organizational structure. At the same time, organizational structure can either impede or facilitate the execution of corporate strategy. To execute strategy effectively, managers must make sound decisions about structure and develop methods or processes to achieve the needed integration of structural units.

Structure and Strategy

Organizational structure—the grouping of people and reporting relationships, the rules and procedures that determine what people in various groups do, the patterns of interactions fostered by such grouping, rules, and procedures—determines the speed of adaptability to changing environments. Structures take on many forms, all of which have different effects on the speed at which change can be brought about. Research and experience tells us that when you want to execute strategy quickly, be capable of adjusting to changing markets, and stay focused on the actions that will move the enterprise forward

towards long-term goals, the best organizations are structured for goal achievement. Bureaucracy is minimized, staffs are small, there are few layers of management, spans of control are broad, and information flows freely.

Yet this does not describe the majority of organizations. As we discussed in Chapter 2, the ideas people have about how work could best be accomplished often are far ahead of where companies actually are. The present organizational structures— functional silos locked in a pyramid of bureaucracy—were bequeathed to us by the Industrial Age and, like a giant battleship, are hard to turn around.

Functional Organizations and Their Legacy

Dr. Frank Toney, founder of the Project Management Benchmarking Forum, has done extensive research into the effects of organizational structure on project and program success. Using both meta-analysis of the literature and action research methods in the Forums, Toney identified a host of dilemmas resulting primarily from a functional structure as well from organization size.

As organizations become larger, functional units become increasingly independent; fewer and fewer opportunities naturally arise for cooperation and integration of processes at the lower working levels. Functional managers may be reluctant to share projects with other areas or relinquish control when project-related activities leave their area.

As organizational size increases, leadership becomes progressively distanced from the working groups. The addition of each layer of management makes it more difficult for the leader of the company to communicate the organizational vision and goals of the organization to lower levels of management and workers within functional areas. Thus, communications between functional areas become strained as each incre-

ment of organizational growth results in the insertion of additional layers of management filters and information barriers. The formal communications track becomes longer and more difficult to traverse. Under such a situation, it's not surprising that, as we noted in the Preface, few corporate strategies are understood or enacted at the project and operations levels of the organization.

Enter Projects

The concept of the project as an organizing principle and a management specialty—with its own techniques, tools, and vocabulary—had its beginnings in the 20th-century military. These military origins help to explain why the initial focus in projects was on planning and controlling. In fact, control might be considered the raison d'etre for project management: control of schedules, costs, and scope on endeavors that otherwise might careen over budget, over time and/or fail to meet specifications.

At the same time, in spite of the focus on control, projects have tended to feel "out-of-control" … and frequently to run amok in fact as well as feeling. This "out of control" feel stems from the way projects were superimposed on existing bureaucratic structures, with their bulky communications mechanisms. Obeying the strictures inherent in the hierarchy and at the same time acting for the best interest of the project has been difficult at best—and often downright impossible. But this is the model we began from in project management. No wonder projects have felt uncontrolled, mysterious; no wonder project management developed a reputation as both science and "art."

Most projects conducted within functional departments do not have executive-based authority. As a result, they have limited access to resources and face numerous challenges

when working with other functional and geographic groups. To further complicate matters, most employees in functionally structured organizations already have a full-time job. When a project is initiated, the time required to participate is often committed at the sacrifice of day-to-day job accomplishment. It's rare in such an organization to find professional, trained project managers; so, projects are executed in an ad hoc manner. Project time to completion is excessive. Project performance is difficult to evaluate as there are few measurement metrics. The functional organization structure tends to undermine the authority and decision-making capability of project managers, making project success more difficult.

As for human performance, if individual or group performance is evaluated based on measurable output, such as encountered in sales and production departments, projects are often viewed as counterproductive and a distraction from the core activity. Where commissions or performance-based bonuses are involved, contributing time to the project may even reduce the participant's income. In such situations, most projects simply don't get done or are performed in a hurried manner—hardly desirable when it is only via projects that the important organizational changes decreed by strategy can become a reality.

Inside the Matrix

When project management's early tools—Gantt charts, network diagrams, PERT—began to be used in private industry, the new project managers faced a hurdle: business was also fashioned on the command-and-control model. Putting together an interdisciplinary team was a process fraught with bureaucratic roadblocks. The earliest uses of project management—in capital construction, civil engineering, and R&D—imposed the idea of the project schedule, project objectives,

and project team on an existing organizational structure that was very rigid. Without a departmental home or a functional silo of its own, a project was the organizational stepchild—even though it may have been, in terms of dollars or prestige, the most important thing going on. Thus was born the concept of the "matrix organization"—a stopgap way of defining how projects were supposed to get done within an organizational structure unsuitable to project work. It was a "patch," to use a software development term—not a new version of the organization.

The matrix project organization structure is based on appointing a project manager from within a functional area. Usually the project manager still has a full-time job and is reporting to a functional manager. Team members and financial resources are "borrowed" from other departments. Team members have two bosses, the project manager and their functional unit managers. The governance of such a structure depends in large part on the project manager's finesse and persuasion. In essence, team members only follow the project manager because of leadership skills rather than the strength found in formal authority.

If this sounds like "a heck of a way to run a business," you are right. The matrix organization attained a kind of fad status in the 1970s and 1980s. Its theoretical benefits appeared so inviting that it was applied by organizations to the management of nearly all large multifunctional projects. Companies embraced the concept in hope of getting something for nothing—as a way to use existing people and resources to execute projects within the cultural confines and constraints of traditional functionally organized enterprises. However, these desired results rarely materialized. Organizations found that executing large multi-functional projects with a matrix structured project team, within functional departments, often

resulted in an imposition on employees who were already performing a full-time job. Particularly in performance based organizations such as manufacturing or sales, applying the matrix managed projects within the organization reduced the measurable output of the group. The "borrowed resources" element of the matrix equation also proved difficult; particularly, when the resources that the project team was trying to borrow were scarce funds and people.

In his book, *Project Management Strategic Design and Implementation,* David Cleland reviews the research and literature associated with matrix project organizations. He quotes Texas Instrument as announcing that their attempt at matrix management was a key reason for their economic decline. Xerox said that matrix management proved to be a deterrent to product development. Other cases cited concluded that the matrix style of project organization was more cumbersome and costly than an independent project organization. Further results from the PM Benchmarking Forums has shown that using matrix organizations to execute large multi-functional projects is consistently less successful than utilizing full-time project managers and team members.

Many of the problems associated with the matrix design have to do with the inability of the upper managers to work out the required power sharing; imbalance of power between departments and projects inevitably causes conflicts to arise on the projects. The matrix structure contains no inherent methods for conflict resolution, so without proper power sharing among upper managers, project managers are left to fend for themselves. A study of matrix organizations cited by Jeffrey Pinto found that the three most intense areas of conflict (schedules, priorities, and personnel resources) result from the split-authority problem between project managers and functional departments.

In recent years, as organizations have noticed that the rise in cross-departmental work has created problems in quality, customer service, and cycle time reduction, a new "super-function" has been born: one that exists to work, and provide value, cross-functionally. Variously called the Enterprise Project Management Office, the Strategic Project Office, or even—and probably most accurately—the Office of Strategy Management, this addition to organizational structure seeks to maximize business results by having the project management function report to an executive, or executive committee, whose authority extends across multifunctional business units. At last, the discipline that delivers results had an organizational home.

What Works: The Strategic Project Office
(Office of Strategy Management)

The key organizational structure for promoting effective strategy execution is the Strategic Project Office (sometimes called the Office of Strategy Management). Key roles of this organizational structure include:

- Developer and custodian of the SPM Framework: the standards, processes, and methodologies that improve strategy execution performance organization-wide
- SPM consulting and mentoring to insure alignment with strategy at all levels (organizational and individual)
- Design and report on strategy performance measures
- Manage the strategy performance process—via oversight of the project portfolio
- Create a comprehensive communication and education process focused on strategy execution

- Work with senior executives to shape the agenda for strategy review and learning
- Identify and oversee management of strategic initiatives (portfolios, programs, projects)
- Facilitate processes to identify and share best practices
- SPM library, where information on objectives, budgets, progress and history are stored
- Facilitate the strategy execution processes
- Integrate the elements of the SPM context.

We call this center of organizational focus on projects the Strategic Project Office (SPO), but whatever you name it, a home-base for project managers and project management is a must for organizations to move from doing a less-than-adequate job of managing projects on an individual basis, to creating the organizational synergy around projects that adds value, dependably and repeatably, to the entire portfolio. The only way to maintain a global sense of how a company's strategic projects are doing is to have this sort of project focus point.

Business Case and Implementation Strategy

In 2000, the Gartner Group proposed, as a "Strategic Planning Assumption" for companies, that organizations that establish enterprise standards for project management, *including a Project Office with suitable governance* (italics ours), would experience half as many major project cost overruns, delays and cancellations as those that failed to do so. Many organizations jumped onto the Project Management Office (PMO) bandwagon, with mixed results. Often PMOs have been put in place without being fully thought through or properly staffed. In our award-winning 2001 book, we offered a blueprint for project offices based on research, practice and experience, which is

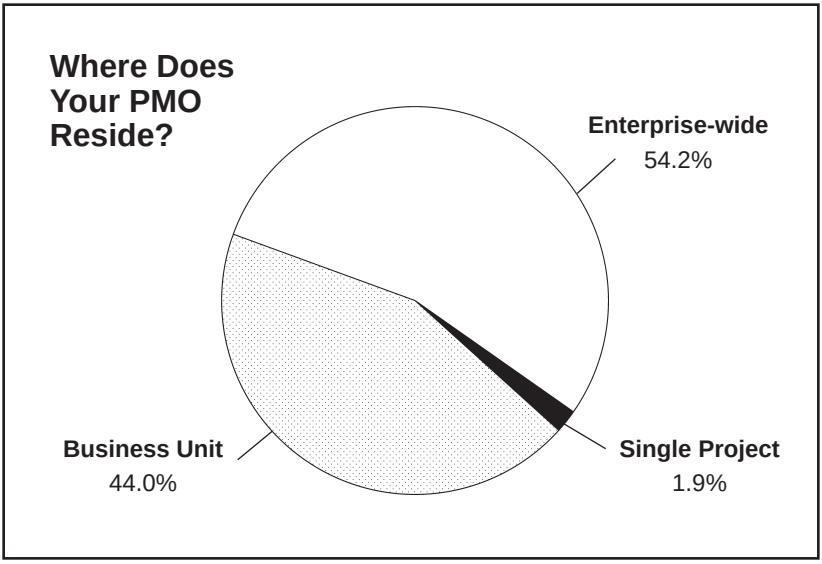


Exhibit 4-1. Companies are realizing that only the enterprise-level Strategic Project Office (SPO) can answer the challenge of strategy execution. In a recent study, over half the respondents reported having enterprise-level PMOs. (Source: *The State of the PMO 2007,* Center for Business Practices.)

briefly summarized in this chapter. The project office we envisioned at that time has since taken hold in organizations: 2007 research on the *State of the PMO* found that enterprise-level, strategic PMOs are becoming the most common organizational structure for execution of strategic projects and programs (see Exhibit 4-1). These Strategic Project Offices (SPOs) sit at a high level in their organizations, typically reporting to a C-level executive—sometimes the CEO (Exhibit 4-2). SPOs address both ends of the corporate dilemma: the reasons for project failures, as well as the reasons for strategy failures. In the SPO, strategy and projects meet and work together seamlessly for the good of the entire organization.

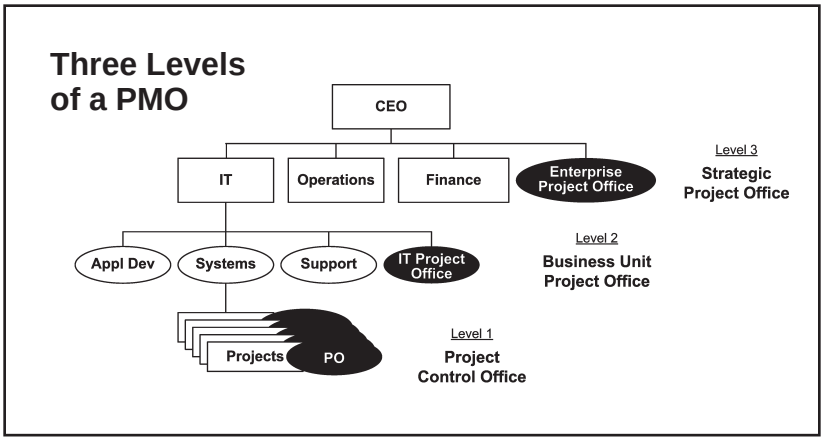


Exhibit 4-2. Organizational Placement of the SPO. The single-project and divisional PMOs—Types 1 and 2—still exist in many companies; they may continue to have a role even after the deployment of a Type 3 SPO.

A study published in the *Project Management Journal* (Sauer, et al.) focused on the ways that project-centered companies build the organizational capability to manage the project portfolio. They found that organizations with the ability to leverage projects for competitive success display the following organizational features:

- **A different view of the role of executive management.** They "reframe the management task" so that the enterprise's objective is to improve the way the organization manages its project managers and its project management processes. Improved performance on individual projects follows as an outcome of the redesigned management structure and processes. This "systemic approach" contrasts with many organizations' habit of focusing on and intervening in on individual projects on a case-by—case (often, crisis-by-crisis) basis, rather than the enterprise level.

- **A flat organizational structure.** The authors found flat structures with no more than two levels separating project managers from the board, thereby ensuring ready access to powerful decision-makers. They also found that functional departments are relatively small and therefore act as support units rather than empires that compete with projects. This structure clearly signals the importance of projects to the business. The result is that projects can be managed with the minimum of internal tensions and conflict. By having weak functional authority, the organization ensures that project directors are able to command organizational resources as and when they need them. By positioning project directors either as executives or as direct reports to that level, the organization secures strong identification with the corporate interest and commensurate accountability.
- **Streamlined reporting processes.** The flat structure's short lines of authority combine well with tight and frequent reporting and control processes to ensure that the organization concentrates on project performance. Informal reporting keeps the project director informed about progress and difficulties, sometimes several times per day. This eradicates the long-lamented disconnect between project management and executive management—and thus between projects and strategy.

Why Strategic Projects Fail

Project managers asked to manage a project with no methodology, no procedure, and no process to support them is going to be challenged to keep that project under control. When individual project managers do succeed, it's often the result of heroic individual efforts—not something the organization

can reliably repeat. Some reasons for project failure on which establishing an SPO can have a direct impact include:

- Project managers who lack enterprise-wide multi-project planning and control skills and tools often find it impossible to comprehend the "big picture." Thus projects get worked on individually, but overall company priorities aren't necessarily supported.
- Projects are not actively and realistically tracked and managed throughout execution. Thus change, kill, or recover decisions are not made early enough.
- Most organizations promote proficient technicians instead of developing needed project management skills. Thus many organizations have raised a crop of project managers who are administrative in outlook—reactive managers who merely report trouble after it has occurred, rather than being able to take responsibility for outcomes and act to resolve problems.
- Executive support for/understanding of projects is lacking in many organizations, and there is a high correlation between lack of clear project sponsorship and failure.

What We Can Do About It

Many of the best practices for preventing failures are directly related to SPOs:

- A repository for best practices in planning, estimating, risk assessment, scope containment, skills tracking, time and project reporting, the SPO maintains and supports best practices for the project manager, providing the organization consistency in project performance.
- Project managers must be competent: able to define requirements, estimate resources and schedule their delivery, budget and manage costs, motivate teams, resolve

conflicts, negotiate external resources, manage contracts, assess and reduce risks, and adhere to a standard methodology and quality processes. Such project managers are grown in an environment that trains, mentors, and rewards them based on performance in projects—an environment best created under the oversight of the SPO.

- Project metrics and milestones must be defined, measured, and reported in a consistent manner. Setting up such processes is a core activity of the SPO.
- Critical dates must be monitored via enterprise time tracking software—usually Web-based for ease of use. This is a necessity for larger projects, multi-project environments, and dispersed project teams. Enterprise-wide software implementation and multi-project oversight cannot be well managed except by an SPO.
- Project portfolio management—the systematic selection, prioritization, and evaluation of projects across the enterprise— cannot be effectively engaged in without an SPO.
- Projects must be carried out in a standard, published way, with a project methodology that sets planning and control standards, review points, the nature and frequency of project management meetings and change control procedures.
- Enterprises should harvest best practices and lessons learned, and identify reuse opportunities in order to lay the groundwork for future success.

Most organizations have approached bringing project management into their organization by implementing enterprise project management software tools, or launching a training program. The frequent failure of these one-dimensional approaches has shown that implementing project management is a multi-faceted initiative that involves a combination of processes, skills building, enabling tools, as well as organiza-

tional and change agents. To succeed, these types of initiatives require the organization, coordination, and sponsorship of an enterprise-level SPO.

It's in the SPO that the value-adding mechanisms of a PMO really reach warp speed. At the corporate level, the SPO serves as a repository for the standards, processes, and methodologies that improve individual project performance in all divisions. It also serves to deconflict competition for resources, and identify common resources that could be used across the enterprise. More important, an SPO allows the organization to manage its entire collection of projects as one or more interrelated portfolios. Executive management can get the big picture of all project activity across the enterprise from a central source—the SPO; project priority can be judged according to a standard set of criteria, and projects can at last fulfill their promise as agents of enterprise strategy. The Gartner Group has identified five key roles for a PMO, all of which are most effectively carried out at by an enterprise-level SPO:

- Developer, documenter, and repository of a standard methodology: a consistent set of tools and processes for projects
- Resource evaluator: Based on experience from previous projects, the PMO can validate business assumptions about projects as to people, costs, and time; also a source of information on cross-functional project resource conflicts or synergies
- A competency center and library for previous project plans
- Project management consulting center: providing a seat of governing responsibility for project management; perhaps staffing projects with project managers or deploying them as consultants.
- Project review and analysis center: a knowledge management center where information on project goals, budgets,

progress, and history are stored—both during the project life cycle and after, in the form of lessons learned.

We should note that, while PMOs most often began in the IT function, organizing around projects is not "an IT thing." Project offices have arisen first in IT because of the competitive pressure to make IT projects work. IT is one of our primary drivers of economic prosperity; America spends over $200 billion annually on software development projects—many of which fail. That IT project offices have been proven to reduce waste, bring projects in on time, and improve morale should be a wake-up call for all areas of the corporation, in all industries.

"Project sponsors and managers need 'islands of stability' to guide teams and to ensure the integration of project deliverables into the organization," write Cominos and Verwey in *Research Technology Management.* "Without this stability, project results will not align with organization strategy and stakeholder expectations. Project participants and stakeholders will have difficulty comprehending the project's contribution to the organization's vision, resulting in unproductive activity and high levels of demotivation and frustration." The elements of stability—a sustainable corporate strategy, a project management culture, capable and adequate human capital to deliver results, and a clear link between project activities and strategy —is achievable. However, it won't be achievable by a fragmented organization in which projects are one problem, strategy another, and human resources something separate. The Strategic Project Office offers the hope of creating the island of stability in today's chaotic organizational life. However, all the organizational-improvement potential of the SPO that we have discussed in this chapter is dependent on the knowledge and skills of project managers, team members, and other project personnel. Therefore, staffing the Strategic Project Office—discussed in Chapter 6—is the keystone to realizing the business potential of project management.

Functions and Roles of the Strategic Project Office

Many companies operate with Type 2, or business-unit-level PMOs (see Figure 4-2). How does the SPO increase value over this type of organization? Consider an organization with multiple business units, multiple support departments at both the business unit and corporate level, and ongoing projects within each unit. A Type 2 PMO would have no authority to prioritize projects from the corporate perspective, yet corporate management must select projects that will best support strategic corporate objectives. These objectives could include profitability goals, market penetration strategies, product line expansion, geographic expansion, upgrades to internal information management capability, to name just a few. Only a corporate-level organization can provide the coordination and broad perspective needed to select, prioritize, and monitor projects and programs that contribute to attainment of corporate strategy. Only the SPO can appropriately serve as center for transforming the organization around the SPM model.

There are seven primary components to any PMO, which grow in capability and complexity as the PMO takes on more strategic responsibilities and morphs into an SPO. Notice how these areas of responsibility map to the SPM model components.

Processes, Standards and Methodologies

(Governance, Strategy Management)

A primary role is as developer and maintainer of the processes and methodologies pertaining to the management of projects as well as the management of strategy. It serves as a central library for these standards, and the expert on their deployment. The SPO also incorporates lessons learned on projects nearing completion into the project management methodology. As the

keeper of these standards, the PMO also maintains the templates, forms, and checklists developed to ease the paperwork burden on project managers, teams, and executives.

The methods and standards function may also serve as a quality audit and continuous improvement function for project management. Methodologists understand what should be done in terms of methodology and process and can audit whether or not it is being done and, if so, whether or not it is showing value and productivity.

Project Managers
(People)

The SPO takes charge of the development of professional, proactive managers. Initially, the SPO must aggressively follow a three-point strategy for getting top-flight project managers in place: new project managers may be hired or contracted for while, at the same time, personnel with promise may be developed within the organization. Coordinating both the efforts and the development of project managers from diverse sources is a critical role.

In the fully deployed SPO, project managers actually report to the SPO and are deployed to projects either as full-time managers or on a part-time basis. The SPO maintains a database of project managers, their skill sets, capabilities, specialties, experience, and technical skills. New projects can be staffed from this database, while project managers between full-time assignments work on special projects such as developing new processes, methodologies, techniques, templates, and capabilities. A highly competent project manager is too valuable to be idle just because he or she is between projects: this infrastructure development aspect of the SPO allows the organization to derive full value from a project manager's expertise and experience as well as avoid the high cost of turnover.

Training/Professional Development

(People/Culture)

One of the biggest challenges in most organizations is that they have subject matter experts (technology gurus in IT organizations; clinical experts in pharmaceutical R&D organizations), but few professional project managers skilled in the disciplines of project management (planning, scheduling, communicating to uncover problems, resolving and removing problems, reworking the project and communicating with stakeholders to meet objectives). The SPO is the center of focus for project manager and team training and development. It identifies competencies needed by high-performance project managers and for executive awareness and team member participation. The SPO participates, with a specialized project management training vendor typically, in tailoring standardized courses around the culture and methodologies that apply to the organization specifically. Just as important as contracting for training is the development of promising project managers into high-performance project managers. Such professional development includes training but begins with identifying project manager competencies, then hiring for or identifying those competencies in-house, creating performance metrics that reward project managers for the right behaviors, and so on.

Project Support

(Program/Project Management; Performance Management)

With an appropriate level of technical support, project managers can focus on the things at which they can have the greater impact. In a fully staffed SPO, the project support group performs the science of project management, as opposed to the art. They are responsible for estimating and budgeting, including cost estimating and capital estimating. They develop plans and schedules and provide status updates, pulling data from

time collection, timesheets, and the financial system to update the status against the plan. They perform variance analysis, and are also critical to change control.

Project support also entails keeping a project repository, which may be as simple as a book, or as complex as a knowledge management system. Project support also maintains issues tracking and handles progress reports; thus the project support organization is responsible for the executive dashboard. Project support acts as a resource broker with functional heads to ensure the right resources are working on the right projects at the right time.

If the organization does not have direct access to cost information at the project level (through integrated enterprise-wide software), a lot of legwork is required to provide project managers with current, accurate, and complete cost information. Members of the project support team within the SPO literally "mine" cost tracking information they need from available data sources.

These metric-tracking responsibilities reflect the Performance Management role of the SPO—tracking and evaluating not only project performance, but portfolio performance as well.

Finally, project support handles all issues surrounding the project management software support—a category of responsibility so large we have also named it one of the central components of the SPO.

Software Tools

(Information Technology/Performance Management)

The SPO centralizes the establishment and maintenance of project-related software tools, maintains project management software standards, and acquires project management software and supporting software (time collection software, time reporting software, configuration control software, documentation software, knowledge management software, database

software, spreadsheets and other applications). The project support group identifies software, facilitates or performs the integration and use of software, and maintains and monitors its performance. Where other enterprise applications are in use, to the extent that their functionalities play a role in strategy deployment, the SPO may also have an IT oversight role.

Mentoring and Coaching

(People/Culture)

When another department in the enterprise wants to manage a project themselves, the SPO can provide expert assistance in the form of mentoring and coaching for the staff involved. This also provides an audit function for existing projects to determine how effectively the project management process is being utilized within the organization.

The entire organization should view the SPO as a source of experts with focused ability in project management. When a project needs additional oversight and guidance to achieve project recovery, the mentor can help develop workaround plans, new estimates of cost, resource reallocations, and replanning. Finally, mentors and coaches from the SPO are the logical personnel to do project assessments or audits.

In sum, the role of project mentors and coaches is to transfer the knowledge they have developed to project managers and project teams to enable them to perform better on current and future projects. Knowledge transfer is the key, since mentors are not provided on a continual basis.

Portfolio Management

(Strategy Management/Performance Management/Program/Project Management)

As a central clearinghouse for project information, the SPO is the owner of the portfolio management process, coordinat-

ing between project level and portfolio level to make sure that decision makers have the best information in the most accessible formats. The investment decisions reflected in the portfolio form the blueprint for the work carried out by the project managers and teams within (or mentored by) the SPO.

Implementation

For project office success, executive management must be wholly supportive of the project office and clearly communicate its support across the enterprise at all levels. The project office should be positioned at the top of the organizational structure where it crosses functional boundaries and has the visibility necessary to influence. Metrics must be established, followed, and tracked to determine project return on investment.

Implementations will go more smoothly if the cultural aspects are looked to first (see Chapter 5).

Introduce the need for a project office and set the stage for its acceptance by explaining why—not how, what, or who. Get buy-in from all factions during design and deployment. Collect user requirements, design ideas, service solutions, and key knowledge areas before you start the design stage. Deal with problem interfaces before they become sources of conflict.

In any organizational change initiative, the executive staff must establish vision and direction. Under the SPM model, this vision should logically derive from corporate strategic planning.

It isn't necessary for executives to become project managers; but it is necessary that they enthusiastically support—with words, actions, and funding—the SPO implementation project. Once the initiative is in place and the projects that fall under it are gearing up, the executive staff has minimal involvement in day-to-day project activities.

There are two specific ways in which executives play a key role:

Proper Chartering

As one of the architects of the charter for the PMO, the executive must take responsibility for placing the PMO in the appropriate organizational niche (see discussion of project levels, above). Appropriate placement means not only specifying the responsibilities of the PMO but also matching to those responsibilities appropriate levels of funding, staffing, and organizational clout. Staffing, as discussed earlier, may include in-house personnel, contracted staff, and new hires—the executive should commit to doing whatever is necessary to bring on board the project management talent without which the PMO initiative is likely to fail.

Creating Change

A project management initiative changes the way people work. Therefore, the sponsoring executive leadership must plan for and support the kind of activity necessary to change the behavior of organizations. The specific activities may vary from company to company based on their culture, but the executives' role in this process is pivotal. In summary executives need to:

- Value the new process, and show it by being
- Vocal in their support of the process,
- Vigilant in carrying out the new process, and
- Visible in their support of the process.

The Project Office Steering Committee

As the liaison between senior corporate management and the SPO project team, the executive sponsor should be the chair of

the SPO Steering Committee. This committee is normally made up of the chair (who may be the COO or a Senior Vice-President), the director of the SPO, select heads of key functional organizations (members of business units affected by the project or projects being dealt with at any one time), and possibly a senior corporate official—the CFO or a senior legal officer.

This committee is active on a continuing basis to select, prioritize, and evaluate the entire corporate portfolio of projects. When issues with a key strategic project must be escalated, the SPO Steering Committee provides a forum for issue resolution. This committee also initiates the SPO implementation project in a management oversight role, and also continues to hold end-of-phase reviews throughout the duration of the SPO deployment project, monitoring progress against the objectives to determine whether or not the SPO is meeting the objectives that were established at initiation. This group is, in effect, the board of directors for the SPO and other mega-projects.

The Project Office Steering Committee continues to revisit the goals and objectives of the SPO, as well as the critical deliverables, and works within the organization to achieve executive buy-in.. As a primary contributor to ongoing progress, the Steering Committee reinforces culture change by making decisions to move the implementation along.

Staffing the SPO

Is the project office to play the central role in guiding project management in the organization? If so, staffing is complex. The project office director position within the organization should be equivalent to that of a high-level functional manager—even a VP, in some cases. The project office director at this level is supported by large numbers of professional associates and administrative personnel. These positions are discussed in more detail in Chapter 6. But the role of SPO director is so

central to the success of the SPM model that identifying this individual and crafting his or her role description is a key part of the implementation process.

The SPO Director

If your organization is prepared to make the SPO the central driving force behind the management of projects, establish a director of project management who will sit at the director or vice-president level with other senior executives in the organization. This position, which we will call the SPO director, but who in some forward-looking enterprises is called the Chief Project Officer, provides project oversight in virtually all areas of the organization, managing corporate-level projects and overseeing corporate-wide resource distribution and allocation on all projects. Any project that crosses divisional boundaries, as well as some large projects performed within a department, would be under the auspices of this SPO director.

The SPO director position is more than a glorified project manager. It's useful to think of the SPO director as a "program manager." While individually accountable for his/her own program (overall direction of the SPO in this case), they may also be measured and held accountable for the success of all projects within their domain. Thus the structure supports the natural desire to work closely with other division or departmental heads) on leveraging opportunities.

Some of the many hats that may be worn by an SPO director—or overseen by the SPO director but carried out by SPO staff, depending upon the size and scope of the SPO—include:

- Chartering an SPO that delivers business benefit to the organization and regularly demonstrates value
- Developing an organizational metrics program to measure SPO success

- Facilitating the identification, prioritization, and execution of the organizational project portfolio
- Developing working partnerships and relationships between project managers and functional managers in the organization as well as sponsors/customers
- Developing and communicating the mission, vision, scope, and benefits of the SPO
- Serving as a liaison to executive and functional management to ensure availability of the appropriate services, and participate with them in setting direction for the SPO
- Developing the skills of the SPO staff and project managers throughout the organization
- Prioritizing the application of SPO resources and managing SPO budgets
- Providing corporate project oversight, checkpoints, and controls.

In the recent past, it was rare for SPOs to maintain and manage their own project management staff. However, the past few years have seen a significant trend in this direction. It's only logical that, as organizations more further and further away from the functional organization and ad hoc projects, that project expertise becomes more centralized. Today, the most successful organizations are those with enterprise SPOs that manage a staff of project managers and project support roles. In fact, organizations identified by the *State of the PMO 2007* study as high performers (as measured by a number of project and organizational metrics) have larger PMOs (30% more staff) and rely on more specialized roles (i.e., they have more staff performing those roles), including mentors (a 136% increase over low-performing organizations), team leads (467% increase), planners (147% increase), controllers (116%

increase) and relationship managers (698% increase). And, the more mature the PMO, the more planners, schedulers, and controllers they employ: at Level 4 maturity (utilizing PM Solutions' Project Management Maturity Model), PMOs have 70% more of these positions than Level 3 maturity PMOs. This inference is underscored by the fact that the most mature PMOs in the study showed the greatest improvements in performance metrics. PMOs at Level 3 maturity showed a 16% budget/schedule performance improvement compared to those with no PMO … and an 8% improvement over PMOs assessed at Level 2 maturity.

A Deployment Checklist

We've written in great detail about creating, staffing and deploying an SPO in our previous books; that topic is beyond the scope of this chapter. But, briefly, in order to implement an SPO that will begin to immediately show value as the link between project performance and organizational performance, here's a very high-level list of steps:

- Assess the current state. What is the maturity of program/project management practices? Of strategy management practices? Are there qualified personnel in house to carry out the implementation, or will you need outside assistance? What cultural barriers will need to be overcome?
- Remember deploying an SPO is an investment, and a project. It should be subjected to the same planning, risk identification, and benefits analysis as anything else in the portfolio.
- Establish short- and long-term objectives. A short term objective might be (if the organization is new to portfolio management) to inventory all projects. A long term objective might be to integrate cost and resource management across the enterprise.

- Move forward with some rapid successes. This will do more than anything to sway the organizational culture toward the new way of doing business. Recovering troubled initiatives, training project teams, and eliminating duplications of effort via the portfolio inventory are some immediate wins the SPO can make.

Because implementing Strategy Performance Management requires the integration of disparate management tools that are currently promoted in the management marketplace, including corporate performance management, business process management, business intelligence, strategy management, portfolio management, and enterprise program/project management, an organizational center of excellence in all these disciplines is the optimal solutions. Guided by the integrated SPM framework, an SPO can enable effective strategy execution.

The SPO approach to building organizational and individual maturity is to move forward quickly: show results on specific projects within six months; really begin changing the culture within the first year; and begin showing corporate results within a two-year time frame. But be prepared: this is no quick fix. It will take anywhere up to five years to fully deploy a Strategic Project Office.

What does success look like? How will you know when you have arrived? Research studies allow us to paint a picture of the organization that has demonstrated competence in managing projects, and managing by projects:

- Top management understands project management basics.
- Effective training programs are in place.
- Clear project management systems and processes have been established.
- There is improved coordination of inter-group activities.

- There is an enhanced goal focus on the part of employees.
- Redundant or duplicate functions are eliminated.
- Project expertise is centralized.
- A clear link and set of processes exist connecting corporate strategies to execution on the project level.

Best Practices in Organizational Structure for SPM

The *Strategy & Projects* study carried out by the Center for Business Practices found that there were two practices related to organizational structure that set high-performing companies apart from the rest:

1. The enterprise project office allows the organization to manage its entire collection of projects as one or more interrelated portfolios.
2. The company has an organizational structure (strategic project office, office of strategy management, strategic steering committee, etc.) that is responsible for managing strategy execution.

Other identified best practices for organizational structure were:

- A strategic (enterprise) project office plays a role in linking the organization's projects to its strategic plans.
- The organizational structure is flexible and adaptable to today's dynamic, rapidly changing business environments.
- Project management is clearly established and embedded within the organization's business management structure.
- Information about strategy and projects flows freely between business units facilitating strategy execution.

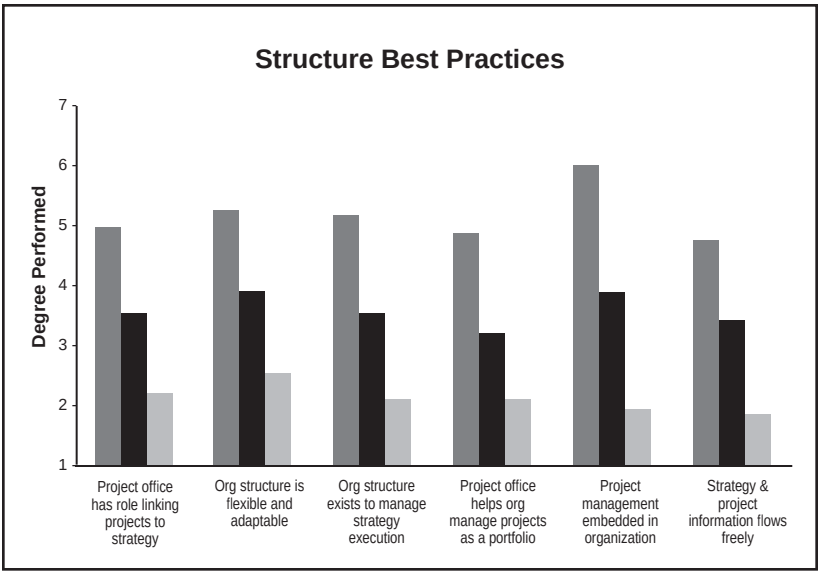


Exhibit 4-3. The degree to which Structure best practices are performed is rated from 1 (not at all) to 7 (to a great extent). This chart compares the degree to which structure best practices are performed by high performers (left bar), versus low performers (right bar), versus all companies surveyed (central bar).

The most often used practice by high-performing organizations is having project management clearly established and embedded within the organization's business management structure.

Organizations that have put an SPO in place can congratulate themselves, but, as James P. Lewis, noted in *The Project Manager's Desk Reference,* "To expect that the design of an organization is finished "once-and-for-all" is to limit ourselves to new possibilities and also to freeze our response capability in the face of changes that make the old design obsolete. It is better to regard design work as a part of regular operations and not a separate front-end activity." He recommends setting

goals for people development so that appropriate skills and flexibility are generated to respond to the changing environment. If project office staff keep up with the latest developments of project management practice by monitoring project management and industry literature, and keeping training fresh, the SPO will exhibit the execution excellence culture that it models to the rest of the organization.

Chapter Five

Culture and Change

In a 1995 *PM Network* article, Dan H. Cooprider prophetically said, "Culture is the key ingredient of a company's success. Discovering, defining, and changing that culture is the business challenge of the '90s." Well, the millennium has passed and organizations still are grappling with this challenge. Culture—the mental software of that amazing machine, the human brain—programs our responses to situations. If the values and norms of the organization—or a workgroup within the organization—support changes in processes, then changes will be easier to implement. Thus, understanding your organization's culture is an important first step in introducing the SPM framework as a management model.

Corporate culture is the beliefs, behaviors, and assumptions shared by individuals within the organization. It includes such things as procedures, values, and unspoken norms. An organization's culture represents what people believe about their work, each other, and management. It includes the formal business rules, unwritten but understood processes, and the organization's beliefs and practices around decision-making, management style, communications, rewards, customer relationships, quality, and employee involvement. Obviously, creating change in such a pervasive system requires a systematic approach.

Culture can have a significant influence on how well strategy is executed in organizations. Like islands in an archipelago, the various functions in an organization frequently

have their own particular cultures. Engineering holds different values and accepts different norms from R&D or Marketing, and so on. The larger, older, and more distributed the organization, the more likely these varying cultures are to hold views that can create conflict.

For example, the compensation structure of the organization—how people are rewarded—is a matter of culture. If quantity is rewarded over quality, the practice will be to crank out as much work as possible without regard to errors. On the other hand, if people are rewarded for producing a quality product every time, and even have the power to shut down an assembly line when defects are detected, the practice will be to produce quality. This practice will lead to a change in culture—one where employees believe what the organization's leadership believes in and values—quality. We are all familiar with organizations where, for example, Marketing trumpets quality as a core value, but the compensation structure sends another message. In order for culture to change, and to support strategy execution, there has to be coherence in all the SPM processes, so that statements about desired outcomes can be truly believed by the workforce.

SPM requires that everyone, from the executive suite on down, "walk the talk."

Some of the cultural issues that can impact the deployment of the SPM framework include:

- The importance of achieving strategic objectives
- How performance is communicated
- Whether or not changes create competition or cooperation
- Who can access and use SPM technology
- Whether or not decision-making is done in command-and-control environments or by self-directed teams
- How functional units work with each other.

These are just a few of the issues of culture that need to be addressed in creating a structured approach to executing strategy.

SPM focuses on managing the strategy-cultural relationship, as well as the interrelationships between culture and the other elements within the organizational context, as the organization becomes more strategy execution-focused. It requires sensitivity to the interaction between the changes necessary to execute strategy and the fit between those changes and the firm's culture. Some possible considerations include whether or not to:

- Link strategic changes to the basic mission and fundamental organizational norms.
- Focus on reinforcing the culture.
- Manage around the culture.
- Reformulate strategy or prepare carefully for long-term, difficult cultural change.

In order to choose one of these paths for dealing with the cultural side of SPM implementation, an assessment of existing culture must be undertaken. Whatever path is chosen, SPM helps organizational leaders to communicate the vision for change and empower business units and all employees to devise new ways of doing their day-to-day business to help the organization accomplish its strategic objectives.

Assessing Corporate Culture for "Change-ability"

The shared values of organizational culture are acquired through socialization and social learning processes as individuals experience membership in an organization. Recent research into the needs and preferences of knowledge workers give us

some more specific ideas for creating change in the project-oriented organization.

Technical and creative people—descriptors of project managers and many other members of today's knowledge-based organizations—have some characteristics that should make the "execution environment" easier to implement. They want to do more than show up: they want to make a contribution to the company's bottom line and they want interesting, fulfilling work. Companies that erase barriers to success—technical, funding, and bureaucratic barriers—set them free to enjoy their work and take home the "psychic income" so important to knowledge workers. In exchange, their commitment to the organization will add value to all they do. Generally, these kinds of workers are not as risk-averse as operations and administrative staff: they have a higher tolerance for change and may actually welcome a framework that adds rationality to the way their work is scheduled, funded, and rewarded. One finding of the Center for Business Practices' 2000 *Value of Project Management* study was that job satisfaction and morale improved in companies that implemented project management improvement initiatives. When work became less chaotic, it became more satisfying. This is another way in which implanting SPM impacts the bottom line.

Work culture begins at the top with HR policies, which can support one of two strategies. An organization following a long-term investment strategy views people as worth developing and retaining due to their specific knowledge and competencies. Organizations implementing the long-term investment strategy experience the least turnover. An organization following a short-term producer strategy, on the other hand, views people as providing highly valuable contributions to the organization in the short term and see them as driven by financial goals. Compared to all other strategies, the short-term producer strategy puts relatively greater emphasis on compensation and

recruitment, and creates the greatest turnover. These policies must be reviewed in detail to surface the ways in which the organization may be inadvertently rewarding the wrong behaviors, hiring the wrong kind of people—in short, hindering execution.

At the same time, too much change is disruptive. A company that is experiencing constant change, including downsizing and economic stress, sees higher stress levels among the workforce. As uncertainty saps commitment, less and less gets done. Higher-order activities such as innovation come to a halt. The antidotes, in many instances, are communication and involvement of employees in change. Encouraging employees to participate in professional organizations can help insulate them from the sense of vertigo brought on by organizational change, as it gives them a venue for identifying with peers outside the workplace.

Elements of Culture that Support Change-Ability

Implementing SPM is an organizational change project. That's because it is designed to facilitate the management of projects; and also intended to improve management of the entire enterprise via project portfolio management and linking projects to corporate strategy. Many such implementations flounder because the degree of dislocation caused by change has been seriously underestimated.

One of the more difficult and most important aspects of instilling any new process or discipline in an organization is changing the behavior and habits of the people doing the work. The project management maturity assessment is, in itself, surfaces attitudes and processes that may have become powerful, if unrecognized elements of culture. As work products and process that people are using will be evaluated and

compared to some best practice scenarios. As this process takes place, staff members have the opportunity to identify with the logic in the new processes and gain an initial understanding of what project management has to offer. Thus culture change starts to take place with the start of the initial assessment. Staff members begin to realize that they need to think differently than they have in the past. In many cases, individuals already know that change is necessary. They're just not sure in what direction change should occur. During the interviews performed during an assessment some indication of that direction is given to the staff members.

One important thing to remember is that you will not win the hearts and minds of 100% of an organization's members. As a rule of thumb:

- 15% of the employee body will eagerly accept any change, just because it is new. They will lead the transition and thrive on the challenge, because it is their nature to do so. In fact, their productivity and probability of staying with an organization long term will largely depend upon the opportunity for new challenges.
- 15% will be extremely uncomfortable with change. In a stable organization, they are often valued, providing excellence by refining the details of the operations and ensuring consistency. They will do everything in their power to prevent change from upsetting these established routines.
- 70% range between these extremes and can be integrated successfully into the new system with proper coaching. The challenge of change agents is to work closely to identify them and assist them in the transition

There are five elements of culture that, if they characterize your organization, can support the execution environment.

Collegial Environment. Watson Wyatt's Human Capital Index, a model for determining which HR practices lead to better financial performance, lists "a collegial environment" as a top contributor to bottom-line success. When you consider that knowledge is converted from tacit knowledge into explicit knowledge through the socialization process, it isn't surprising that organizations with a healthy atmosphere of teamwork and camaraderie also lead the pack financially. Not only in R&D and high-tech, but also in a study of motivation and retention at a U.S. Department of Energy (DOE) site, good working relationships (teamwork) proved to be a key factor and motivator in organizational success.

The long-term benefits of successful teams include higher performance, increased morale, and a strong commitment to the mission of the organization that can withstand almost any kind of adversity. The sense that "we are all in this together" is a potent agent for inspiring acceptance of change.

Peformance-based Culture. A results-oriented culture appeals to knowledge workers' need for professional achievement. Yet over 27% of high-tech workers do not understand how their performance is evaluated. When reviews are not fair, accurate and timely, they fail to reward star performers, fail to provide encouragement and guidance to borderline workers and fail to give proper feedback to those whose work is substandard. This is particularly a problem for knowledge workers, for whom a sense of equity drives commitment to a greater degree than the amount of compensation or the package of benefits. The workplace is not only a source of income, but it also meets important affiliation needs. Again, when employees feel that "we're all in it together," the sense of equity contributes to employee commitment. Make sure that, if you are asking the workforce to execute strategy, you have a performance mea-

surement system in place that rewards strategy execution. Your best employees with thank you for it.

Clarity of Vision. The best avenue for jump-starting cultural change is the communication of a vision. Align that vision with the assessments (of change readiness and project management maturity). The results of the assessment provide a clear path and tangible actions that can be implemented for the company to move forward. This information can be communicated across the company in an easily understood fashion to start people thinking in new directions. By using the assessment information (which is based on information provided by all levels of employees), staff members become a part of the plan to promote change or at least feel they have an understanding of where the future for the company lies. This is one starting point to generate interest and enthusiasm to improve.

Open Communication. Trust is built through communication, and not just "happy-talk." Has the organization failed to meet strategic objectives? All stakeholders need to know that, and know why it is a problem. Often, executive management does not give members of the organization enough credit: most people, when presented with an honest and clear business case for changes, will at least attempt to get on board. As SPM infiltrates the culture, through new channels of communication, it will become possible for the entire organizational culture, from chief executives all the way through project teams, to communicate in a common language and work together to understand the issues surrounding projects, as well as how the issues on one project affect other projects and, ultimately, the organization. Individual capability and organizational capability must grow together and reinforce one another, just as project management and strategic planning, under the SPM framework, reinforce one another.

If information about the change—what is happening and why—is not continuously shared with the rest of the organization, the rumor mill will defeat you. Following some common sense guidelines will help:

- Formulate and widely communicate the plan for the change you are considering.
- Specify, in writing, the objectives of the change. Use the same guidelines used in formulating strategic or project objectives—they should be SMART: Specific, Measurable, Agreed-to by stakeholders, Reasonable, and Time constrained.
- Follow up dissemination of the objectives with written systems, methodologies, and procedures for the change. Find out how to get information out directly to everyone in the organization affected by the change.
- Follow up written methodologies and procedures with support systems and rewards for following the new practices. Work closely with functional management and Human Resources to structure rewards (and they don't all have to be monetary) for those who follow the new practices and who achieve better results.

In short, specify why the change is necessary—what is threatening the current organization and how the proposed change will defeat the threat. Spend time and money developing the methodology, processes, and policies. Distribute the methodology and other literature widely. Make it clear to people that they will receive training, will be expected to implement the new practices, and will be rewarded for doing so. The following communications vehicles can help instill the new culture:

- Introductory seminars for new employees and contingency workers to smooth the transition and immediately create a community that speaks the same language, rather than taking the risks inherent in multiple language translations

- Encouraging managers to identify work that can be handled as projects and providing opportunities for each of their employees to gain experience in the methodology
- Consciously incorporating project, portfolio and strategy management language in all in-house communications
- Including cultural change in the scope statements for projects managed internally and externally
- Assuming that everyone in the organization is a stakeholder in every project and ensuring communication that is open, easily available and constant.

Leadership from the Bottom Up. In an organization that is already mature in project management—especially if an SPO is already in place—SPM implementors have an advantage. In part as a result of technology, the organizational change instituted by project management has begun to "trickle up" from department level project offices. IT project offices in particular have been thrown into the spotlight because of the tremendous pressure on IT and other technology development projects to improve performance. Project performance has become a significant driver for people's careers and even for the existence of some internal IT departments. They must bring the organization to a position where it is actually delivering projects on time and within budget and with the quality that is desired by the customer. When they are successful, their methods become highly desirable to the rest of the organization.

So, unlike most organizational change projects of the past, we see the initiative to formalize project management begin on the department level, even on the project level. As technology efforts begin to show results, two things happen: One, all the other the business units begin to come into the project teams as stakeholders of the organization, and two, those business units see improved delivery performance on technology proj-

ects and ask themselves, What can we do to improve our own performance? What are they doing right that we can adapt to our own projects?

Thus, in many cases, a PMO begun in the IT department has eventually become an enterprise-level SPO, involved in portfolio management and even in strategic planning. This is a grassroots change process quite different from anything traditional companies are used to. And when change comes from the grassroots instead of being imposed from above, the usual problems of resistance are minimized. As our Center for Business Practices research showed, the implementation of systems that promote rationality in planning, resource allocation and rewards, has a profound effect on morale, on the sense of ownership felt by stakeholders, and ultimately on productivity. At the individual level, this sense of empowerment builds trust in the organization and satisfies the intrinsic motivational needs of project personnel.

Change Management

Change management incorporates communication, training, and rewards into a process that helps an organization move from a current state to some desired future state through effective change processes. To lead an organization through change, the individuals managing the change process must:

- Understand the organization's past history of change
- Gauge and overcome resistance to change
- Manage specific cultural issues that may impact change.

These three areas, known as critical change variables, must be integrated into the change process. Understanding an organization's past experiences with change is also an important change variable. Organizations that have tried and failed to implement change effectively in the past build up additional

resistance. Keeping these variables in mind, let's look briefly at some key issues for the change agent to consider when deploying SPM.

Maintain a Systems-Thinking Perspective. SPM is a framework for optimizing the portfolio of strategic initiatives—not for optimizing particular projects or programs. This translates to an organizational setting in which virtually everyone who is touched by a project is impacted by what happens with the project management initiative. Ultimately this impact sweeps across the entire corporation. That's why effective organizations have an SPO (or Office of Strategy Management) located at the corporate level, providing data on total corporate funding for projects, the resources utilized across all corporate projects, capital requirements for projects at the corporate level, materials impact, supplies impact, the procurement chain impacts.

When corporate executives can effectively prioritize projects and make fact-based decisions about initiation, funding, and resources, they will be in a position to truly apply systems theory to their organization: to optimize the system (corporation) as a whole, rather than just tinkering with the parts (projects and departments). At this point, most corporations haven't yet achieved that level of sophistication.

Implement Process Change Systematically. To make any new process part of culture, here are some practical suggestions:

- Make the process easy to follow—keep it simple.
- Make the process known throughout the organization—ensure employees and management understand the objective of the process, key steps, and points of contact.
- Make the process iterative and structured—build a process that allows for reviews, discussions, and re- reviews.

- Make someone responsible for the process—things don't get done unless someone is responsible.
- Establish appropriate review and decision levels—put in place a logical hierarchy of reviews and decision points.
- Periodically assess how well things are doing—ask key individuals how the process is working; normally the opinions are invaluable.
- Establish a historical database to capture progress—keep records and establish metrics for how well things are doing metrics such as number of projects in the queue, types of projects, number of successes, number of missed opportunities).
- Pilot test the process before implementing it corporate-wide—for example, by implementing the first steps in Project Portfolio Management, or by establishing a performance measurement system such as is described in Chapter 8.

Deliver Value Fast. Culture change takes time. On the other hand, it is critical to meet clear objectives during deployment of any new organizational process, or risk the possibility of a failed project, with the participants losing sight of added value that the SPM management practices can bring. So move forward quickly. Some aspects of SPM—such as the initial project inventory step of Project Portfolio Management—can show tangible results within six months. At the same time, be prepared that it will most likely take anywhere from two to five years to fully deploy all the aspects of this system, from strategy management to the Strategic Project Office.

The best way to change culture is to get influential (not necessarily powerful) members of the organizational community on board. One way to win converts is by adding value as quickly as possible. Short-term initiatives provide solutions to immediate concerns of key stakeholders. These are items that

can be implemented quickly and which address top-priority organizational concerns. Examples include: an inventory of projects; summary reports and metrics; an assessment of strategy management. At the same time, continue to work toward longer-term objectives related to changing organizational culture and adapting the organization to a new way of doing business.

Creating Change

To establish a new and effective way for the organization to perform, change/knowledge transfer activities are essential and are often performed in concert with the activities discussed above. Some examples include:

- Understanding the organization's readiness for change
- Developing a change plan that includes components for communications, learning and rewards
- Establishing and cultivating a sense of urgency for the new practices
- Establishing supporting processes that reinforce the use of the new practices and methodology.

Creating a Strategic Project Office facilitates the management of projects on one level, and improved management of the entire enterprise via project portfolio management and linking projects to corporate strategy on another level. More than establishing an office and creating reports, it is infusing a cultural change throughout the organization.

Change to the culture will not occur through declarations, new mission statements, or a big party, unless these proclamations are backed up by changes in the everyday practices and procedures that define what people should do, how they are evaluated, and how they are rewarded. These changes in way

things are done will lead to a new belief that the new way is the right way, a matter of culture.

Here are some "readiness" questions to ponder:

Is the organization prepared to handle a major organizational change? If the organization's management is not trusted, any attempt to change will be treated with skepticism on the part of the organization's members. We have all heard statements like "This is just the flavor of the day;" "this too shall pass;" "this will last about a year then we'll be into something else;" "this is just like TQM—here today, gone tomorrow." These are statements that reflect distrust in the organization's leadership. Ask the following questions:

- Is employee morale high? High morale is usually associated with a high level of excitement and commitment about belonging to the organization.
- Does the senior leadership have a history of successfully implementing major changes? If so, people will naturally assume that the pending change to a project management approach has been well thought out and that senior management will see the change through.
- Is management known for tackling tough decisions and doing the "right thing?" If so, management will be respected for its integrity and perseverance.

On the other hand, if the answer to these questions is no, any attempt to implement the sweeping changes will be met with skepticism. It is advisable not to attempt the change without first addressing the root causes of distrust.

Is the proposed change consistent with existing organizational climate and culture? Major changes will have a greater probability of success if they are undertaken in incremental steps that are consistent with the existing organizational culture. In

deciding how ambitious to get in changing the culture, consider the following four dimensions of organizational climate:

- The nature of relationships. Are they contentious? Is conflict the order of the day? Or do people work collaboratively toward solutions, freely sharing information?
- The nature of existing hierarchies. Is the organization rigidly structured or is the structure flexible and agile?
- The nature of the work itself. Is most of the organization's work project or process oriented? Does the work have a defined start and end; can specific objectives be established; are resources from more than one department involved? If so, the work can be classified as project work. Otherwise, it is continuous in nature and not suitable for the project management approach.
- The focus of support and rewards. Are people rewarded for achieving results or just showing up and putting in their time? This question addresses one of the fundamental differences between bureaucratic and entrepreneurial organizations. Project management rewards those who can bring projects in on time, within budget, according to customer expectations.

Is the reward system structured to motivate employees to focus on implementing SPM? People will figure out what the organization rewards and focus their energy on doing those things well, ignoring all else. Management must determine specifically what behaviors will be rewarded in advance and tie appropriate behavior to both financial and non-financial rewards.

A Project Management Approach to Change

Any change that is significant enough to engender transition within the company is significant enough to be considered a project. The problem with most corporate change and transi-

tion is that it is poorly managed. Employees need to understand the value and rationale behind corporate change and transition. They need to understand how, when, where, and why this is occurring. Project management is an ideal way to manage all corporate change and transition by defining what will occur, when it will occur, how it will occur, and where it will occur. By developing respect on all sides (employee, customer and corporation), the organization puts itself in a position for successful change and transition. CJ Walker recommends the following change management considerations:

- A defined scope (the magnitude of how business operations will be modified)
- Associated cost parameters (are new systems required, are new personnel required?)
- Risk issues (opportunity risk as well as the risk of not being competitive)
- Quality issues (ensuring that the same quality of service/product is offered throughout the transition)
- Designated time frame constraints (will this occur over one month, six months or one year?)
- People who will be involved and need to be managed (how will roles and responsibilities be defined, will this require reorganization within the company, will new skills need to be learned?)
- Major communications issues (how do we communicate with our existing customers, our employees, our stakeholders?).

Culture Change Success Factors

These success factors, recommended by CJ Walker, can be used as a checklist for culture change. The more rules that are followed, the greater the chances for successful implementation.

- Become a learning organization. Embrace new ideas, new concepts, new techniques, and make them available to everybody.
- Establish clear communications processes and media.
- Record and praise accomplishments and heroes who support and demonstrate the concepts required in the new culture.
- Establish a flexible, central structure which provides a critical core for all implementation efforts.
- Accept risk and proceed judiciously. Strive to extend the culture throughout the organization, despite the inherent risk of change.
- Know and publish boundaries for the culture. Ensure a common understanding of what the culture is intended to be, and what it isn't.
- Evaluate and prove the economic value of the culture change.
- Involve everyone. Use a common language and terminology to bond the members of the organization into a community.

Signs of SPM Culture

An organization with all six of these elements up and running is well on its way:

- A standard project management methodology, deployed throughout the organization and used by all project teams
- Metrics that drive strategy execution instead of unwanted or unintended consequences (see Chapter 8)
- A meaningful, attractive career path for project managers
- Effective education, training, and certification for project managers, and training for team members, managers or project managers, and senior executives

- Ongoing support through a Strategic Project Office at the corporate level
- A standard suite of software tools to support management of the project portfolio.

We might want to include a sixth element—integration of software systems throughout the enterprise—as discussed in Chapter 7. An integrated system provides project managers, managers, executives, and other stakeholders with all the information necessary for real-time planning, execution, and control. Software will not create a new culture, but it can support and reinforce the behaviors that make up a culture.

Change Management Never Ends

Employees over these last years have become so immured to the multitude of changes taking place in all aspects of their lives, that they are reacting in several ways, based on their own personal styles:

- Ignore it and it will go away
- Embrace it immediately; whatever it is, it's new
- Wait and see
- Don't bother me with it, I'm busy
- I'm too tired and discouraged to deal with anything new; I'm out of here.

Therefore, recognizing that "change fatigue" is a reality, a key factor to effective change is to provide a foundation of stability that forms the basis upon which all decisions are made, and then to apply specific strategies and procedures consistently when a change is implemented. Stability is provided by the vision and values of the organization; however, consistent

implementation is provided through training throughout the organization and throughout the introduction and establishment of new processes.

Even though there will always be new changes to implement, with an organizational change on the magnitude of SPM, it is important to specify an "ending" "When the organization is able to … [insert objective] … we will consider that SPM has been successfully implemented, and throw a party." The Ending cannot be ambiguous. It's important, when people are being asked to uproot routines and practices they are familiar with, to offer them a light at the end of the tunnel.

Inevitably, circumstances will arise that will make the new processes a challenge to follow. Change is more easily accepted in good times; when hard times hit, the organization often lapses back into old patterns, abandoning the new structure and culture. When this happens, it's important to gear up communications and collaboration activities, reinforce use of the agreed-upon communications plan, and follow the governance structure of the SPM model, along with the methodologies that have been set up. Maintain sensitivity to cultures across the organization—but don't back down. Re-center the collective imagination of the organization on the mission and vision that strategic planning began with, and remind all stakeholders why the changes were made, and what successes have been achieved under the new system.

CHAPTER SIX

People

Optimizing Human Capital

THE EXECUTION OF strategy ultimately depends on individual organizational members.

That sentence may be the most important one in this book. In Frank Toney's benchmarking research on the superior project manager and project organization, one of the key insights was that superior project environments emphasize people over tools—in contrast to many organizations where project management almost exclusively refers to software, templates, and the "hard" processes of monitoring and control. This is why "People" come first in this book (you'll find IT in Chapter 7).

Intellect = Value

When the total cost of hiring, training, and indoctrinating people in the organizational culture are added to the potential costs of firing and rehiring, the total investment in a typical employee is phenomenal and trending upward, as the knowledge economy causes organizations to rely more and more on the intellectual capital represented by employees. In highly volatile projects there is much greater reliance upon the superior project manager to maximize the probability of project goal achievement; Toney cites a significant positive correlation between an improvisational and adaptive style on the part of the project manager and project success, and a negative relationship between the excessive of use of formal project tools and performance. In an execution environ-

ment, project leaders must be relied on to respond to opportunities and alternatives as they unfold.

And it isn't only project leaders who must be full acting members of the execution environment. New research showcased in books like *The Wisdom of Crowds* by James Surowiecki supports the notion that "the many are smarter than the few"—good news for teams and organizations. Organizations can unleash the power of collective judgment by consulting broad groups of employees in the strategic planning process, and by engaging them in the execution of strategy. This approach has the added benefit of creating support for change.

This is important because using the SPM approach often means that employees' work processes change. With the SPM approach, management teams monitor performance against the strategy, work as teams to interpret the data, develop new strategic insights, formulate new strategic directions, update performance measures, change budgets. This change of work process allows organizations to adapt their strategies as the world changes or the strategy matures. Employees must learn about and understand the strategy and the strategy execution framework if they are to make strategy work. Creating employee knowledge and understanding, as well as competencies in strategy execution, are key objectives of the SPM approach.

Engaged employees are good news for the organization; and SPM is good news for project managers and team members, as it focuses attention on the training, rewards, and career path of the project professional. It's also good news for the bottom line, since it translates the improved capabilities of individuals into better project management … better portfolio management … and strategies that are executed.

At the same time, it resolves many of the issues of motivation and retention that bedevil human resources managers. For a decade or more, writers in the HR and organizational development fields have been telling us that today's workers are

changing: becoming more achievement oriented, less motivated by the "hygiene factors" of money, benefits and safety, and more driven by the need for what Abraham Maslow called "self-actualizing" work. Project work, because of it's time-limited and cross-disciplinary nature, offers people the "zest" of a sense of urgency, continuous learning, contacts with a wide variety of colleagues within and without their specialty areas, and repeated new challenges. On the organizational level, it makes possible the "flattening" and streamlining of management, reducing bureaucracy, facilitating the development of intellectual capital, and helping the organization to stay focused on strategic goals.

There is a single factor, says teams expert Jon Katzenbach that inspires teams to great things: A performance challenge that is meaningful to team members. "The organization's responsibility is to identify this performance purpose for the group. The more clear and compelling it is, the easier it will be for the group to function as a team," says Katzenbach. "Purpose has this kind of performance value—if it's compelling you are halfway there."

Clarity of purpose has such power, because, as Katzenbach stresses, "Most of us really do want to make a difference." Individuals and teams cannot make a difference, however, unless the organizational leadership is clear about what's important, and how each project feeds into those important goals. Such clarity in setting performance goals is the aim of the SPM governance model.

People in the Strategic Project Office

In Chapter 4, we mentioned several roles of the SPO identified by The Gartner Group. Here's why those roles include important implications for "people management," not only within the project office, but across the enterprise:

- As developer, documenter and repository of a standard methodology, the SPO provides a common language and set of practices that helps to boost productivity and individual capability and takes a great deal of the frustration out of project work. Research by the Center for Business Practices revealed that over 68 percent of companies who implemented basic methodology experienced increased productivity; and 37 percent reported improvement in employee satisfaction. One manager noted, "If the organization values project management, that translates into very specific policies and behaviors—policies and behaviors that affect the lives of individuals. What is it that keeps people working for a company? It's being valued."
- As a center for the collection of data about project human resources, and tools for evaluating and scheduling them, based on experience from previous projects, the SPO can validate business assumptions about projects as to people, costs, and time; it is also a source of information on cross-functional project resource conflicts or synergies. The human capital implications of rational allocation of human effort are immense. Having common corporate data on resource projections means that planning can be accomplished in a common database, resource projections summarized at the project level, then at the organizational level, on up to the corporate level. This resource-based approach to planning is an integral part of portfolio management, and a key to the rational allocation of resources, both human and financial.
- As a center for the development of expertise, the SPO makes possible a systematic, integrated professional development path and ties training to real project needs as well as rewarding project teams in ways that reflect and reinforce success on projects. This is quite different from the reward and training systems presently in place in most

organizations, which tend to focus on functional areas and ignore project work in evaluation, training, and rewards.

- As a "competency center" for project management, the SPO provides a knowledge management locus not only for project management knowledge but for knowledge about the content of the organization's projects. With a "library" of business cases, plans, budgets, schedules, reports, lessons learned, and histories, as well as a formal and informal network of people who have worked on a variety of projects, the SPO is a knowledge management center that maximizes and creates new intellectual capital. Knowledge is best created and transferred in a social network or community, and the SPO provides just that. Through mentoring both within the SPO among project managers, and across the enterprise to people in all specialty areas, knowledge transfer about how to get things done on deadline and within budget is facilitated.
- Through new channels of communication set up by the SPO, it becomes possible for the entire organizational culture, from chief executives all the way through project teams, to communicate in a common language and work together to understand the issues surrounding how projects are faring and how the issues on one project affect other projects and, ultimately, the organization.

The study of successful project-focused organizations by Oxford University's Christopher Sauer found that organizations with strong project management capability, and the related ability to leverage projects for competitive success, display some key organizational features related to human capital management:

- **Project-centered role design.** Project managers are assigned sole responsibility for the conduct of the project, and at the same time, sufficient authority is delegated to

them to deliver on that responsibility. Given the resources and authority to match their project responsibility, project managers are held accountable by their superiors for the extent to which they achieve targets. But, at the same time, a "project director role" is created and positioned as the immediate superior of a number of project managers. This role encompasses total responsibility and accountability for all phases of the company's involvement with a particular client's project, from business development through to post-implementation.

- **Valuing project managers.** Successful project-centered companies treat their project managers as an asset, retaining them in bad economic times, even when there are no projects to be managed. These companies are more tolerant of mistakes. With the expectation of continuity of employment and a sense that the company values the project manager, greater openness, innovation, and learning results in more accurate estimating and reporting, and in the preservation of organizational knowledge. Methods, procedures, and standards structure the project management task and formalize some organizational knowledge; but are not expected to substitute for project managers' active skills, which often incorporate much tacit knowledge.
- **HR management policies that are project-friendly.** Project managers are graduated through a sequence of projects of increasing complexity and difficulty with appropriate culling. Since much of this apprenticeship or mentored learning takes place "just in time," it happens not under the purview of HR-based trainers, but within the community of project managers. Consistent with the development of a talented body of project managers, the valuing of project managers and the tolerance of understandable mistakes,

the performance review practice also is more flexible, and project managers have significant input, compared to functional managers, in staff appraisal.

Thus, aligning strategy with training, managing, measuring, rewarding, and promoting people are critical to effective strategy execution. The "people management" issues that are focused on in implementing the SPM model fall under five interrelated categories, all of which the reader can find discussed in detail in our book, *Optimizing Human Capital with a Strategic Project Office* (Auerbach, 2005):

1. Staffing: Candidate identification/selection and/or outsourcing
2. Competency identification and assessment
3. Training (program development and administration)
4. Performance measurement and rewards
5. Career paths/leadership development.

Staffing: Finding the Best People

Hiring mistakes are costly—to the individual as well as to the company. The estimated cost of a hiring mistake ranges from 1.5 times to 5 times the departing person's salary; add another $8,000- $12,000 per new employee for advertising, recruiting, and training expenses. Since time is money, personnel costs—the number of hours multiplied by wages—mount up when one considers staff's time to interview, check references, review, and place employment ads. The intangible costs, which cannot be weighed accurately, are business losses resulting from customer relations problems, ebbing employee morale, lost productivity. Yet most companies practice a "firefighter approach" to staffing: each unexpected job opening becomes

a fire to put out as quickly as possible. Hiring the right people means taking time up front to analyze the position being filled (job description); and determine the type of person who will best fit the position (competency identification); then conduct structured interviews and perform due diligence: assessments (competency evaluation). The investment in performing these steps may be significant but isn't likely to be more expensive than the turnover costs already described. Some best practices for talent management:

- **Use an employee referral program.** Employees won't refer people unless they want to work with them. In the year 2000, 71% of all managers surveyed by Meta Group ranked internal referrals as one of their top three IT recruiting methods.
- **Recruit from within.** Promoting from within boosts morale because it tells other employees that they too can be promoted. Internal hires also don't need the extra orientation and training to become familiar with corporate culture.
- **Bring the managers into the picture.** In many companies, HR won't let the hiring managers get involved until recruiters have selected a short list of candidates, even though the hiring manager is the person with industry contacts. This is why we recommend that the SPO have a dedicated position for recruiting and nurturing project talent.
- **Create a "permeable" organization.** For most companies, it takes five to seven years of investment in order to develop a competent team of in-house project managers. No doubt this is why the Gartner Group issued a Strategic Planning Assumption that said that IS organizations with no strategy for blending internal and external resources to achieve "best-in-class" staffing would incur 25 percent higher labor costs than those with such a strategy—and

> that is true for non-IS organizations as well. Organizations that don't have a proficiency in managing projects, or which don't have as many project managers as they need and don't want to incur the overhead to recruit and orient new employees, increasing turn to outsourcing relationships.. Placing contractors in leadership roles (even supervising permanent employees) because of the level of technical expertise and project-management skills required is becoming an acceptable practice. Contractors can be an interim solution to train permanent employees to backfill for the contractors at some point. Moreover, outsourcing allows in-house staff to become part of a wider "invisible college"—otherwise known as a community of practice.

Not only project managers, but other project staff are being swept up in this trend. A recent survey of several hundred Project Office Directors and senior-level executives revealed that 39 percent of respondents said that they currently outsource project management functions like planning and controls, or are considering it. In addition, more than half (61 percent) of the responding companies use consultants for project management, primarily for augmented staffing.

Overall, for the companies that utilize the skills of contract project managers and other project staff, there are many important benefits, including:

- Reduced costs: Bringing in a project management outsourcing partner eliminates the need to invest in internal project management training and infrastructure development. It also eliminates the need to recruit and assimilate project management specialists for unique situations.
- A framework for continuous improvement: Bringing in "ready made" processes, staff and support services jumpstart the entire project management function. Service firms

coach and mentor internal staff as well. By reducing the burdens of managing projects in house, companies can focus on improving in other operational areas, such as research and development, software engineering, staff productivity and quality assurance.

- Decreased employee turnover: Turnover costs of a project manager average 150 percent of the employee's salary. This includes tangible costs such as hiring and relocating new employees and intangible costs such as inefficiency and lost productivity while the job is vacant.
- Improved customer satisfaction: When companies achieve new levels of efficiency and product and service quality, customer satisfaction improves. And customer satisfaction is the key to growing sales and profits.
- Knowledge transfer from external professionals to in-house staff. The enterprise can enhance its internal project management competency with proficient outsourcing. Mentoring and coaching by the outsourced staff helps to build in-house expertise. When the client company uses documentation and benchmarking to capture and preserve new organizational learning, the benefits become long term. Outsourced project managers look at internal project management practices with fresh eyes and bring in new information about best practices. They do sector-specific research and bring in ideas from other industries that can "cross-fertilize" with their clients' base of expertise.

… and Retaining Them, Too

Studies of highly talented employees reveal certain values that cause individuals to join or stay at their place of employment. These quality employees seek organizations with a strong sense of direction; an emphasis on training and development

A New Role: The Outsourcing Relationship Manager

It's so critical in a situation where professional services are being provided and contracted for, that we recommend the creation of a special role dedicated to the development of sound outsourcing partnerships. An Outsourcing Relationship Manager combines sound project management procurement practices with top-notch communication skills. Without such a dedicated role, miscommunications between client and provider, or between external and in-house resources, are likely.

with clear opportunities for advancement; an organizational culture and environment that place a premium on innovation and creativity; competitive reward strategies linked to performance; innovative benefit plans that are designed to meet individual needs; and an open and fair culture that values diversity and respect for individual differences. According to studies by Towers Perrin and the National Association of Colleges and Employers (NACE), the desires of top performers (that is, those individuals who have the potential to be the best-performing, most successful employees in an organization) today include: challenging work, change on the job, rather than routine tasks, opportunities for growth with the employer, performance-based pay, and the autonomy to complete work assignments.

Measuring Competency

As much care should be given to the appointment of a project manager for a mission critical project as is given during the hiring process for a key position in corporate leadership, according to Boston University's project management program leaders. Yet most organizations have no process for choosing project managers, and little idea what skills and personality traits are needed by project managers to help them succeed.

Poor project manager competency thus accounts for 60% of project failures, according to IT research firm Gartner, Inc. Lost profits due to late, over budget, and failed projects have encouraged more business decision makers to look at project manager competency assessment programs. These in-depth evaluations help executives make better, more informative decisions about project manager recruitment and training initiatives.

Focusing on building project manager competencies to the "best" level means first identifying what needs to be improved. To do this requires a comprehensive competency assessment program. Competency-based project human resource management is a bold approach to the professionalization of the role of project manager; not only in terms of providing them with the means to acquire the needed skills and competencies, but also making it possible for experienced project managers to bring their knowledge up through the ranks to senior-level positions in the organization.

Caution: This isn't a small change. In order to optimize the strategic benefits of project management, organizations need to completely change their approach to hiring, training, and developing personnel. They also need to more aggressively develop the knowledge, skills, and competencies of their project management staff. To accomplish this, the organization must focus on both developing the individual and on linking organizational roles to individual skills. Once a company begins viewing role description, recruitment, rewards, and professional development through the lens of competence, many time-honored structures and patterns existing in our human resource management will change. Behaviors in the workplace are the building blocks of competence, but they are also an expression of organizational culture. It's no exaggeration to say that designing organizational human resource processes around competence on projects is a paradigm shift.

Modeling Competence

The quality of competence can be more specifically described in terms of competencies. Competencies are statements about the characteristics, in each of the areas of knowledge, skills, experience, and personal qualities, that result in effective or superior performance at work. Defining competencies for critical jobs helps a company identify criteria that can be used to assess employees for recruitment, in performance appraisal, and in making professional development choices. In truly competence-driven organizations, pay and other rewards are also linked to competency, as are training opportunities and other forms of professional development, so that:

- Project managers are appropriately recruited.
- Project manager training is more effective.
- Projects are managed at a higher level of quality.
- Projects are delivered on time and within budget.
- Project failure rates decline and time to market increases.
- Profitability improves.

The model co-developed by PM College and Caliper International, a leading human resources assessment firm, The Project Manager Competency Assessment Program (PMCAP) for example, addresses three aspects of competence: Knowledge of project management concepts, terminology, and theories; behavior and performance in the workplace; and personal traits indicative of the individual's project manager potential. The information generated by the three assessment instruments is analyzed to identify the top three to five areas for growth opportunities. Together, the knowledge, potential, and behavior assessment profiles determine the individual's:

- Suitability for the project manager job, or if he or she should be redirected toward another career path

- Potential to become a superior project manager
- Skill area strengths and weaknesses
- Need for training and what types of training programs will be most effective.

The assessment of this information is done through gap analysis. The knowledge gaps are determined by examining the differences between the demonstrated level of knowledge and the level of knowledge that is required. The behavioral gaps are identified by examining the differences between the self-rating of the project manager candidate and the rater's score. The gaps in both knowledge and behavior, based on the size of the gap, are targeted as developmental opportunities. The results of this integrated assessment are used to create professional development plans for project manager candidates.

While an individual assessment is being conducted, the organization should be determining what roles they will need to ensure an improved level of project portfolio performance. Possible roles include team leaders, multiple levels of project managers, program managers, project portfolio managers, project executives, project office directors, and chief project officers. With each of these roles, the organization will need to create effective job/role descriptions that define performance/competency expectations, experiential requirements, and prerequisites of whatever technical skills are required.

With these role descriptions in place, the organization can conduct a gap analysis between their desired state and the existing state. This analysis is accomplished by aggregating the individual results of the knowledge assessment with the multi-rater assessments. Once this gap analysis is completed, the next step is to examine the results of the assessments of potential to identify the project managers who display the

most potential to succeed in the project manager role. The key to examining this data is to identify the project managers who will be successful in either the small, non-complex projects or the larger, complex projects.

Because of the impact of excellent project managers on project outcomes, the more qualified the staff is to manage projects, the better the organization will be able to execute, manage, and complete projects. This leads to fewer project failures, increased organizational efficiency, faster project and product delivery times, reduced costs, and higher profitability.

The developmental program should be aligned with a career path that clearly demonstrates how an individual can progress from a team leader to a project executive within the organization. It can also be used to assist in recruiting candidates to the organization.

To develop the organizations project management capability, says Sauer, it is desirable both to institutionalize the development of individual capabilities and to create learning, which extends beyond the individual project manager's skills and experience. He recommends the project office, as "a focal point in the organization," where an environment conducive to the development and practice of project management capabilities can flourish. Yet even the best-run project office cannot sustain brilliant project managers unless it is nested within a corporate culture whose values are the values of project management: teamwork, flexibility, merit-based rewards, realistic planning.

There's another point that should be stressed about the importance of identifying high-performance project talent. From within their ranks will come the next generation of project executives: Project Office Directors, Portfolio Managers, CIOs … perhaps even CEOs. Experienced project managers with the aptitude for business bring a valuable project-focused intelligence to corporate leadership. But these leaders must be

developed, from team members into project managers, from managers into leaders.

Training and Mentoring

The next step is to ensure the availability of the necessary experiential and educational opportunities. To be effective, information collected from the knowledge, behavior, and potential assessments is necessary to create a targeted training program. The educational program should be targeted to the requirements identified in the career path, and be designed in a progressive nature. In other words, the training requirements of team members are prerequisites for project managers and so on. Mentoring and coaching, in combination with other training and development, can help prepare the next generation of project leaders.

The Center for Business Practices' *Value of Project Management Training* study reveals that organizations overwhelmingly improved in a number of areas as a result of project management training. The relationship between classroom and workplace performance is highlighted by the finding that 91% of the organizations showed a moderate to extreme improvement in the individual's on-the-job performance. They also show moderate to extreme improvement in a variety of business measures, including customer satisfaction, productivity, and cost-schedule-requirements performance.

The job descriptions, competency analyses, and career paths recommended for the SPM execution environment all geared towards creating a professional development environment focused on maximizing the talents of all project management personnel. Supported by these processes and artifacts, managers can focus on opportunities that support the individuals' development of their talents while, at the same time, adding to the skills and knowledge of that individual. When

professional development is directed at getting better at what we do best, company performance can only improve.

But don't take our word for it. There are two quantifiable measures related to the corporate bottom line that are readily available, and even more important, relatively easy to measure: project performance and staff retention.

Project Performance

The bottom line measure of success is often posed as a question: Are you delivering projects in accordance with expectations (schedule, budget, quality—the time-honored Triple Constraint)? The ability to show an improvement in project performance as a result of training often hinges on being able to demonstrate that an individual project manager was able to apply his/her training to the project. Therefore, when sending a project manager to a training class, consider how that individual will apply the training and how the manager will know that it is having an impact. One method is to measure the individual's knowledge and competency before the class and then again after the class or series of classes, such as those that comprise a Master's Certificate Program.

However, keep in mind that a project manager does not manage a project in a vacuum. Unless the rest of the organization has been exposed to management by projects and understand their roles and responsibilities to the project, the project manager cannot succeed. This is where a corporate-wide governance framework such as SPM, which brings "the project mindset" to visibility at the highest levels of the organization, provides the necessary power. Project management can change organizational culture from the grassroots up—it has been happening for decades. But only top management can instill organizational will to follow best practice portfolio alignment and project management in the time frame that yields a competitive boost.

Staff Retention

Another qualitative measure you can use is staff retention rate. Project managers have careers that they are interested in enhancing—either while employed with you or with someone else. Providing project managers the right opportunity to participate in skills development training is a powerful tool to retaining them. Consider the project managers' work schedules when scheduling training. These resources often cannot spend a week, or even two full days, away from their respective projects. To address this challenge, consider offering courses more than once, perhaps even during off-hours.

Establish a process to monitor these metrics during the period in which you are offering the training. If you don't see an improvement, conduct the analysis to determine why not. Are the right people attending the right training? Are there other factors that are preventing project success that are not related to the training (i.e., organizational politics)?

Who Should be Trained?

There are four audiences for training and each one needs a different depth and focus.

1. Executives need awareness training to give them an appreciation of what project management can do for them, and to teach them how to ask the right questions to get the right information so that they can make good decisions.
2. Practitioners. Project managers need training designed around their present level of capability. You don't design a uniform training program—you design a program that meets the needs of the population. Train all levels, from novice PMs to experts who need refreshers. Assess your practitioner audience for areas of strength and weakness and design around that.

3. Matrix organization functional managers need training in three areas: their role in a project environment (as resource owners), the role of project management in the organization, and finally an overview of what project management is all about. A related audience is ancillary managers, such as HR and finance, who support projects. The need for functional managers to receive project management training was highlighted in a recent field study published in the project management journal. One of the findings was that, even when project managers are knowledgeable about risk management, poor risk management results when functional managers do not have any formal risk management training.
4. Team members on the project need to understand both the big picture and their supporting roles. Encourage "would be" project managers to participate in the training as well. Use training to grow the skills you will need to address the staff transition that will occur, to ensure you have a pool of trained staff to draw upon.

Executives and project managers should be trained simultaneously. The executives are change agents and project champions. If project managers know that executives are going to be asking them questions they might not be able to answer, they pay more attention. It improves performance at the same time it raises expectations on the part of executives, so the two trainings reinforce each other.

Most individual workers believe they need training. Most corporate executives also believe training is a high priority. But often, middle managers to be educated on its importance. Managers send a strong message about the value of employees via policies on who pays and when the training is delivered. When management wants employees to pay for the class and use vacation time to attend, the messages that employee receives about trust, power, and career are not positive.

COURSES:	PM Essentials	Risk Management	Cost & Schedule	Managing Multiple Projects	Leading Project Teams	PM Practicum
LEVELS						
Team Member	X					
Project Manager	X	X	X		X	X
Program Manager	X	X	X	X		
Project Office Director	X	X	X	X		

Exhibit 6-1. Example of education and training requirements by position. Requirements at entry-levels are pre-requisites for higher levels. Course names are taken from the PM College catalog.

Reinforce the training with follow-on activities, to maximize the effectiveness of the training. Implement a mentoring program that supports project managers benefiting from the experiences of other who have gone through the training. Ask your instructors to conduct follow-up sessions: bring the entire class back together to talk about their experiences applying the classroom instruction in the real world. Exhibit 6-1 is an examples of training and education plans for developing project managers and other project personnel.

Companies can support individuals—and improve training results—when they are mindful that individuals are more likely to take ownership for their learning when:

1. They are given a compelling, meaningful reason to do the task (ie, a link to strategic goals.
2. They have options to make the task more interesting
3. Social networks exist to support the learning (so that individuals fulfill social needs as they connect with one another through a topic or project of interest.) The project management community of practice is an example of such a social network, as are online threaded discussions with other practitioners, professional associations, and the like.)

Mentoring and Coaching

Mentoring is the best source to better understand work standards and behaviors that fit the company culture. Effective mentoring involves a relationship with a respected executive-level person to gain their evaluation of your professional and personal goals, their insight into the development of action plans, and their experience on how to develop relationships or handle specific situations.

As members of "the accidental profession," project managers more often than not learned how to manage projects by managing projects, and by observing other project managers in action. And mentoring still remains the most effective way to bring new project managers up to speed quickly.

Toney identifies mentoring as both a skill the project managers should master for success, and as one of the few reliable routes to competence in the project-based workplace. Lynn Crawford, of the University of Technology at Sydney (Australia), a leading project management thinker who was instrumental in developing Australia's government-mandated competency measurement system for project managers, recommends mentoring and other social learning modes (such as communities of practice), as important learning tools for project management.

Measuring (and Rewarding) Performance

Prior to the knowledge economy, the concrete inputs and outputs of business functioned as a way to measure human performance. Workers used materials to create objects, thus measuring materials used and objects produced gave the business a way to calculate something about worker productivity. But as we move into the realm of the information

economy, the productivity equation becomes more complicated. Knowledge workers—and this label fits nearly everyone in the project management field—use primarily information and processes to add value to work products that are often abstract: an organizational change project, for example, or a new product rollout plan. Yet, more than ever, business needs to know "How are we doing?"—and in a knowledge-based organization, "people performance" is the central metric.

Performance management—the process of establishing both employee objectives and metrics by which performance against those objectives can be measured—should provide a formal, structured way to discuss work performance, identify performance gaps and rate performance. Career and development planning elements are logically linked with this process. The "pay for performance" trend also links compensation to performance goals, as opposed to traditional reward structures based on rank and/or seniority.

Research tells us that there are some performance measurement and appraisal systems that don't work very well. Unfortunately these are the ones in common use. A recent survey by the human capital research and consulting firm Watson Wyatt underscores some of the principal problems with how we measure work performance. The study found that less than 30 percent of U.S. workers agree that their company's performance management program actually does what it's intended to do: improve performance. Fewer than 40 percent say the system establishes clear performance goals and generates honest feedback.

These statistics led Watson Wyatt to conclude that performance management programs "represent a lost opportunity for most companies." In fact, according to their studies, if designed and implemented properly, performance manage-

ment can have a strong, positive impact not only on individual performance but on financial results—up to a 20 percent improvement in shareholder value.

In contrast to the traditional performance appraisal, the emergent approach to performance management places strong emphasis on continually striving to enhance performance and develop capability. This process must be linked to the defined competencies for the role as well as to development planning and opportunities.

In summary, performance measurement provides a framework within which effective performance can take place. The elements of that framework, according to Graeme Dobson, are:

- The essential job functions the employee is expected to perform (role descriptions)
- What "doing the job well" means in concrete output focused terms (role competencies)
- How job performance will be measured and rewarded (performance measurement and efforts at employee motivation and retention—which include, but are not limited to, compensation)
- How employee and supervisor will work together to sustain, improve, or build on existing employee performance (professional development)
- How the employee's job contributes to the objectives of the team and the organization (integration of performance management with the organization's strategic goals and objectives—an integration that is facilitated in project-oriented companies by a Strategic Project Office responsible for both the development of project personnel and for project portfolio management).

"Performance Culture": Creating a Best-Practice Environment with SPM

One aspect of the Watson Wyatt survey cited earlier that might surprise some managers is that employees complain that performance standards aren't set high enough, and that people aren't held accountable to these standards. Only 54 percent of workers say their company sets high performance standards and only 44 percent feel that people are held accountable for their performance. Nineteen percent of all workers say their company deals effectively with poorly performing employees. That so many workers view these as problems says something very positive about the workforce: people want to be held to high standards; they want a system that not only rewards high performance but confronts poor performance. In short, today's employees long to work in a "performance culture."

A performance culture, as described by Dobson, is one in which individuals and teams are motivated to proactively fulfill their responsibilities; stimulated to perform their work and achieve superior results; inspired to communicate their progress and results; and willing to accept responsibility for those results. To establish a performance culture, he lists organizational qualities that should be sought after:

- **Trust.** A performance culture cannot survive in an environment of mistrust
- **Clarity.** People need a clear picture of what they need to do and what results are expected.
- **Balance.** Accountability and authority; expectations and capability; pay and performance—all should be balanced to achieve optimum performance.
- **Ownership.** When employees feel like owners responsible behavior and thoughtful approaches both increase.

- **Consistency.** Policy, procedures, resources and consequences must be applied in a consistent way.

All five of these qualities are supported by SPM-based governance.

Rewards

Competency-based management still comes down to someone making decisions about who gets what pay, for what reasons. Best practices include group reviews where managers review competency assessment decisions and then approval of manager's recommendations by the level above. The method for determining those differences is most often where the individual employee falls on a scale relative to the competency model. If competencies are the "wheels" for managing knowledge work, pay remains the engine. Employees will continue to pay attention to whatever gets reinforced by pay even if that is just the individual biases of their managers. In the past, some project-oriented companies have linked rewards to Project Management Professional (PMP®) certification; yet it is possible for a PMP® to acquire the technical skills needed for project management, but still lack many of the business and interpersonal skills needed to lead people or portfolio management successfully.

Probably the biggest surprise in human resources research over the last decade or so has been the consistency with which compensation comes in last as an important consideration in how people feel about their jobs. Technical workers especially are less likely than those in other fields to be lured away by more money. Competitive compensation may be of importance initially, but it comes in third behind career growth and training and development where retention is concerned.

Money is the most common extrinsic reward, but it does not make people passionate about their jobs. Intrinsic rewards, however, can generate the kind of passion required to make them achieve high levels of performance. Although knowledge workers can be motivated with extrinsic rewards, the evidence suggests that intrinsic rewards are more effective motivators. These include flexible career paths, the challenge of project work, and the sense of entrepreneurship—all of which are underscored in the SPM approach.

But reward systems also need to motivate performance with extrinsic rewards. Because high performers can make substantial financial contributions to the company, reward systems need to be flexible enough to reward them commensurately with their contributions. Many companies are replacing the traditional narrow salary ranges with broad salary bands. They also reward cross-functional and team performance, create pay-for-skills plans, and provide bonuses based on company profitability.

The most radical—yet most obvious—change is to base all performance appraisals and review systems on the team, and make the team accountable for team results. For true teamwork to occur, people need common purposes measurable goals and a common fate. Thus, moving toward a project-oriented organization means creating a team-oriented appraisal and reward system.

In addition to organizational objectives, personal and team objectives need to be developed that are aligned to the organizational objectives. Employees must understand how they can influence the successful execution of the strategy and how their work is important to execution outcomes. Managers must help employees set individual and team goals that are consistent with strategic success, while developing buy-in to support the organization's strategy. Personal development plans can be customized to achieving these goals. Incentive and reward

programs, as well as clearly articulated career paths, must be developed that motivate behaviors and performance encouraging effective strategy execution. Linking pay to achieving strategic objectives provides clear communication of the value of strategy execution to the organization.

Even the best individual performance can be wasted or go unnoticed, if it is misaligned with company objectives. A genuine performance culture doesn't measure individuals by actions that don't improve the business; nor does it measure the company in terms that don't relate to long-term organizational health and growth. Organizational and individual performance should be linked to one another by a strategy and values focus that values customer relationships and human capital more highly than procedure, rules, fixed assets, and other non-productive features of organizational life.

The quality and usefulness of an organization's strategic planning process can in part be judged by whether or not it leads to the development of measurable performance objectives. These objectives guide the future actions of organizational units, provide a blueprint for resource allocation, and serve as an important means of providing yardsticks for feedback on progress or problems. The budget then translates intentions into actions. Strategic goals are distilled to lower and lower levels of the organization until individual employees develop personal goals that further those of the project and of the organization as a whole.

This alignment of the organization around strategy requires a broad-based approach to measuring and managing the business. Performance measurement aimed at management improvement rather than simply documentation must establish this relationship between corporate strategy and the tactical initiatives—that is, projects—that are required to achieve the strategy.

Taken together, skills and competency assessments plus performance management that is linked to development

opportunities, creates a "talent management strategy" that ensures that the right people are in the right roles at the right time. if you address the skills and competencies required for people to do their current jobs well, and you must assess, select, and develop people for their next jobs. As people move higher in the organization, manager and leader competencies become more critical.

Career Paths: Developing Future Leaders

A broad range of experiences are required for future project managers. It is not possible to develop them by restricting their experiences to one function. Thus, rather than climbing the ladder up the functional silo, project managers benefit from being exposed to a number of functions, perhaps moving back to functions they have fulfilled before, but in a more senior role. One writer has labeled this "the spiral staircase" career path.

It is far better, however, if alternative upward paths exist: one through technical managership and one through project managership With such dual promotional ladders, technical managers can stay in their departments and become core team members responsible for the technical portions of projects. Dual ladders also allow progression through project management, but project managers must be able to manage technical specialists while handling the behavioral and administrative tasks that motivate the specialists to do their best work. (See Exhibit 6-2.)

A project manager multilevel career path can be developed around levels of competence in the following categories: education/experience, interpersonal skills, technical coaching ability, business acumen, customer focus, project complexity, role in managing projects, and the industry/work environment.

According to Christopher Sauer of Oxford University, developing a career structure is essential to the development

of an organization's project management capability. The career path structure serves three purposes:

1. It allows the organization to match a project manager's level of competence/experience to the difficulty and importance of a project.
2. It assures project managers that the investments they make in developing their professional skills will be rewarded.
3. It provides an incentive for people to stay with the company, because they can see a clear promotion path.

To survive in the competitive business environment, an organization must develop a career program that will respond to future strategic requirements for certain skills. By doing so, the organization provides opportunities for and encourages multifunctional experiences and allows their personnel choices and control over their lives. To the extent that the organization provides opportunities for the individual to use and develop his or her personal competence while moving through various jobs, functions, and levels, the individual will grow and experience career satisfaction—and the organization will reap the benefits.

The objectives of any career development program should be to:

- Improve skills
- Assess an employee's readiness for advancement
- Define professional skill areas
- Create an equitable salary structure
- Create a positive and open environment for career discussion
- Ensure frequent feedback

- Provide opportunity for advancement through a career "path"
- Encourage a "change to grow" environment
- Assure future strategic leaders for the organization.

Role description for enterprise-level positions within the SPM framework are detailed in Appendix E.

New and Expanded Roles Create the Execution Environment

One of the perennial issues in execution has been the way the roles on the project level have been defined. The traditional "art/science" clumping of skills and abilities in the project manager has often proven to be nearly impossible to pull of successfully. Refining role descriptions and providing technical and administrative support to project and program managers sets the organization up for success. Some thoughts about the expanded roles within the Strategic Project Office:

Project and Program Managers

The goal of a project manager is to see to the successful completion of projects. This includes initiation, planning, execution, control, communication, and closure of the project. The project manager is also responsible for keeping the project sponsor and SPO management apprised of progress and pertinent information. Coordination and communication with functional management and PMO team peers is also essential. In addition, project managers today should be expected to feel a sense of partnership with the business,, not just "do the job." A proactive project manager does more than merely report problems: he or she is empowered to take action, solve problems, and escalate issues to management as a last resort.

PM Careers: Position/Organizational Level

Project Management Business-side Career

Chief Project Officer/Enterprise
Strategic Project Office Director/Enterprise
Project Office Director/Divisional/Departmental
Portfolio Manager/Enterprise
Manager of Enterprise Project Managers/Enterprise
Manager, Project Managers/Divisional/Departmental
Global Program Manager/Enterprise
Enterprise Program Manager II/Enterprise
Enterprise Program Manager I/Enterprise
Enterprise Project Manager II/Enterprise
Enterprise Project Manger I/Enterprise
Program/Project Mentor I, II/Enterprise or Divisional
Program Manager II/Divisional
Program Manager I/Divisional
Project Manager III/Divisional/Departmental
Project Manager II/Divisional/Departmental
Project Manager I/Divisional/Departmental
Business Analyst
Risk Management Coordinator

Project Planning and Controls Focused Career

Chief Technology Officer or CIO/Enterprise
Strategic Project Office Director/Enterprise
Project Office Director/Divisional/Departmental
Manager of Enterprise Project Support/Enterprise
Manager, Project Support/Divisional/Departmental
Enterprise Project Controller/Enterprise
Project Controller II/Divisional/Departmental
Project Controller I/Divisional/Departmental
Project Planner II/Divisional/Departmental
Project Planner I/Divisional/Departmental
Project Estimator II/Divisional/Departmental
Project Estimator I/Divisional/Departmental
Project Scheduler II/Divisional/Departmental
Project Scheduler I/Divisional/Departmental
Business Analyst
Issues Management Coordinator
Change Control Coordinator
Risk Management Coordinator

Specialty Positions/Careers

Systems Analyst
Knowledge Management Coordinator
Methodologist
Technical Advisor
Budget Analyst
Project HR Specialist

Exhibit 6-2. Project Management Careers in the SPM Culture

Project Support

Several roles complement the project manager(s) to efficiently execute programs and projects:

- Project Schedulers
- Project Planners
- Project Controllers.

These roles, which represent the "science" side of project management, provide a career path for technically skilled project personnel, and by assuming responsibility for the tracking of schedules and cost, updating schedules and budgets, keeping project status reports current, and analyzing variances, they make sure the project managers and executives have accurate information upon which to base business decisions, and free up the project manager to concentrate on the facilitative and business aspects of projects.

Staff Roles(s)

Among the roles filled by project team members in an SPO are:

- Administrative support—back-office tasks, report generation, software support
- Best practice or process experts—training, project oversight, quality assurance, methodology development
- Knowledge Management Coordinator—project records, standards, methods, and lessons learned must be stored in a project database. In a large organization, the maintenance of such a repository can become a full-time job.
- Resource manager—in organizations with significant project activity, an RM prioritizes resource requests and works with the Project Office Steering Committee to manage the

"fit" of resource skills to project requirements, manage and balance scarce resources, forecast and aid in planning for acquisition of resource shortfalls, and secure assignment of key resources in keeping with the prioritized project list.

Most of these roles fall under the Project Support and/or Standards and Methodologies areas of PMO functions noted earlier. And, although we discuss these roles at the SPO level, they are scalable to divisional PMOs as well. Note: All these roles, and more, are fully described in our book, Optimizing Human Capital with a Strategic Project Office.

In addition, the new SPO recognizes that people do projects and that most project problems are people problems. Having a Manager of Project Managers, a role that combines project management experience with the skills to supervise, coach, mentor, develop and recruit top project management talent, provides a long-needed interface between corporate HR and real life in the projects. One major insurance company includes a role called the Organizational Development Specialist along with the MPM, whose role the IT PMO Director calls "to float around and make sure everyone's human needs are being met"—an addition to project life that has had tremendous positive effects on morale and productivity.

Then there's the Methodology Guru. One of the complaints we have heard about PMOs is that they tend to become "methodology police." But what we have in mind for the MG is more like a combination guru, cheerleader, and research whiz. Someone who is both passionate and meticulous and who can build, within the SPO, a community of practice dedicated to changing work habits and project results through the application of a standard methodology. Imposed methodology is rarely sustainable, people being as contrary as they are. But when introduced by someone fascinated with process and

dedicated to ease-of-use and knowledge transfer, a methodology can transform a chaotic workplace into a rewarding one.

Developing Supportive Leaders

Supportive leadership, often titled servant leadership, embodies an attitude or philosophy about people. It involves the leadership view that their role is to support and help subordinates. It differs from more directive styles of leadership in its emphasis that team members are competent and skilled. Supportive leadership necessitates building the team with skilled and effective people, having broad spans of control and delegating authority.

Supportive leadership assumes a trusting relationship with others. Executives who take the supportive approach tend to have organizations with broader spans of management control. For this approach to work, it's necessary to have highly qualified people. Consequently, the executive has a strong incentive to seek out and work with superior people. The desired capabilities of the managers tend to reflect those of the servant executive; they willingly assume responsibility, are trustworthy, use good judgment (wisdom), and can work on their own without constant guidance.

Overall, the nature of trusting, supportive leadership is that it encourages subordinates to exercise initiative, develop self-reliance and confidence, and to learn from errors and experience.

The supportive attitude is by definition people-oriented as compared to system-oriented. The supportive attitude is evidenced in numerous people-oriented best practices. It includes providing others with the information needed for job performance, team building, training, coaching and mentoring. The supportive leader places faith in the ability of people to maximize opportunities and to minimize problems. Trusting and

supporting people tends to result in systems that are efficient. Consequently, once the supportive approach to management is put in place, systems problems tend to take care of themselves.

The supportive approach to management emphasizes training. Executives see themselves as teachers or mentors and work with others to improve their levels of confidence. The objective is to nurture the person so that they can take on even greater amounts of authority and responsibility while minimizing their need for supervision and direction. It's easy to see how an organization imbued with this kind of culture would have an edge in executing strategy. To create an environment where people are engaged, feel entrepreneurial, and feel a part of the organization's movement towards its strategic goals, supportive leaders are a must.

Best Practices for People Management in the Execution Environment

As we've discussed above, aligning strategy with training, managing, measuring, rewarding, and promoting people are key ingredients in effective strategy execution. Best practices identified for "people management" included:

- Project stakeholders understand how they can influence the successful execution of strategy and how their work is important to execution outcomes.
- Project stakeholders have clearly defined individual and team performance targets that are aligned with strategic objectives.
- Performance management reviews are structured to reward or correct individual performance based on the employee's contribution to strategic objectives.

- Project stakeholders clearly understand and buy into the organization's strategies.
- The project management staff is capable of creating, deploying, and maintaining enterprise, portfolio, program and project strategies.

The most often used practice by high-performing organizations is having project stakeholders' buy-in to the organization's strategies. High-performing organizations are significantly better than average at having performance management reviews structured to reward or correct individual performance based on the employee's contribution to strategic objectives.

Additional best practices in resource management identified by participants in the 2006 Benchmarking Forums included:

- Pool funding to promote flexibility in assigning resources between and among projects
- Include specialist and admin roles in the resource pool in addition to pm roles
- Give resource data visibility so project teams can articulate demand and resource teams can show availability
- Use monthly reviews to analyze resource supply-demand gaps
- Divide PM roles among several individuals, splitting the "art" of PM from the "science"
- Use contractors for experienced, short-term staff; have full-time PMs within the PMO
- Look outside the "technical box" for potential project managers
- Advocate for PPM as an executive "reality check" on capacity for planned projects

- Tie performance reports to training opportunities
- Create an HR liaison role in the PMO—some sample titles: Role Steward, Organizational Development Analyst, PMHR Coordinator
- Create a shared pool of project managers to keep people off the bench and avoid loss of expertise from losing people/rehiring
- Identify levels of project managers (by education and experience) and link level of PM to complexity/size of projects
- Bring project staff within an enterprise PMO to take the uncertainty out of staffing issues
- Use 360 degree or multi-rater system for performance measurement with PM as one evaluator.

In summary, SPM provides organizations with a powerful tool for communication, motivation, and alignment. It focuses the energies and talents of employees on achieving the organization's strategic objectives. This is good not only for the organization, but for the employees as well. Research has demonstrated that engaged employees experience less stress and higher job satisfaction—while delivering higher performance for their organizations.

Human performance management works best when it unifies activity at the individual, team, project and organizational levels. Best-practice performance management systems translate the company vision into clear measurable outcomes that are shared throughout the organization and with customers and stakeholders. Aligning organizational, project, and individual performance helps to strengthen the project management culture; facilitates continuous planning and review; and provides tools for assessing, managing, and improving the overall health and success of business systems. A paradigm

shift is taking place, from prescriptive, compliance-based performance oversight to a forward-looking strategic partnership involving all elements of the business. Alignment of performance measurement with other management processes such as strategic planning, budgeting, quality improvement, project management, and employee evaluation offers the potential for improving overall efficiency and effectiveness. Through alignment, leaders articulate a vision and direction, managers develop operational or project plans to implement the vision, employees and managers together monitor and evaluate results and work to close performance gaps, and capability for future projects is built.

CHAPTER SEVEN

Information Technology

The Alignment Facilitator

STRATEGY EXECUTION INVOLVES participation and communication up and down the organization, as well as lateral flows of information and coordination across organizational units. Making strategy work also requires feedback about organizational and project performance and then using that information to fine-tune strategy, objectives, and the execution process itself.

SPM requires that appropriate information tools are in place to implement and automate the SPM processes as well as align the elements of the SPM context, including people, to focus on strategy execution. These tools provide the information needed to:

- Monitor and control both the on-going priorities and execution of strategic initiatives, continually reviewing and adjusting as necessary
- Assess the business impact (and alignment to business objectives) of portfolios, programs, and projects
- Effectively manage initiatives through to completion
- Incorporate resource realities into estimates and feasibility assessments
- Make optimum decisions
- Monitor and manage strategic objectives at all levels of the organization

- Discuss performance, communicate decisions, and record relevant actions
- Capture knowledge for developing alternative plans and strategies
- On-line reports for discovery, analysis, communication, and decision-making.

SPM requires a robust technology platform to support the information needs of the organization. However, tools, if allowed, can proliferate. Governance should dictate the role tools are to play in the organization, keeping in mind that SPM technology is a supporting system that provides simple, actionable information to decision makers enabling the continuous planning and execution of strategy.

How Valuable Are Software Tools for SPM?

It would be hard to overstate the importance of IT to the execution environment. In fact, it is precisely because of the improved communications flow and data analysis allowed by today's software tools that the kind of integration we propose in the SPM model is even possible.

In 2002, Dr. Frank Toney of the University of Phoenix's Executive Initiative Institute noted that, as with many other business opportunities, project portfolio management had become a hot topic partly because the tools now exist to facilitate it: "In order to make sound decisions on a portfolio level, decision makers must have sound information on the project and program level." Recent improvements in project management methodology and software support that need for information. With this visibility and understanding has come a drive towards managing the entire enterprise as a portfolio of projects.

The role of IT in aligning project and program activities with corporate strategy is underscored by findings from the

CBP's 2005 *Strategy & Projects* research. Information technology best practices in particular set high performers apart. The top-performing companies in the study used the following best practices far more consistently than companies identified as low performers:

- IT tools integrate strategy execution management, portfolio management, program/project management, and performance management functions.
- IT tools are used to develop alternative strategic and project portfolio scenarios.
- IT tools provide information on the availability of resources.
- IT tools provide the capability to monitor and control risks, issues and financials across portfolios.
- IT tools enable appropriate communication of strategy and strategic performance throughout the strategic management chain, both top-to-bottom and bottom-to-top.

Among the low performers, these practices were used infrequently, if at all. And, another identified best practice—"Information about strategy and projects flows freely between business units facilitating strategy execution"—was among those least practiced by the low performers. It was a surprise to the researchers to find that IT practices, more than any other single area of the SPM model, set successful companies apart from their peers. High-performing organizations use information technology best practices more than other organizations, consistently and significantly; and they are significantly better than average at having IT tools that integrate strategy execution management, portfolio management, program/project management, and performance management functions, followed by having IT tools that are used to develop alternative strategic and project portfolio scenarios. Exhibit 7-1 shows all

the IT best practices in the *Strategy & Projects* study, and the frequency of use by high and low performers.

That being said, it is interesting to note that, even experts in IT, when discussing the selection and rollout of project portfolio management/enterprise project management software tools, stress that it's people and process first, tools second, in the hierarchy of organizational needs.

According to Chris Vandersluis, president of HMS Software and a noted writer on enterprise software implementation issues, "Collaboration … has spawned a entire category of project management tools; but collaboration is something that can only be enabled by technology, not created by it. In the past ten years, the entire project management industry has focused more on having project team members communicate and work together than it has on the algorithmic nature of project scheduling. As interesting as it might be to create the ultimate theoretical schedule, actually managing a project has everything to do with communicating and only a little to do with calculations." He adds that there is a tendency for some managers to believe that if they purchase and then deploy an enterprise software system with collaborative functionality, project team members will automatically collaborate. "This is not always the case," he warns. "If this is one of your goals in deploying EPM, it's worthwhile to ask why personnel don't collaborate already."

Vandersluis suggests the following questions as a litmus test to see if the cultural side of tool deployment is more of an issue than the technical side in your organization:

- If project managers share their true data with the organization, will managers punish them with their own data the next day?
- Does it concern you that if you share your data with other project managers, they may use it to take unfair advantage?

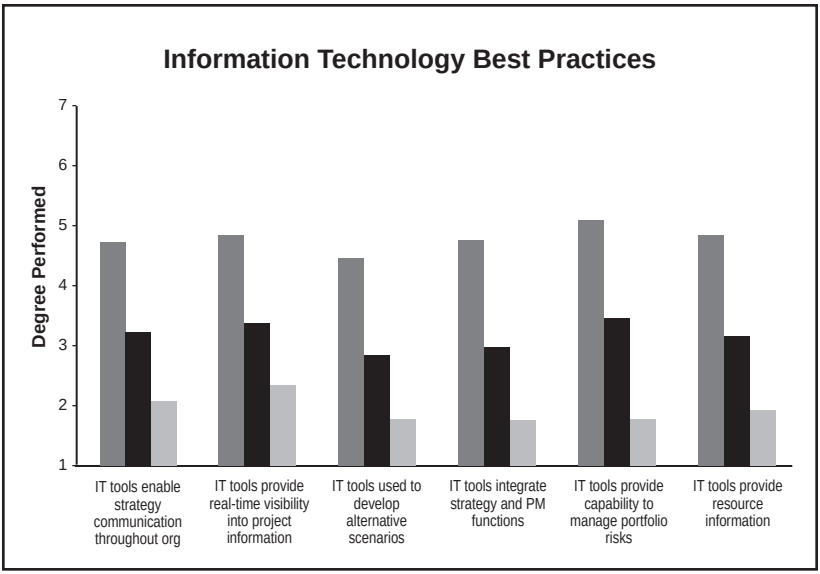


Exhibit 7-1. The left bar in each set indicates the frequency with which that practice was reported being used by the top performers in the survey; right bar indicates the reported use of that best practice by low performers. The central bar expresses the mean. Note the dramatic difference between high and low performers for each practice.

- If staff members enter an entire week of work on a single integrated timesheet, will they be concerned that the data will be used to unfairly evaluate them?

SPM is a highly integrated and collaborative framework. If project team members, project and functional managers, and executives aren't collaborating and communicating at present, the reasons are almost always culturally oriented rather than technical. So, as a first step, evangelize the benefits of SPM and make changes to any procedures that set up roadblocks to participation in strategy execution by members of the

organization. These barriers are more likely to be found in the organization's performance measurement, rewards, and communications norms than in any lack of functionality in tools.

An environment that is overly tools-focused, as we discussed in Chapter 6, can become an environment of project and program failure. Keeping the balance between people, process and tools is a key success factor in implementing the SPM execution environment.

What Kinds of Tools?

There are a number of software tools that can be use to support the execution environment. In fact, recent focus on execution has led to the release of numerous "strategy execution" packages, most of them utilizing some form of the Balanced Scorecard approach. And, for some companies, these tools may be a useful addition. Yet, just as in software design, in organization design the concept of reuse is a valuable one. Why purchase and implement an additional layer of tools if the tools already in your arsenal have functionality that will serve the purpose?

When you read about the functionality of these new strategy execution tools, you get the sense that they are talking about project management software … in code. All the elements of portfolio management—rationale, resource allocation, and priority—are discussed without the word "project" being uttered. Yet, with the addition of a scorecard for balancing the portfolio, these tools look very, very familiar.

The good news is, project management software design has for some years, been reaching ahead to envision just such an opportunity. Each year project management software developers improve the functionality of the tools to help the portfolio manager organize the projects and programs, formulate the portfolio options and analyze alternative scenarios.

The use of pivot tables, bubble charts, resource allocation algorithms, and risk/reward diagrams provide the portfolio manager with a plethora of options and analytical capabilities. Recently, improvements have given portfolio managers very robust tools for building, analyzing and tracking the portfolio.

Analytic software that use the Analytic Hierarchy Process (AHP), are still used successfully for prioritizing projects against appropriate strategic factors. Additionally, a number of software vendors provide tools that help in financial analysis and ROI calculations. In summary, today's tools are becoming extremely valuable in tracking and analyzing a portfolio especially as the more disciplined project management promoted by PMOs provides a basis for collecting the information and data needed to plan and track the portfolio.

So, the tools for monitoring strategy already exist in organizations where enterprise project management software (EPM) tools have been implemented. It's rare, however, that such tools are used to their full power. What the designers of the software envisioned—enterprises that use the EPM tool as a strategic tool for tracking the performance of the portfolio—is now just beginning to become a reality. Look to your PMO to discover how software that may be already in use can become a strategy execution tool. With enterprise-wide training in the use of such tools, organizations can begin to function as coordinated strategy execution engines.

A Few Words about Functionality and Selection

When it comes to making IT decisions in the light of aligning projects and strategy, here are some high-level considerations that will help you think through your requirements. Software that supports SPM must:

1. **Support integration for a total enterprise perspective.** You need the ability to summarize and capture the most

pertinent information for an executive perspective. As things change in the supporting details, you want the top-level information to reflect the impacts and the new status. Not only do you want to see this for the enterprise schedule, but you want to see it for all your resources and project funding, too. Having the ability to efficiently integrate the details and provide a total enterprise perspective for schedule, resources, and cost is a capability of most sophisticated tools, but not of all tools.

2. **Provide different capabilities and levels of information for diverse stakeholders who work at different levels.** Executives are important, but we can't forget about the project managers and teams, including the administrative and operational folks who support them. The software tool needs to be sophisticated enough to provide the enterprise integration capabilities, but it should be simple enough to use on an individual project. Don't buy a software package that is overly complex and not intuitive. Make sure it is user-friendly and easy to migrate through (get your experts—the end users—to test it and tell you).
3. **Support dynamic, changing environments and priorities.** Most organizations are dependent upon external influences. Priorities shift. You need a software package that is flexible and can easily adapt to changes across the board. You don't want to manually reconcile different databases every time there is a fluctuation. Get a tool that makes it easy to make changes, not hard.
4. **Make a good process more efficient with software.** Process comes first. Select a tool that will support or enhance your processes. Identify the ones that are important and understand how the software can support them. This means that, first, you have to understand the processes

that are percolating through each function in the organization. Examining processes under the four categories in the SPM model—strategy management, portfolio management, program/project management and performance management—will help determine how tools can streamline the work of the organization.

5. **Provide a historical database to gather company-specific information for future planning and estimating.** A software tool in the Strategic Project Office can be a central repository of information, collect actuals on projects as they move through the life cycle, as well as lessons learned on completed and in-process projects. These "knowledge management" aspects act as inputs to future strategy and portfolio planning, as well as bringing realism to budgets and resource projections.
6. **Reduce the administrative burdens so project managers can spend more time managing and analyzing vs. consolidating and summarizing.** If projects are the way strategy is carried out, project managers are golden. Minimize the time they spend consolidating and summarizing information, maximize the time they spend on managing the project and interpreting the resulting information. Make sure the software maintains and provides the information they need to see, as well as a way to roll up high-level information to executives for strategic and portfolio decision making.
7. **Support the establishment of standards and consistency across projects.** In large part, software tools will support standardization and consistency. By their very nature, they are oriented in this direction with common database fields and nomenclature. In many instances, the software is simply a shell for you to populate as it best fits your organization.

8. **Provide a central place for written communications and project exchanges.** Collaboration is the name of the execution game. Keep it simple; provide one convenient place to find information on vision, mission, strategies, goals, objectives, project management guidance and new "things happening in the field." Individuals will then know where information is located and can access elements that will help their current activities.

Best Practices for Selection

If new software is called for, make selection a systematic and carefully thought-out project. The most experienced software selectors recommend at least three stages of analysis when selecting software:

1. User analysis—how skilled are the personnel who will be using it?
2. Needs analysis—What are they going to do with it? What kind of reports are needed? What needs to be tracked? What problem are you trying to solve? Be specific.
3. Vendor analysis—are they financially stable, with a good support track record with other clients?

One of the best processes for software selection laid out the following eight steps:

1. **State the business problem driving the selection project.** Document what data is not available, how it will be used when it is available, and how that information will help meet strategic objectives. Define the information required in detail, in order to generate requirements for the software.
2. **State improvement objectives early in order to define requirements in terms of the features that *will actually be***

used. This means documenting the current state of things, quantifying the improvements, and finally, defining the information required to support the improvements. Document what information is not available from current system. Treat this as a visioning exercise, using subject matter experts or consultants as appropriate. State the high-level goals of the organization (such as, *Reduce time to market of new products by 10 percent*). Why can't these goals be met with the current system? Document how the software should help meet these goals.

3. **Document or re-engineer the project management process.** If the current process is inappropriate for solving the business problem, meeting the improvement objectives, and meeting the goals of the project management environment, document a new process before continuing with software evaluation. When seeking to make strategy drive projects, it is wise to make certain that your project management processes are working first.
4. **Map the desired process to the appropriate category of software.** This is the most labor intensive step. Schedule a series of detailed sessions to walk through each step in the process. Make detailed notes describing the inputs, outputs, and processing required to support the process. Involve subject matter experts, management, the current system, and IT staff. Produce a detailed document explaining how the system will support the process for each step. Capture the data elements required. There are many ways to achieve an information objective, so identify what is required, not how the software should make it happen.
5. **Generate a requirements list.** Most critical requirements will be uncovered during the mapping process. Articulate these and the short list will identify the best possible matches to the requirements.

6. **Select the short list.** A short list of two products is ideal—more products shows that requirement definition has not surfaced a differentiating feature, and almost any product will do.
7. **Test products yourself.** Invite vendors to introduce you to their software. Testing them with data that actually represents the business problem facing you will demonstrate which products handle the requirements in the way you expect. Use experienced people to evaluate the results. They should have an understanding of what results are expected, can articulate the pros and cons of the differences between how the packages perform, and can comprehend the potential benefits of differentiators between products.
8. **Decide.** Software evaluation efforts can take as little as two days or as long as four months. One important element in selection should be careful consideration of the vendor's strength and weaknesses. You should assess their reputation (years in business, customer base, financial condition, proven track record, alliances with other vendors, long-term strategy). Judge how they deliver software and support: Do they use partners and service providers? Who will deliver and implement the software? Do they have/need a local presence? Are there performance guarantees? Is there adequate training and documentation? Finally, what technology decisions have they made and how do those impact their future plans?

To this, we might add that at a certain point, there is a diminishing return on the time invested in evaluating software.

Fundamental Tool Features to Support SPM

Enterprise-wide Systems

In view of the need for common corporate data on strategic projects, we can see that all of the planning must be accomplished

in a common database. For this to be possible, common systems must be established that integrate data and provide summarized integrated reporting in a timely fashion—not just with regard to resources but also in the areas of capital funding, budgeted expenses, and the like. At the organizational level, effective, integrated resources management, cost planning, and time tracking requires integration with corporate procurement systems, financial systems, time collection systems and human resources systems. Systems integration at this level of complexity requires detailed specifications development and planning of its own accord.

As Chris Vandersluis has noted, storage of all project data in a single location is often highly contentious. Many managers equate control of data with power—something few managers will willingly sacrifice. Budgets may be part of Finance; teams of resources may be managed by department managers; project managers will be used to controlling their own schedule data. But for an enterprise system to be possible in any way, all project data must be stored in the same place and managed in the same way.

No two organizations are the same and therefore no one can predict how you will need to group and analyze your project data. Ensure that the system you are looking at will be able to adapt to whatever coding you envision now and will have the capacity to extend to the grouping and coding you haven't even imagined yet. Also, critical in this area is the ability to impose some coding as mandatory. This is important when you are linking the EPM system to other corporate systems. For example, in a link with finance systems, you must ensure that work is only coded to accounts which exist and that 100% of work be coded. Can the system impose this on all tasks?

Portfolio Management

Portfolio management is 80 percent thinking and 20 percent mechanics. Having said that, adding the mechanics to the

process can often resolve some of the worst political issues related to prioritization. Any manager who elects that his or her project carry anything but the highest priority knows that can mean loss of resource allocation. So the system for prioritizing projects should be part of an empirical analysis. The rules on what makes a project a high priority vs. a low priority are quite easy to get agreement on prior to deployment of the system—and hard to get afterwards.

From a tools point of view, key aspects in portfolio management include the ability to code projects so they can grouped together for reporting or analysis, and the ability to organize the projects by priority from whatever perspectives are important, such as ranking projects by risk, by return on investment, by alignment to corporate strategy, by cost, by revenue, by manager or by client.

Using portfolio management functionality, for the first time, management has the ability to do forward-looking resource capacity planning. With all projects stored in a central location, you have the ability to see all resource loads simultaneously. This enables a "what-if" analysis where the impact of a temporary addition of a proposed project can be assessed instantly. In addition, the interrelation between projects becomes clearer. If any project is dependent on the completion or delivery of elements from another, the impact of changes in one project can have dramatic effects on the second.

At the enterprise level, we encounter true portfolio management issues: selection and prioritization issues that only the newer generations of software begin to handle. There are decision support tools on the market that can be used in facilitating an executive team through evaluating a proposed project business cases against current goals, an exercise that should result in committed and executed projects. This is a very effective process for identifying and prioritizing new projects as well as

regular reevaluation of ongoing initiatives. But, often until you have some data from individual and departmental projects to roll up you cannot make that decision because you don't know what the projects cost or where they stand.

The software requirements at this level are evolutionary, since if you don't have individual projects managed well, and that consolidating or coordinating function at the departmental level is not going well, you can't evaluate projects at the enterprise level. So good portfolio management is built on two things:

1. Solid data from the bottom of the pyramid
2. A structured decision making process that ties corporate strategy to the projects, supported by that data.

The capabilities typically offered by project portfolio management tools include:

- What-if modeling: The ability to analyze the effects of proposed and/or newly added projects, including changes to available resources, project schedules and project costs.
- Project portfolio views: Allowing executives, project managers, end users and, team members to view the project and portfolio information tailored to their information needs. Dashboards offer the ability to see high-level portfolio, project, resource, and cost information based on user-defined metrics, with the option to drill down into details.
- Project prioritization information: Featuring comparative views along financial and other dimensions (for example, risk, business goal, and strategy alignment).
- Project information and status: Task and sub-task information, Gantt chart building, project searching and the ability to drill down in a project or task from the retrieved information.

- Resource allocation: Resource profiling by skill, geography, business or organizational unit, for more appropriate allocation as well as the ability to view resource use in real or near real time.
- Internet or intranet enablement: Support for Web browsers to enable project and task review, as well as the ability to changes status or record time against projects or tasks.
- Support for wireless, mobile, and handheld devices.
- Reporting: Visual layouts enabling integration of charts, data, graphics and text elements into reports (publishable on paper or electronically).
- Workflow support: Including timesheet approval/rejection.
- Security: Access to system features and functions based on username and password security as well as other security protections, depending on the organization.

Collaborative Work and Communications

In a way, any function of an enterprise system can be considered a collaboration function: instant chatting with team members, the ability to notify team members of events in the system through their regular email, instant messaging or mobile device, the ability to create elements such as mini-web sites, online surveys, or online update forms … these are all focused on enabling the human interaction aspect of project management. Chris Vandersluis reports that once a project is underway, project managers report that 80% to 90% of their time is spent on managing issues, going to meetings and dealing with people. So tools like issue management lists can make teams extremely effective. Everyone involved with the problem sees it right away so the likelihood of the issue be-

ing forgotten becomes negligible. The issue is assigned right away so everyone knows who to go to for the solution and with assistance on how to solve the problem. Notification on the creation of the issue and its resolution are electronic and integrated into the issue management area automatically ensuring no one continues working on the problem after it's been solved. That's execution!

Therefore, look for the simplest elements of collaboration. Does the system enable project management personnel to interrelate? Look for automatic notifications that can be integrated into your standard email or instant messaging systems. The ability to create communications areas such as project websites that are dynamically integrated with the project data can be of great benefit. The ability to collect data, rapidly analyze results, and accurately report status in a variety of fashions is critical to the success of an effective enterprise project management system. That means full integration with your corporate intranet and for virtual project teams, the Internet. Enterprise project management software should be expected to provide access to corporate project management methodology, project, procedures and templates to assist the project team in planning, executing, and controlling their projects. It should be capable of collecting data on individual project status, supporting the analysis of the data, and reporting project status, program status, and summarizing data in a variety of forms to include departmental, divisional, and enterprise rollups. Enterprise software must also have the ability to assemble resource requirements data by task for each project and accurately forecast resource utilization forecasts by job category. Integrated software begins to truly prove its value when it generates accurate project/program status, timely resource estimation and planning, and portfolio data for decision-making based on integrated corporate project schedules.

There is only one rule for good "social design" of collaborative technology, according to community of practice guru Richard McDermott: Make it easy to connect, contribute to and access the community. Software should make it easy for organization members to connect with each other, and to use information from the organization's knowledge base. This is more a matter of how seamlessly the software integrates with people's daily work patterns than with specific technical features of the software. For example, when saving documents for the team or posting for the organization involve the same number of steps in a familiar software product, the friction involved in collaboration is reduced. Friction is a useful way to think about barriers to communication or collaboration within a community. How difficult is it to connect, contribute or find help? Does it require going into a new program, accessing a separate area of a network, learning new computer skills? Is the collaborative software intuitive? The more special effort it takes to connect, the more friction is created. The greater the friction, the less likely people will take the time to connect.

If multiple users can't access data at the same time to view current project data and do project updates, you haven't got a collaborative enterprise system. The system has to be user-friendly enough that non-professional users can access it with little training. End users can't have their life become about servicing the system. The system is there to enable them to do their core work more effectively. This is something that IT practitioners often lose sight of.

Workflow

In larger organizations, the ability to define a sequence of events that must occur in a particular order can be of great interest. This isn't complicated functionality, necessarily. Can you list a series of steps and then identify when a step has

been completed? This type of functionality is important when looking at phased project approvals or when considering any kind of change management such as a change in project scope.
Resolving resource conflicts. As complexity grows, resource assignment becomes crucial. Many times, in order to get resources allocated or committed to the task, project manager has to engage in significant discussions concerning resource availability and allocation. Frequently the project starts moving forward before the resources are fully committed to the project. This is a time-consuming, error-prone and risk-exposed process in project management—one of the primary causes of project failure.

Organizations assume that the primary constraint on successful completion of projects is availability of key resources. This approach requires more sophisticated methods and tools to gather information about project status and to reconcile resource requirements across projects; without sufficient investment in these methods and tools, little improvement in capability will be possible.

To resolve resource conflicts, you must be able to comprehend both resource availability and resource requirements. Then, you've got be able to compare them—that's all the resource availability and all the requirements across the enterprise. It is the comparison of availability and requirements that displays potential conflicts. This means that all project loads and all availability must be defined in similar ways so that information is consistent across the system.

Human resource libraries can be designed using one of three resource management strategies:

1. Individual resource assignment. Individual resource assignment specifies the planned utilization of Bob, Mary, or Harry to specific tasks. This style of resource library development assumes the planners in the organization fully understand the skills, capabilities, and performance of each individual in the company.

2. Job-based resource assignment. The resource library consists of resources like programmer, systems analyst, mechanical engineer, electrical engineer, and so on. Large organizations with significant staff that must allocate, spread, and level resources across projects may utilize job-based resource assignment.
3. Skills-based resource assignment. Skills-based assignment takes the job-based system one step further and correlates individual skill within job category. Skills-based systems account for level of competency, degree of experience, and relativity of previous experience to the current task. Advanced skills-based resource libraries will account for skills level by individual to correlate individual assignment to task planning.

An enormous amount of information regarding resources must be catalogued and entered in that system in order to make effective decisions about resource allocation. But it is worth it. With poor data, executives end up shifting resources from disaster areas to disaster area (or pet project to pet project). While this often solves one problem in one project, it also creates waves of effects on other projects while the underlying root cause, of scheduling beyond the organization's project capacity, is not resolved.

Managing Large, Multi-project Initiatives

For large organizations, enterprise project management software capacity must be capable of managing data associated with hundreds of projects, thousands of resources, and hundreds of thousands of project tasks. Some well-known project management software programs just will not perform at this high level of capacity. Data and computational accuracy has been known to falter when subjected to the sophisticated calculations required by critical path calculations, constraints

between multiple projects, and resource leveling. At the enterprise level, the tool you select must be capable of accurate data collection and computation.

Interface with Corporate Systems

Complex interfaces between the project management system and existing corporate collection and reporting systems have frequently made the list of spectacular project failures. Financial systems require special attention in how they integrate with project management software with the two-way flow of information required from time collection and reporting systems, payroll systems, budgeting systems, and cost control systems. When materials and supplies are a significant element of the project execution, interfaces with the procurement, warehousing, and transportation systems may be important to plan the acquisition and delivery of critical components—the timing of which may have a direct impact on the successful attainment of a key project milestone. Direct interface with human resources systems may involve resource library integration with skills, training, performance measurement, and personnel databases. Many other corporate data systems may be affected by the introduction of enterprise project management software—risk management, quality control, and communications interfaces to name a few. This isn't an "IT project." Assign the best and track progress carefully.

Best Practices for Rollout

Fix the process first and teach your people the new principles—then, adapt the software to the new business rules. There is an added complication if you plan to introduce new processes along with a new tool. If you can, it is best to keep the process somewhat similar, and introduce the new tool using the existing process. In this situation, folks will learn and apply

one new element vs. two. In some cases, it entirely unavoidable and you have introduce new processes and a new tool concurrently (e.g., perhaps your current method doesn't work or a process doesn't exist). In such situations, make sure your people understand and accept the new principles of the process before you expose them to the new software environment that will make it efficient.

Proceed slowly & incrementally. Don't promise too much too soon. Phase in the capabilities of the tool. Phase in the tool throughout the organization. Don't roll it out to everyone all at once.

Pilot test using select projects and portions of the organization to show successes and get supporters. The benefits of pilot testing are more than "working through the bugs" they give you the opportunity to have successes (which you can brag about) and earn supporters throughout the company. It is always helpful to have strong advocates that openly support and willingly talk (positively) about the tool and processes.

Keep the software environment and database structure simple, especially at first – don't get too detailed or complex. Keep it straightforward. Stay basic and you will be successful. If you need more, add the expanded capabilities in future increments.

Implement software components to focus on the most pressing needs of the organization first. Your incremental implementation should start by addressing the most pressing needs of the organization. Identify what those are and structure a rollout plan accordingly.

Train, train, train, train – mentor, mentor, mentor, mentor. People will make it happen, but you need to make sure they understand what to do and how to do it. Conduct multiple short training sessions. Make sure you emphasize in the training sessions why the organization is implementing the tool (and

process). Don't assume people know how to use the tool or that they understand the new process. Offer training using multiple avenues—classroom, intranet, handouts, one-on-one, handbooks. Focus heavily on training: make sure everyone understands the basics, and don't assume the word is relayed through management. Show your continued support after training by having a formal or informal mentoring program to help when they encounter specific problems afterwards.

Plan the implementation and communicate the objectives to everyone—again, again, and again. Make it very clear why you are implementing the new software and explain the benefit to everyone. This should be done way up front and accomplished over and over again. Plan the implementation so the objectives are clearly laid out. If you are planning the implementation in phases, make sure there are clear objectives, benefits, success criteria, and identified risks for each phase. Whenever there is change in an organization, people respond better if you can explain the benefit and outline specific accomplishments. Then they understand what to expect.

Get senior level sponsorship and support—more than just words. Executives obviously need to be the ones to drive a move towards aligning strategy and projects for execution.

Employ change management processes. As with all change management projects, assure that you have sufficient management support for the duration of the project.

Software and Change

The use of enterprise project management software as a force for organizational change cannot be underestimated. EPM software, which puts top executives more or less directly in touch with activities within projects, erases many layers of

boundaries in an organization and allows a fluidity of contact and communication across functional boundaries and up and down the bureaucratic levels that is unprecedented. The time-tracking functions of the software also serve to make people working on projects more self-managing.

To some extent, SPM ratchets up the complexity and interaction within the system, because you are taking projects across departments that don't even think alike: IT, manufacturing, warehousing, marketing, and so on. Yet at the same time, SPM resolves some of the longstanding problems in IT: when project priorities and resource allocation had to be decided at the project level, the difficulty of doing this without authority led to many impossible situations.

Project management software pioneer Joel Koppelman has noted that our relationship to computers has changed as software has become more sophisticated. Today's tools promote "ease of understanding." As whole organizations move towards managing by projects, he says, project management won't be limited to people with technical background, and enterprise project management software is moving towards a transparency that helps everyone do project tasks without feeling intimidated by a lot of specialized language. This is a key goal of the SPM framework: to get the entire organization focused on, and working on strategic priorities.

A key focus of today's project management software design is making sure that project coordination and communication works smoothly: making sure the right people are talking to each other, that people don't have inappropriate access to information, but have what they need, getting more decision-quality information to people, without overwhelming them. This is not strictly a technical question. Instead, it goes to the heart of how organizations are managed: who holds the information, who wields the power. Viewed as a cultural

change, the trend toward enterprise project management systems, putting information at the fingertips of every contributor, causes a tremor in the foundation of the pyramid-shaped organizational chart. A company buys software to make people more productive by taking out routine, mindless things and presenting them with a process that makes it easy for them to do the right thing. In the process, it makes work more rewarding for individuals and breaks down structural barriers that are inappropriate to a flexible, competitive organization. Decision-making moves out to the people who are closer to the situation. As Koppelman has said, "Change in technology influences how people work, which influences the growth of technology … through technology, we are constantly reinventing ourselves."

And the organization.

Chapter Eight

Performance Management

Key Process #4

So, you may be asking yourself: If there are seven steps to execution, why is this Chapter Eight?

The answer is simple … and complex. Performance management is a process that is so inextricably entwined with all the other areas—strategy management, portfolio management, project management, people management, organizational structure and culture change, IT—that it is impossible to discuss as a standalone topic. In this chapter you will find our thoughts on how performance management both supports and influences the other areas of our framework.

In the project-focused business, business-focused projects are driven by results and objectives more than by internal activities. Performance measures are outcome-focused, and include things like contribution to organizational goals, objectives and strategies, and stakeholder satisfaction with process and results.

Making strategy work requires feedback about organizational performance and then using that information to fine-tune strategy, objectives, and the execution process itself. There is an emergent aspect of strategy and execution as organizations learn and adapt to environmental changes over time. Because business unit strategies flow by design from enterprise strategies, the groundwork for performance management at the enterprise level must first be laid. Specific business unit performance metrics would then augment these, focusing on

the business unit contribution to the effort. Portfolio, program, and project performance metrics follow and are logically linked to the business unit performance metrics.

Performance Management …

Performance management is accomplished through the application and integration of performance management processes:

- Planning: a process for understanding key success factors, identifying stakeholders and roles and responsibilities, identifying performance management goals, developing a program plan (a Governance role)
- Measurement development: a process for identifying and selecting performance measures, developing measurement scorecards (high-level measures defined at the Governance level; specific metrics that roll up into these identified at the departmental or program level)
- Performance measurement: a process for planning for data collection, including data source and information technology required; collecting data and ensuring data quality (a joint responsibility of IT and the SPO as owner of the portfolio processes)
- Data analysis: a process for converting data into performance information and knowledge; analyzing and validating results; performing benchmarking and comparative analysis (a joint responsibility of IT and the SPO)
- Performance reporting: a process for developing a communications plan and communicating performance results to stakeholders (a responsibility of HR and internal Communications, this aligns to the Culture aspect of the model)
- Continuous improvement: a process for assessing performance management practices, learning from feedback and

lessons learned, and implementing improvements to those practices (a joint responsibility of the SPO as portfolio owner, and executives responsible for Governance).

Performance Measurement Integration

In the SPM approach, the performance management process sets the agenda/goals for management processes and monitors whether or not the operational activities chosen to do this are delivering what is required. Accordingly, an effective performance management process needs to both communicate information about what outcomes need to be achieved and be able to monitor how well these activities are working to achieve the strategic aims of the organizations.

Performance Reporting Integration

Strategy execution is a dynamic, adaptive process, leading to organizational learning. For learning and change to occur, the SPM approach requires performance feedback measured against strategic and short-term objectives. It must come from managers at all levels of the organization, measuring the performance of strategies, portfolios, programs, and projects. This information is part of the monitoring and control feedback in the strategy, portfolio, and program/project management processes. That feedback, in turn, will be analyzed in strategy reviews and used to re-evaluate specific strategic initiatives and their contribution to meeting the organization's strategic objectives.

… and Strategy Management

Probably the most valuable aspect of the recent focus on strategy execution is the reminder that strategy does not stop with

the planning phase. For many organizations, the strategic plan has been a document that gathers dust,. In order for strategic plans to be living documents, they must be linked to the ongoing activities of the organization. That link is performance data.

Performance data must be gathered from every strategic initiative, and from every area of the organization's structure that is working on those initiatives … in other words, from almost everyone. At the level of strategy, these many measurements must be rolled up into a vigorously "pruned" list of those measures that best communicate to executives how well current structures and activities are serving the organization's stated goals. In for-profit companies, it is often the case that these top metrics are financial ones, with other types of metrics having been decomposed into this type. For example, a customer service metric such as number of return visits to a store website, upon deeper analysis, may be rendered as additional revenue generated by customer loyalty.

While financial metrics are certainly useful—even for nonprofit and public organizations in many cases—relying on money alone to tell the story of the organization's enactment of strategy leaves a lot to be desired from a motivational point of view. For employees and customers, the "feel-good" metrics (percentage of reduction of the organization's carbon footprint; numbers of children reached by a sponsored educational initiative; steps achieved in the progress towards some organizational restructuring like Open Book Management, and so forth) inspire engagement and make great copy for the PR department.

Even shareholders and executives with stock options may want more than a financial view. It must be remembered that financial metrics represent a look backward: a snapshot of the performance of investments already made. Yet strategy is all about the future. As Balanced Scorecard executive

Randall Russell said in a 2000 interview, "projects—what we call initiatives—are not well represented by financial metrics since they tend to be one step removed from financial outcomes. New products, for example, have to change customer behavior first. If you are talking about an investment in IT infrastructure, it's even further removed. 'Let's accelerate IT development'—that's two or three steps removed. So financial measures alone are not of much value." More valuable will be measures that track the organization's progress towards the vision; at the Strategy Management level, this is where the Balanced Scorecard can be useful, as it provides a graphic illustration of where the priorities lay: listed in the framework of the scorecard, it is obvious at a glance if all the major priorities are skewed towards one area or another. When considering the weight to give to the various financial metrics, it is worthwhile remembering what Peter Drucker once said: "Enterprises are paid to create wealth, not control costs."

… and Project Portfolio Management

Portfolio tracking is all about metrics. Make sure accurate data is available about all projects and programs within the portfolio so that strategic decision makers can decide where to invest more, or less, effort. In addition to establishing criteria and developing a decision support model, ensure the data used to value each project is accurate and current. The organization should have a reliable accounting system that collects and accounts for resources (expenditures, revenues, and manpower). Information from the accounting system may be necessary to forecast project costs and benefits. The organization should have reliable, up-to-date market, technical, and manufacturing information. Since project portfolios are made up of both new projects and on-going projects, the organization should have

a system to track the status of on-going project activity. Establish a process to analyze the project information. Establish a process that will validate project information and compare the information against the common decision criteria. The purpose of this process is to analyze the project information to ensure data validity and consistent application of the decision criteria. It is important to go through this process *before* selecting the portfolio to eliminate any controversy over the data and key assumptions while in the midst of developing the portfolio.

But portfolio metrics are not just about projects. They should also reflect the relationships among projects and programs within the portfolio, tracking, for example, the ratio of "horizon" projects to "lights-on" projects; the ratio of short-term goal-oriented projects to those that serve the long term (sales initiatives of existing products vs. new or blue-sky product R&D, for example).

… and Program/Project Management

As the foundational materials for portfolio analysis and management, project and program performance metrics could not be more important. Yet, not all project management metrics are created equal. There are numerous ways to determine project progress and success, and the metrics necessary to one organization may be superfluous to another. (See Appendix for the CBP's top ten metrics for project management). At the same time, tracking the project's alignment with business goals at all times keeps project teams from becoming so distracted by the project-level metrics, such as cost and time, that they sacrifice the original objectives. Although it may go against the project manager's grain, the SPM framework is about optimizing the portfolio—not delivering perfect projects. The tradeoffs traditional to a project, between schedule,

scope and quality, are now made on a much wider scale, as the organization seeks to balance and streamline its activities to create not project performance improvement, but strategic organization level improvements.

In order to further this goal, it's wise to agree on the definition of a "measured project"—projects of sufficient size, complexity, visibility, or risk that they would require SPO monitoring and control.

… and Structure

If any part of the organization could be said to be "Metrics Central," it is the SPO, where the data tracked using IT tools is analyzed and organized for executive consumption.

Within the SPO, project and program metrics are rolled up into a set of metrics useful for making portfolio decisions. But that is not the only role of this new organizational entity in promoting and facilitating an execution environment. Other measurable activities of the SPO would include the training of organization members in project management and in the SPM model; the adoption rates of methodologies; the baselining of organizational performance on strategic projects, and the subsequent re-assessment periodically to track improvement.

In addition, it is the role of the SPO to monitor the performance, not just of projects and programs, but of the program/project management process itself. Note that you will be selecting measures of project management *value* rather than measures of project performance. The key difference in performance measures versus value measures is the reason for doing the measuring. In measuring performance, you are trying to gather information to help you make management decisions to affect change that, hopefully, will improve that performance. For example, project performance measures are undertaken to provide

information to managers in order to exert control over the project. Those measures must be appropriate to the organizational level that can immediately effect change based on information it learns in order to control the performance of the project at hand (measuring the earned value of the project will provide information on the performance of the project to allow managers to make critical decisions to bring the project to closure successfully). These measures must be collected fairly often, perhaps even weekly, depending on the duration of the project.

In measuring value, you are trying to demonstrate that decisions you made to implement change (project management improvement initiatives) has indeed added value to the organization. So you are measuring value rather than performance (which may or may not be the same). Sometimes (usually) improved performance can be translated into value. For example, improving schedule performance for all your projects over a period of a year can be translated into improvement in average project cycle time, which can be translated into improvement in time to market, which can add significant value to your organization. Value measures, therefore, provide information on the performance of the organization rather than the performance of a project. They must be collected over a longer period of time (no more than quarterly) and over your portfolio of projects.

… and Culture

Culture measurable? Well, perhaps not as exactly as materials management. But what is true is that there is a profound relationship between what companies measure and track and the behaviors they get out of their employees and customers.

When identifying performance metrics—and we cannot stress this strongly enough—it is crucial to think them through to their ultimate behavioral effects on the organizational cul-

ture. The best—or most harrowing—true story of metrics gone wrong is that of a state government that defined "success" for its Child Protective Services teams as "number of cases closed," and linked that metric to recognitions and rewards. Within months, the entire culture of CPS offices across the state began to shift, from "working out the best outcome for the child, no matter how long it takes" to "close as many cases as possible as fast as possible." It's painful to imagine the damage that was done before the agency realized its mistake. Not every choice of metric will have that kind of life-threatening import, but the inadvertent valuing of quantity over quality, or maintenance over development, or bricks over people … will eventually take its toll.

… and People

Some wag once defined metrics as "the bundle of sticks I gather each month and give to my management to beat me with." That seems to sum up nicely the mood that talk of metrics creates in most people. This is a cultural issue—see above—and can be remedied by a conscious focus on the value of people. Many organizations collect HR-related metrics that actually tell us very little about the value those individuals provide. We know headcount, and its cost, but rarely have good insight into the intellectual capital they provide. Some companies have worked to remedy this by, for example, establishing knowledge management "libraries" and rewarding people for populating these databases with useful history, tips, examples, and lessons learned.

Among other "people metrics" that pertain to developing an execution environment:

- Retention. A high rate of churn saps the organization of time, money, energy and intellectual capital. If turnover is

high, this is probably a cultural issue and should be analyzed and addressed. Tip: Among technical and creative people, bad managers cause more turnover than monetary issues.

- Competency levels, and progress against a model.

Since employee costs can exceed 40 percent of corporate expense, measuring the ROI in human capital is essential. Jac Fitz-Enz notes that management needs a system of metrics that describe and predict the cost and productivity curves of its workforce. Quantitative measures (cost, capacity, time) are needed to tell us what happened, and qualitative measures (values, human reactions) are needed to tell us some idea of why it happened.

… and IT

The single repository for project and program data that is required by the SPM model is a function of IT. In addition, creating a lessons learned database associated with the project management software allows teams to track actuals versus estimates in time and money, and over time, improve the estimation reliability of the project network.

Electronic capture and centrally located databases make the capture of measurement data a result of normal business operations. For example, time stamps on electronic documents or actuals reported through project plans and financial systems are captured through standard systems. This type of data collection reduces the amount of effort required to gather data and ensures a greater level of compliance. It also allows for ongoing access to information, allowing for the periodic reporting of metrics from the systems without the need for mobilizing a search team to track down information.

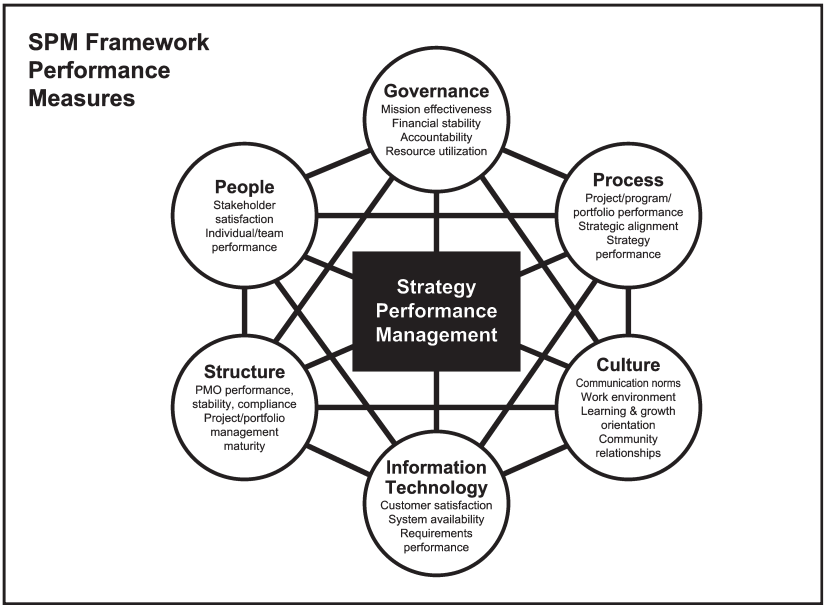


Exhibit 8-1. Examples of types of performance measures for each SPM category.

Developing Performance Metrics

While there is general agreement that "you can't manage what you can't measure," the actual measurements themselves usually prove to be a source of conflict. What are we measuring, and why? What should we be measuring? What's the connection between the performance metrics we collect regarding individuals and their tasks and the ultimate performance of the company—if any? And what, in reality, does "performance" mean, on an organization-wide scale? Is it merely making money? And if so, how much? "Metrics are the easy part," says Mel Schnapper, co-chair of PMI's Metrics Specific Interest Group. "Knowing what you want to measure, and why, is hard."

One problem is we continue to assess New Economy businesses with Old Economy systems of measurement. Back in the 1700s, Lord Kelvin announced that the measurement of an activity is basic to its control—a statement that formed part of the foundation for scientific management. The trouble is, business has changed— even the laws of physics have changed. The weak link in our present ideas of metrics lies in the word "control." Kelvin's statement is true—if control is all you are trying to achieve. But in the context of dynamic, knowledge-based, information-economy business, control is a loser's game. Control is static. Control is limiting. What's a more helpful goal? Balance is one idea that has received a good bit of attention since the introduction of the Balanced Scorecard concept in 1992. Seeking to balance, rather than control, a company's assets and energies, brings a less punitive character to the collection of performance metrics. It allows companies to be more forward-looking, as opposed to merely relying on financial measures that represent a snapshot of the past.

In addition, following a structured process helps in the development of less fuzzy project management metrics, while engaging a wide variety of the people who actually do the work in the process prevents the chosen measures from diverging too far from reality or ease-of-use.

A Structured Approach

A process developed by Mel Schnapper, cofounder of PMI's Metrics SIG, asks those developing project and program metrics to respond to the following questions and answer them based on mutual agreement and alignment:

- What are our major contributions to the strategy? (Key Result Areas)

- What is the proportionate value of these contributions? (%)
- By what metrics and objectives are our contributions going to be judged?
- How will we determine the standards for our individual and collective performance objectives?
- What is the proportionate value of each performance objective? (%)
- How will we know, in advance, what kind of reward our performance will bring?
- How do we get agreement about all the above within our corporate hierarchy?

This process, says Schnapper, offers a way to align strategic, annual, functional, and departmental objectives, creating a context in which the effectiveness of project management can be judged. It also offers an internal monitoring system to initiate when these objectives need to be fine-tuned, a methodology to align all project management/functional objectives across the top of the organization, and a process of getting executives to commit to teamwork, interdependencies and proper allocation of project management resources.

At the project level, this approach offers the ability to measurably define what constitutes "value" and "priorities." It sets up a reward system that makes sense and is based on predefined standards of results. It bolsters teamwork, thanks to well-defined objectives that are interdependent both within and between departments and functions. And it results in empowered individual and project team efforts because management's support for accountabilities and results are also clear. With clear goals to strive for, employees can realize their potential for achieving standards that are greater than "satisfactory."

Lessons Learned

A case study based on metrics development at SAP noted the following lessons learned:

Prioritize "traceable" measurements. Measurements that can demonstrate successful execution against a strategy should receive most the attention. In other words, can you associate a good result from the measure with good execution of the associated strategy and does a poor result from the measure point to an opportunity to improve execution?

Some desirable metric qualities: reliable (indicates current status, predicts future status); understandable (easy to understand, intuitive), valid (measures what it claims to measure); robust (insensitive to other factors); economical (little expense to collect and analyze); timely (data is there when decisions need to be made); simple (easily derived and graphic); highly leverages (supports significant improvements); numeric (charts, trends, and statistical analysis are possible).

Act on measurement results. It may seem obvious to anyone steeped in Deming's Plan-Do-Study-Act cycle, but results cannot be announced without also announcing a corresponding action. Negative findings especially must be accompanied by an opportunity or action plan. The word "Study" is particularly apt in this context, because the SPO must also think through all the consequences of the results.

Socialize or "test drive" measurements. Informal feedback is one of the most useful ways to validate whether metrics resonate with key stakeholders.

Prune metrics vigorously. Some metrics, though they may be desirable, are impossible to gather. When the cost of analysis outweighs its usefulness, it's time to prune that metric from the list and go on to one that is perhaps less perfect but more

readily available. In addition, there is a point of diminishing returns in collecting metrics. Metrics are not an end cause, but merely a tool to facilitate that cause, which is execution of strategy. Collect the information needed to drive strategy … no more, no less. In the SAP case study, the list of metrics was "pruned" from over a dozen to under eight.

Regularly perform strategy/metric re-alignment. To continue the pruning metaphor, "promote new growth" by re-aligning metrics with strategic direction.

Lessons learned in developing and launching a measurement program include the following:

Planning

- Create central area of responsibility for measurement program
- Promote clear accountability
- Set clear measurement goals and objectives
- Think performance information, not just metrics
- Insure clear understanding of measurement terminology and principles

Establishing measures

- Link measures to goals and objectives
- Baselining is critical to measuring progress
- Select a critical few measures

Measuring

- Data needs to be accessible, reliable, and collected in the least burdensome manner
- Need to determine what counts as a project for the purposes of the measurement program

Analyzing

- Analysis is one of the most important steps
- Benchmark against industry standards
- Learn to get value from "dirty" data

Reporting

- Communicate effectively and broadly
- Tailor value and performance reports to appropriate audience

Improving

- Seek and use feedback

In general

- Manage stakeholder expectations
- Get senior management buy-in
- Project management maturity influences measure choices
- Create a sense of urgency
- Pilot and implement measurement in phases
- Insure measurement program delivers value

There is no single set of measures that universally applies to all companies. The appropriate set of measures depends on the organization's strategy, technology, and the particular industry and environment in which they compete. Like any aspect of any "living company," metrics cannot be static: they cannot be chosen once and locked into place. Along with strategy, they evolve and are refined as the organization becomes more focused on, and skilled at, meeting strategic goals.

AFTERWORD

SPM Tools

IMPLEMENTING STRATEGY PERFORMANCE MANAGEMENT requires the integration of disparate management tools and practices. The most successful organizations integrate key SPM processes, establish a strategy execution focus, and implement the tools required to make this approach sustainable and agile. Below is a brief list of the kinds of management tools and practices that will be needed to effectively implement strategy performance management.

Implementation Tools

- SPM diagnostic
- SPM roadmap development
- SPM framework
- SPM best practices research and benchmarking

Governance Tools

- Governance diagnostic
- SPM governance framework

Strategy Management Process Tools

- Strategy execution readiness diagnostic
- Strategy formulation processes
- Strategy performance measurement processes
- Strategy mapping processes

Portfolio Management Process Tools

- Portfolio management maturity diagnostic
- Portfolio governance processes
- Portfolio management processes
- Program/project selection processes
- Portfolio review processes
- Resource allocation processes
- Strategy alignment processes
- Portfolio balancing processes

Program/Project Management Process Tools

- Program/project management maturity diagnostic
- Program/project opportunity processes
- Program/project management processes
- Program/project management/business process integration
- Project performance measurement processes
- Project recovery processes

Structure Tools

- Strategic project office diagnostic
- Strategic project office design and implementation
- Strategic project office performance measurement processes
- PM Community of Practice

Culture Tools

- Culture diagnostic
- Change readiness diagnostic
- Change management planning

People Tools

HR:

- Career path development
- Candidate identification/selection

Learning & Development:

- Competency assessment
- Training program development/administration
- Performance measurement
- Training

Outsourcing & Staffing:

- Planning and control services
- Project office planning, control, and support
- Program/project management
- Staffing: Mentors, portfolio/program/project managers, planning/control specialists
- Project recovery teams

Information Technology Tools

- SPM technology diagnostic
- SPM technology implementation (e.g., Corvu; Prosight; Microsoft; Primavera)
- SPM technology adoption and mentoring

Performance Management Process Tools

- Performance management diagnostic
- Performance/value measurement processes
- Performance reporting processes

APPENDIX A

Strategy & Projects:

A Benchmark of Current Best Practices

The *Strategy & Projects* report was the initial product of a three-part research project. Part One was a review of management literature to develop a list of practices for aligning projects and corporate strategy. We first identified those practices that lead to high performance through a search of the literature on the integration of strategy execution, portfolio, program, project, and performance management. This research revealed a set of best practices that we organized according to the SPM framework:

1. Governance Best Practices (discussed in the Introduction)
2. Processes (discussed in Chapters 1 though 7)
   - Strategy Management Best Practices
   - Project Portfolio Management Best Practices
   - Program/Project Management Best Practices
   - Structure Best Practices
   - Culture Best Practices
   - People Best Practices
   - Information Technology Best Practices.

3. Performance Measurement Best Practices (discussed in Chapter 8).

These practices were used to develop the questions in the survey. The goal of the survey was to learn whether or not organizations that exhibit these practices are, indeed, high performing, to confirm whether or not the practices identified are really "best practices," and to identify those practices that are most critical to the success of the organization. Participants rated their organizations on the frequency of their use of the best practices against a 7-point scale, where 1 = "not at all" and 7 = "to a great extent."

The Survey

Members of the Center for Business Practices Research Network (senior practitioners with knowledge of their organizations' project management practices business results) were invited to participate in a web-based survey. Of 87 respondents, 84 completed the survey in its entirety. We compared high-performing organizations, low-performing organizations, and all organizations, focusing on whether high-performing organizations exhibited the identified best practices more than the average of all organizations and whether or not low-performing organizations were below average in exhibiting these practices.

How "performance" was defined. Most of the measures we used to ascertain which organizations performed well are familiar to all project stakeholders. We asked not only about the success of project management by conformance to schedule, budget, requirements, and so forth, but also about the overall success of the organization. Practices related to the organizational value of project management, such as the rational

allocation of project resources, the skillful selection and prioritization of projects, and the alignment of projects to business strategy, are being supported today by organizations' increasing use of portfolio management systems and processes. As project management becomes more and more essential to the achievement of strategic organizational goals, these practices will gain in importance for all project stakeholders. The performance measures included:

- The organization's strategies are executed according to plan.
- The organization's shareholders are satisfied.
- The organization is financially successful.
- Projects are completed on schedule and on budget.
- Project customers are satisfied.
- Project resources are allocated optimally.
- Projects are aligned to the organization's business strategy.
- The organization works on the right projects.

Participants rated their organizations on the frequency of their achievement of these measures against a 7-point scale, where 1 = "not at all" and 7 = "to a great extent." Organizations termed "high-performing" in the results reported better-than-average performance in all areas measured. In particular, high-performing organizations are significantly better than average in allocating project resources optimally, followed by completing projects on schedule and on budget and executing strategy according to plan. Low-performing organizations are significantly poorer than average in allocating project resources optimally, followed by completing projects on schedule and on budget and satisfying the organization's shareholders.

Key Findings

- A significant finding was that the results confirmed the best practices proposed by the management literature and described in the report. This underscores the value of using Strategy & Projects best practices in executing an organization's strategy.
- High-performing organizations use Strategy & Projects best practices in all areas more than other organizations, consistently and significantly.
- Low-performing organizations consistently under utilize Strategy & Projects best practices in all areas.

Best Practices that Set High Performers Apart from the Rest

The following best practices were used significantly more often by high-performing organizations than other organizations. Information technology best practices in particular set high performers apart. The practices are listed in order of their significance.

- IT tools integrate strategy execution management, portfolio management, program/project management, and performance management functions.
- IT tools are used to develop alternative strategic and project portfolio scenarios.
- Project management is clearly established and embedded within the organization's business management structure.
- IT tools provide information on the availability of resources.
- Senior management consistently rewards successful project behaviors.

- The enterprise project office allows the organization to manage its entire collection of projects as one or more interrelated portfolios.
- Program/project performance feedback is used for managing strategy execution.
- IT tools provide the capability to monitor and control risks, issues and financials across portfolios.
- Project management is valued throughout the organization.
- IT tools enable appropriate communication of strategy and strategic performance throughout the strategic management chain, both top-to-bottom and bottom-to-top.
- The company has an organizational structure (strategic project office, office of strategy management, strategic steering committee, etc.) that is responsible for managing strategy execution.
- Performance management reviews are structured to reward or correct individual performance based on the employee's contribution to strategic objectives.
- As strategy cascades down the organization, performance measures are established at each level (business unit, portfolio, program, project) to link up with the strategic performance expectations of the entire company.

Best Practices Not Performed that Set Low Performers Apart from the Rest

The following best practices were not used significantly more often by low-performing organizations than other organizations. People best practices in particular set low performers apart. The practices are listed in order of their significance.

- Project management is clearly established and embedded within the organization's business management structure.
- IT tools provide the capability to monitor and control risks, issues and financials across portfolios.
- Senior management consistently rewards successful project behaviors.
- Project stakeholders clearly understand the organization's strategies.
- Information about strategy and projects flows freely between business units facilitating strategy execution.
- Project management is valued throughout the organization
- Enough resources are in place to make the project portfolio achievable.
- The project management staff is capable of creating, deploying, and maintaining enterprise, portfolio, program and project strategies.
- Performance management reviews are structured to reward or correct individual performance based on the employee's contribution to strategic objectives
- Program/project performance feedback is used for managing strategy execution.

Most Often Used Best Practices

The following best practices were the most often used practices by all organizations. Governance best practices in particular were used most often. The practices are listed in order of their use.

- A list of current projects (active, proposed, on-hold) is documented.

- The organization has a well-defined strategy.
- The organization's leadership is trusted.
- Project performance is monitored (schedule variance, budget variance, earned value).
- There is a shared understanding and commitment about the organization's long-term objectives and its strategy for achieving them.
- The organization has a process for identifying project opportunities and determining if those opportunities are in line with the corporate strategic direction.
- The organization's strategic objectives are an input to the project initiation process.
- Project stakeholders buy-in to the organization's strategies.
- Decision makers have the information they need about the execution of their organization's strategy to make optimum decisions.
- A focus on strategy execution is an important part of the organization's culture.

The full research report is available at www.cbponline.com.

APPENDIX B

Measuring Performance

An Encyclopedia of Metrics

The CBP Top Ten

1. Return on Investment — (Net Benefits/Costs) x 100

The most appropriate formula for evaluating project investment (and project management investment) is Net Benefits divided by Cost. By multiplying this result by 100, this calculation determines the percentage return for every dollar you've invested. The key to this metric is in placing a dollar value on each unit of data that can be collected and used to measure Net Benefits. Sources of benefits can come from a variety of measures, including contribution to profit, savings of costs, increase in quantity of output converted to a dollar value, quality improvements translated into any of the first three measures. Costs might include the costs to design and develop and/or maintain the project or project management improvement initiative, cost of resources, cost of travel and expenses, cost to train, overhead costs, etc.

2. Productivity

Productivity is output produced per unit of input. Productivity measures tell you whether you're getting your money's worth from your people and other inputs to the organization.

Typically the resources have to do with people, but not always. A straightforward way to normalize productivity measurement across organizations is to use revenue per employee as the key metric. Dividing revenue per employee by the average fully burdened salary per employee yields a ratio. This ratio is the average-per-employee "Productivity Ratio" for the organization as a whole. Other productivity metrics might be number of projects completed per employee, number of lines of code produced per employee. The key to selecting the right productivity measures is to ask whether the output being measured (the top half of the productivity ratio) is of value to your organization's customers.

3. Cost of Quality — Cost of Quality/Actual Cost

Cost of quality is the amount of money a business loses because its product or service was not done right in the first place. It includes total labor, materials, and overhead costs attributed to imperfections in the processes that deliver products or services that don't meet specifications or expectations. These costs would include inspection, rework, duplicate work, scrapping rejects, replacements and refunds, complaints, loss of customers, and damage to reputation.

4. Cost Performance — Earned Value/Actual Cost

The Cost Performance Index is a measure of cost efficiency. It's determined by dividing the value of the work actually performed (the earned value) by the actual costs that it took to accomplish the earned value. The ability to accurately forecast cost performance allows organizations to confidently allocate capital, reducing financial risk, possibly reducing the cost of capital. CPI Standard Deviation is an even better metric, one that shows the accuracy of budget estimating.

5. Schedule Performance — Earned Value/Planned Value

The Schedule Performance Index is the ratio of total original authorized duration versus total final project duration. The ability to accurately forecast schedule helps meet time-to-market windows. SPI Standard Deviation is an even better metric that shows the accuracy of schedule estimating.

6. Customer Satisfaction — Scale of 1-100

Customer satisfaction means that customer expectations are met. This requires a combination of conformance to requirements (the project must produce what it said it would produce) and fitness for use (the product or service produced must satisfy real needs). The Customer Satisfaction Index is an index comprising hard measures of customer buying/use behavior and soft measures of customer opinions or feelings. Index is weighted based on how important each value is in determining customer overall customer satisfaction and buying/use behavior. Includes measures such as repeat and lost customers (30%), revenue from existing customers (15%), market share (15%), customer satisfaction survey results (20%), complaints/returns (10%), and project-specific surveys (10%).

7. Cycle Time

There are two types of cycle time—project cycle and process cycle. The project life cycle defines the beginning and the end of a project. Cycle time is the time it takes to complete the project life-cycle. Cycle-time measures are based on standard performance. That is, cycle times for similar types of projects can be benchmarked to determine a Standard Project Life-Cycle Time. Measuring cycle times can also mean measuring the length of time to complete any of the processes that comprise

the project life-cycle. The shorter the cycle times, the faster the investment is returned to the organization. The shorter the combined cycle time of all projects, the more projects the organization can complete.

8. Requirements Performance

Meeting requirements is one of the key success factors for project management. To measure this factor you need to develop measures of fit, which means the solution completely satisfies the requirement. A requirements performance index can measure the degree to which project results meet requirements. Types of requirements that might be measured include functional requirements (something the product must do or an action it must take), non-functional requirements (a quality the product must have, such as usability, performance, etc.). Fit criteria are usually derived some time after the requirement description is first written. You derive the fit criterion by closely examining the requirement and determining what quantification best expresses the user's intention for the requirement.

9. Employee Satisfaction

An employee satisfaction index will give you one number to look at to determine employee morale levels. The ESI comprises a mix of soft and hard measures that are each assigned a weight based on their importance as a predictor of employee satisfaction levels. The ESI should include the following (percentage represents weight): climate survey results (rating pay, growth opportunities, job stress levels, overall climate, extent to which executives practice organizational values, benefits, workload, supervisor competence, openness of communication, physical environment/ergonomics, trust) (35%), focus groups (to gather in-depth information on the survey items)

(10%), rate of complaints/grievances (10%), stress index (20%), voluntary turnover rate (15%), absenteeism rate (5%), and rate of transfer requests (5%).

10. Alignment to Strategic Business Goals

Most project management metrics benchmark the efficiency of project management—doing projects right. You also need a metric to determine whether or not you're working on the right projects. Measuring the alignment of projects to strategic business goals is such a metric. It's determined through a survey of an appropriate mix of project management professionals, business unit managers, and executives. Use a Likert scale from 1-10 to rate the statement: Projects are aligned with the business's strategic objectives.

Measures to Determine the Value of Project Management

Source: Center for Business Practices, *Value of Project Management Research Report*, 2000.

Financial Measures

- Return on Investment
- Return on Capital Employed
- Economic Value-Added
- Sales Growth %
- Sales Growth $
- Productivity
- Cost Savings
- Earnings Per Share
- Cash Flow Per Share

Customer Measures

- Customer Satisfaction
- Customer Retention
- Customer Acquisition
- Customer Profitability
- Market Share
- Customer Use

Project/Process Measures

- Project Budget Performance
- Project Schedule Performance
- Requirements Performance
- Process Errors
- Defects
- Rework
- Resource Utilization
- Time to Market
- Scope Changes
- Project Completions
- Business Strategy
- Project Risk

Learning & Growth Measures

- Employee Satisfaction
- Employee Turnover
- Training Time
- Employee Productivity
- Employee Motivation
- Employee Empowerment
- Information System Availability

Measures to Determine the Value of Project Management in IT Organizations

Source: Center for Business Practices, *Value of Project Management in IT Organizations Research Report,* 2000.

- Return on investment
- Time to market
- Customer satisfaction
- Alignment to strategic business goals
- Time and budget to date
- Quality
- Labor hours performance
- Schedule performance
- Cost performance
- Defect rate
- Component size
- Defect per peer review
- Staff productivity
- Response time
- Average time to repair defect
- Schedule estimating
- Cost/hours estimating
- Defect rate estimating
- Component size estimating
- Quality estimating

Project Management Metrics

Source: PM Solutions Internal Document

Inputs

- What is the approximate number of current projects?
- On average, how many "full time equivalents" are assigned to a project?
- What is the average length of a typical project?
- What is the average fully burdened cost of a resource (person)?
- Approximately how many people are available to work projects?
- What % of projects meet customer expectations (quality)?
- What % of projects are delivered on-time?
- What % of projects receive adequate resources (quality & quantity)?
- What % of your projects directly drive new/increase revenue?
- What is the average monthly revenue stream of these projects?
- How frequently does the introduction of new development projects interfere with existing production processes?
- What is the average dollar impact of these interruptions?
- Do you know of any situations where a project has been undertaken that repeats functionality in another project?

Summary Project Statistics

- Average Project Resource Cost
- Average Annual Project Expenditures
- Anticipated annual successful projects
- Anticipated annual on-time projects
- Capacity Based on Current Workload
- Capacity Based on Staffing
- Average number of challenged projects

Analysis Category

Cost Reduction
- Early termination of problem projects
- Productivity gain through improved resource allocation

Cost Avoidance
- No functionality repeats across projects

Revenue Increase
- Time to market reduction
- Increase in Project Turnover, resulting in additional revenue generating projects

Revenue Protection
- Improved structure/process lessening impact to production systems generating revenue

Sample Product Development/Engineering Performance Measures

Source: U.S Department of Energy, *Performance Measures*

- Percent of drafting errors per print
- Percent of prints released on schedule
- Percent of errors in cost estimates
- Number of times a print is changed
- Number of off-specifications approved
- Simulation accuracy
- Accuracy of advance materials list
- How well the product meets customer expectations
- Field performance of product
- Percent of error-free designs
- Percent of errors found during design review
- Percent of repeat problems corrected

- Time to correct a problem
- Time required to make an engineering change
- Percent of reports with errors in them
- Data recording errors per month
- Percent of evaluations that meet engineering objectives
- Percent of special quotations that are successful
- Percent of test plans that are changed (change/test plan)
- Number of meetings held per quarter where quality and defect prevention were the main subject
- Person-months per released print
- Percent of total problems found by diagnostics as released
- Number of problems that were also encountered in previous products
- Cycle time to correct customer problem
- Number of errors in publications reported from the plan and field
- Number of products that pass independent evaluation error-free
- Number of misused shipments of prototypes
- Number of unsuccessful pre-analyses
- Number of off-specifications accepted
- Percent of requests for engineering
- Number of days late to pre-analysis
- Percent of requests for engineering action open for more than two weeks
- Effectiveness of regression tests
- Number of restarts of evaluations and tests
- Percent of corrective action schedules missed
- Number of days for the release cycle
- Cost of input errors to the computer
- Percent of bills of material that are released in error
- Spare parts cost after warranty
- Customer cost per life of output delivered

Balanced Scorecard of IT Measures

Source: U.S. General Accounting Office, *Measuring Performance and Demonstrating Results of IT Investments*, 1998

IT Strategic Measures

Enterprise mission goals
- Percent mission improvements (cost, time, quality) attributable to IT solutions and services
- Percent planned IT benefits projected v. realized

Portfolio analysis and management
- Percent IT portfolio reviewed and disposed
- Percent old applications retired
- Percent applications retirement plan achieved
- Percent reusable of core application modules
- Percent new IT investment v. total spending

Financial and investment performance
- Percent and cost of services provided in-house v. industry standard
- IT budget as a percent of operational budget and compared to industry average
- Net present value, internal rate of return, return on investment, return on net assets

IT resource usage
- Percent consolidated/shared resources across units
- Percent cross-unit shared databases and applications
- Percent hardware/software with interoperability capabilities

IT Customer Measures

Customer partnership and involvement
- Percent projects using integrated project teams
- Percent joint IT customer/supplier service-level agreements

Customer satisfaction
- Percent customers satisfied with IT product delivery
- Percent customers satisfied with IT problem resolution
- Percent customers satisfied with IT maintenance and support
- Percent customers satisfied with IT training
- Percent products launched on time
- Percent service-level agreements met

Business process support
- Percent IT solutions supporting process improvement projects
- Percent users covered by training to use new IT solutions
- Percent new users able to use applications unaided after initial training

IT Internal Business Measures

Applications development and maintenance
- Number of function points delivered per labor hour
- Number of defects per 100 function points at user acceptance
- Number of critical defects per 100 function points in production
- Percent decrease in application software failures, problems
- Mean time to resolve critical defects
- Cycle time for development

Project performance
- Percent projects on time, on budget
- Percent projects meeting functionality requirements
- Percent projects using standard methodology for systems analysis and design

Infrastructure availability
- Percent computer availability
- Percent communications availability
- Percent applications availability
- On-line system availability

Enterprise architecture standards compliance
- Number of variations from standards detected by review and audit per year
- Percent increase in systems using architecture
- Percent staff trained in relevant standards

IT Innovation and Learning Measures

Workforce competency and development
- Percent staff trained in use of new technologies and techniques
- Percent staff professionally certified
- Percent IT management staff trained in management skills
- Percent IT budget devoted to training and staff development

Advanced technology use
- Percent employees skilled in advanced technology applications
- Number of dollars available to support advanced technology skill development

Methodology currency
- Currency of application development methods used
- Percent employees skilled in advanced application development methods
- Percent projects developed using recognized methods and tools

Employee satisfaction and retention
- Percent employee satisfaction with the capability of the existing technical and operating environment to support mission
- Percent employee turnover by function.

APPENDIX C

A Unified Overview of PPM

Cutting Through the Jargon

1. Strategic Planning

Other Descriptive Terms for this Step

- Pre-portfolio Management

In-Practice Description

Strategy is the foundation for selecting projects and is expressed in the vision statement, mission statement, statement of principles, organization objectives, and/or strategic plan(s).

How PPM Integrates with Project Management

A corporate-level Project Office can serve as the facilitator between project management and strategic planners.

Tools and Tips

What-if scenario planning, SWOT analysis, environmental scanning, market research, development of mission and vision statements.

2. Opportunity Assessment

Other Descriptive Terms for this Step

- Project Solicitation
- Project Identification
- Project Inventory (includes not only projects under way but those in the queue or under discussion).

Categories of projects:

- Strategic or top-down projects imposed on the organization by upper management
- Bottom-up projects generated by employees
- Projects pressed on an organization by customers/vendors
- Must-do projects (Y2K, regulatory compliance).

In-Practice Description

Opportunity Assessment typically includes a screening step to eliminate project ideas that do not provide real value to the organization. Business cases for proposed projects are completed and compared; the business case is then used in the next two processes, Selection and Prioritization.

Establish a template with minimal acceptance criteria, including:

- link to organizational direction and business goals
- top-level description of the project's costs, benefits, and risks.
- business threshold minimums (return-on-investment or cost/benefit ratio minimums),
- compliance with organizational constraints (existing technology architecture).

How PPM Integrates with Project Management

Processes for defining and estimating new projects; standard PM methodology for scoping, costing and scheduling projects.

Tools and Tips

Process/template for business case development; senior management participation; common decision criteria. A resource allocation and forecasting tool that tracks the project assignments for each person by month, as well as that person's skill can be used to compile a complete list of active projects by determining what each person is doing.

Project ideas should be easy to submit; as simple as a one-page form.

- Establish portfolio decision meetings and teams
- Involve key project personnel
- Develop a process that is easy to follow. It should include details as to who will review the business case, how long it will take to get a decision, and how to appeal if the project is not approved.

3. Selection

Other Descriptive Terms for this Step

- Balancing the portfolio
- Gating process

In-Practice Description

Decision-makers representing a cross-section of management review the projects up for consideration using a criteria checklist:

- Value of the project relative to its financial justification

- Value of the project relative to its impact on the staff
- Value of the project relative to impact on or synergy with other projects, image within the marketplace, etc.

Each criterion carries a weighted score. The cumulative scoring determines whether the project will be approved.

How PPM Integrates with Project Management

PM function feeds data into the selection process, re:

- Resource availability
- Cost estimates
- Schedule estimates
- Technology issues
- Project historical data such as lessons learned
- Status of projects in process.

Tools and Tips

- Have accurate data available. Information from the accounting system (expenditures, revenues, and manpower) to forecast project costs and benefits.
- Have reliable, up-to-date market, technical, and manufacturing information.
- Have a system to track the status of ongoing project activity.
- Establish a process to analyze the project information. to eliminate controversy over key assumptions
- Uniformly apply the methodology across the organization.

4. Prioritization

Other Descriptive Terms for this Step

- Project Ranking

In-Practice Description

The same criteria used in the selection process are used in the prioritization process.

Each of the criteria had a quantifiable rating or score attached to it. When summed, these scores indicate the ranking of the new project relative to other projects on the inventory list.

How PPM Integrates with Project Management

See Selection steps above.

Tools and Tips

A formal project prioritization program can accelerate decision processes by as much as a five times.

There must be a feedback loop in place through which business units can communicate the actual benefits and drawbacks of the new project. as it progresses.

5. Registration

Other Descriptive Terms for this Step

- Project Initiation
- Project Tracking

In-Practice Description

The organization must track the progress of approved projects so that Step 8, Reevaluation, can be conducted with accurate performance data.

Projects are registered into a central repository by assigning a Project ID number, indicating who is the project sponsor/champion; recording all the current project players and their contact information; attaching the project charter; and indicating the project's priority position. This file becomes the central record concerning the project.. Along with essential high-level status information, it is accessible via an executive "dashboard" or equivalent.

How PPM Integrates with Project Management

Project repository maintenance.

Project performance tracking is a traditional PM function. In PPM, it differs in that there is a defined set of organizational (strategic) goals against which to measure progress, in addition to the usual cost and schedule compliance.

Tools and Tips

Although portfolio management system can be done manually, with pencil and paper, today's enterprise project management software, and software specific to portfolio management, makes it easier for organizations to store and access the metrics they need to make good decisions.

6. Resource Allocation

Other Descriptive Terms for this Step

- Formerly a collection of practices and tasks performed by HR

In-Practice Description

Enterprise-wide resource allocation and leveling is a capability that can only be achieved through portfolio management. Knowing the resource requirements of all projects in the portfolio prevents overscheduling of staff, and reveals skill gaps that must be trained for or hired for.

How PPM Integrates with Project Management

The Project Office can act as a center for tracking, testing, assigning, evaluating, and training project personnel.

Tools and Tips

Dedicated resources; a skills database; resource tracking and leveling software functionality.

7. Portfolio Review

Other Descriptive Terms for this Step

- Course Correction

In-Practice Description

A periodic "check up" during which project actuals are compared to the assumptions the project was launched with. Needed adjustments both to the portfolio of projects and to the gating decision process.

If project selection and prioritization were well done, the portfolio review should not result in a major adjustment to the portfolio.

How PPM Integrates with Project Management

- Communication processes
- Performance metrics
- Phase or stage/gate decision models.

Tools and Tips

- Portfolio tracking and reporting tools
- Reconvene the portfolio selection team
- Involve project managers and team members as necessary.
- Establish consistent, standard project reporting forms across the enterprise.

8. Reevaluation

Other Descriptive Terms for this Step

- Reprioritization
- Realignment

In-Practice Description

PPM is an iterative practice, not a one-time event. Depending on company and industry, a PPM Reevaluation may be held monthly, quarterly or even annually.

In some cases, it will be valuable to reexamine projects that have been terminated, since it may prove worthwhile to restart a project after certain criteria have been satisfied.

How PPM Integrates with Project Management

Project failures can be averted by making responsible "kill" decisions in a timely manner—exactly the kind of decision the Reprioritization stage is designed to encourage.

Tools and Tips

- Sound change management practices
- PPM requires active management triggered by periodic reviews and external market triggers—technology changes, human resource cost and availability triggers, business alignment triggers, competitive and regulatory triggers.

APPENDIX D

Project Portfolio Management Maturity Model (Excerpt)

In addition to optimizing project management processes, organizations have found that they improve their overall performance by optimizing their processes for managing the complete portfolio of projects as well. PM Solutions' *Project Portfolio Management Maturity Model* (CBP, 2005), was written to help organizations improve the capability of their project portfolio management processes. The model provides best practices to help:

- determine the maturity of your organization's project portfolio management processes
- map out a logical path to improve your organization's processes
- set priorities for short-term process improvement actions
- assess the role of a project office in your project portfolio management processes
- track progress against your project portfolio management improvement plan
- build a culture of project portfolio management excellence across the organization.

By focusing on specific project portfolio management related improvement processes, your organization can best

leverage the resources assigned to improvement activities while rallying the organization around specific goals. A project portfolio management maturity model can be a roadmap showing an organization how it can systematically move to more mature levels of portfolio management performance and do it in more effective and efficient ways. After an objective assessment, your organization can set its goals for increasing the capability of its portfolio management processes as part of an overall project management improvement initiative.

Component Descriptions

We identified six components essential to developing an effective organizational portfolio management environment:

Portfolio Governance

This component addresses processes that facilitate the governance of an organization's project portfolio.

Fundamental Areas of Focus

- Portfolio governance process
- Initial consideration of alignment to the organization's vision, strategy, or objectives supported by basic alignment criteria
- Portfolio review board operations (policies and procedures)
- Portfolio review board membership (balance of project management and business knowledge)
- Portfolio review board charting process for establishing division-level portfolio review boards.

As the Organization Matures within this Component…

Portfolio governance processes, procedures, and decision-making evolve as an enterprise portfolio review board is established to compliment the division-level portfolio review boards. The portfolio is managed against strategic criteria, and balanced to maintain an optimal mix of projects to achieve the organization's strategies.

Project Opportunity Assessment

This component addresses the processes around identifying and consistently assessing project opportunities.

Fundamental Areas of Focus

- Project opportunity identification/assessment process
- Roles and responsibilities
- Business value determination
- Portfolio review board.

As the Organization Matures within this Component…

Processes such as opportunity identification, business case development, project approval, post-implementation project review and lessons learned are refined and consistently applied across the enterprise. Project portfolio management processes are continually assessed and improved with a particular emphasis on supporting management decisionmaking during opportunity assessment activities. The portfolio review board becomes more active in the analysis of cost-benefit, schedule, and risk data. Post-implementation reviews validate actual results for comparison to initial data and the information is used for process improvement efforts.

Project Prioritization and Selection

This component addresses processes that facilitate the review, prioritization, and selection of projects in the project portfolio.

Fundamental Areas of Focus

- Project prioritization processes and criteria
- Selection and funding process
- Portfolio review board.

As the Organization Matures within this Component…

Prioritization becomes more consistent across the organization as the processes and criteria become better defined, understood, consistently interpreted, and applied. The portfolio review board becomes more active in the review and selection process at the division level, evolving to the enterprise level.

An established process supports executive decision-making concerning new project proposals. Portfolio development information is collected and maintained, including baseline data for the portfolio management processes.

Portfolio and Project Communications Management

This component addresses processes that facilitate the collection and sharing of portfolio information.

Fundamental Areas of Focus

- List of approved projects (beginning at the division level)
- Portfolio information defined (consistent set of data for each project)
- Portfolio information shared across the division

- Processes for sharing information
- Project management processes
- Categorization of projects and balancing of project investment with organizational goals

As the Organization Matures within this Component…

Adherence to corporate project management processes—initially at the division level, then at the enterprise-level—enable the enhancement of the project portfolio list or database. The project list or database covers the entire organization and portfolio information is available to all divisions for their use as they participate in the organization's project management and portfolio management processes. Project investment information is readily available.

Portfolio Performance Management

This component addresses processes that facilitate the collection, analysis, and management of information used in portfolio performance management processes and decisionmaking.

Fundamental Areas of Focus

- Portfolio performance management process
- Portfolio review with sponsors and other key stakeholders
- Portfolio information sharing with sponsors and other key stakeholders
- Portfolio review board.

As the Organization Matures within this Component…

Processes and standards guiding portfolio performance management are institutionalized, portfolio reviews are conducted

regularly, and portfolio analysis is conducted to ensure the appropriate balance of project investments. The portfolio review board operates at the enterprise level and provides project oversight through regular portfolio progress reviews. The enterprise portfolio review board prioritizes projects using defined criteria. There is an emphasis on maintaining the performance of a balanced portfolio—monitoring the actual progress and delivery projects against their investment and planned benefit.

Portfolio Resource Management

This component addresses processes that facilitate the assignment of resources across the organization to support the projects in the organization's portfolio.

Fundamental Areas of Focus

- Resource assignment process
- Skills identification at the division-level
- Project prioritization and resource assignment across the division (based on skills and availability)
- Cross-divisional resource assignment is coordinated to support prioritized projects.

As the Organization Matures within this Component…

Project prioritization is conducted at the enterprise-level by the portfolio review board. Portfolio resource management functions are executed with an enterprise perspective.

Resource assignment is based upon resource skills, prioritization, and project priorities. Resource pools are managed and contain all types of resources. The enterprise portfolio re-

view board oversees the portfolio to ensure resource continuity across projects. The Portfolio Management Maturity Model examines each of these six components independently against the criteria for each of the five levels of maturity.

Levels of Project Portfolio Management Maturity

The Project Portfolio Management Maturity Model developed by PM Solutions is patterned after the SEI CMMI®. The five levels of the model are described below. Each level represents a discrete organizational capability. The Portfolio Management Maturity Model examines each level within the six project portfolio management components.

Level 1: Initial Process

- No processes or only ad hoc processes exist
- Portfolio information not readily available
- Roles and responsibilities not understood
- No project or resource inventories

Level 2: Structured Process and Standards

- Basic processes exist
- Business value of projects understood
- Mix of intermediate and summary-level information
- Portfolio reviewed periodically
- Simple prioritization scheme established at division-level
- Roles and responsibilities defined
- Basic project and resource inventories exists.

Level 3: Organizational Standards and Institutionalized Process

- Organization-wide processes standard
- Summary and detailed information available
- Enterprise-wide portfolio actively analyzed and monitored
- Project strategy aligned with business strategy
- Processes integrated with corporate processes
- Roles and responsibilities defined, linked to business value.

Level 4: Managed Process

- Post-implementation reviews using quantitative and qualitative data
- Repository of portfolio development information established, updated, and maintained
- Project portfolio information is audited
- Project investment information available on demand
- Common objectives and metrics defined for portfolio decision-making and analysis
- Strategic criteria used to maximize portfolio value.

Level 5: Optimizing Process

- Focus on continuous improvement of portfolio management processes.

APPENDIX E

Role Descriptions for the SPM-Enabled Organization

Excerpted from *Optimizing Human Capital with a Strategic Project Office* (Auerbach, 2006)

Chief Project Officer

(Other titles that may be descriptive of this role: Director of Project Management; Director of Programs and Strategy; Director of Enterprise Project Management; Director of Project Portfolio Management)

Role Overview

Reports to a senior C-level executive, preferably the CEO. Provides leadership, direction, and oversight of all corporate programs and projects under development and execution. This role also provides executive oversight for all divisional projects and maintains responsibility for data integration and reporting for all projects and programs within the organization. Oversees development and management of the Strategic Project Office and plays a key facilitative role in project portfolio management. May include the role of Portfolio Manager. Responsibilities for the Chief Project Officer parallel that of a Chief Financial Officer as the office of the CPO provides corporate status, reporting, analysis of all programs/projects with analysis of corresponding impacts to budget, delivery timetables, and resources.

Suggested Duties and Responsibilities

- Promotes the development and diffusion of project management culture throughout the enterprise
- Maintains effective communication with senior management, making them aware of critical issues confronting corporate programs/projects and of the action plans for addressing those issues
- In conjunction with corporate leadership, develops and manages the enterprise project portfolio management process, integrates the corporate project decision-making with corporate strategy, and facilitates on-going enterprise program/project portfolio decision making
- Identifies needed corporate process improvements and works with business partners to effectively drive change throughout the organization
- Facilitates program/project reviews of critical/key enterprise programs and projects
- Direction and oversight of all corporate systems for project planning, implementation and monitoring, insuring that all projects have clear goals, objectives and timelines with measurable milestones consistent with corporate strategy and goals
- With the director of divisional project offices, organizes the project office structure to effectively achieve divisional and departmental project objectives
- With the director of the divisional project offices, oversees major periodic divisional portfolio meetings, driving results and resolving key project and program issues
- With the director of divisional project offices, oversees preparation of key management communications such as

project steering committee presentations, status reports, budget reports, etc.

- With the director of divisional project office, oversees relationships between project personnel and functional managers
- With the director of the Enterprise Project Office, oversees education and mentoring for staff and management regarding project management
- Oversees and participates in the project portfolio management process, ensuring that the technical objectives of projects are integrated with commercial requirements
- Oversees the integration of project processes with other functional areas such as manufacturing, marketing, and finance in order to ensure the success of corporate strategies, products and initiatives
- Maintains an understanding of contemporary project management techniques and industry practices, as they impact corporate objectives
- Ultimate responsibility for enterprise project problem/issue identification and resolution.

Suggested Knowledge, Skills and Abilities

- Ability to analyze and synthesize information in a concise manner and to make recommendations on strategies to resolve policy and political issues
- Demonstrated ability to use professional management and/or technical concepts to solve complex problems and oversee key projects in creative and effective ways is required
- Strong knowledge of finance and accounting
- Strong partnering skills

- Ability to understand and deal with political issues in a highly matrixed environment
- Excellent communication skills (oral and written)
- Strong organization skills and the ability to manage multiple priorities
- Strong project management ability
- Strong leadership ability
- Strong negotiation skills
- Skills to interact with clients and business partners effectively (especially if programs/projects are developed for external client use)
- Strong skills in conflict resolution and problem solving
- Results orientation
- Strong analytical and interpersonal skills.

Suggested Background, Experience and/or Education

- Extensive experience (10+ years) in the management of large, complex programs/projects
- 7+ years of experience in the relevant industry area
- PMP® or other project management certification or equivalent experience required
- College degree in finance, accounting, subject related to the industry area, or a technical subject preferred; CPA or MBA is a plus; MS, or Ph.D. in a business specialty or industry-related subject may be useful
- Product development and delivery experience
- Experience with relevant enterprise project management and enterprise financial systems.

Project Portfolio Manager

(Other titles that may be descriptive of this role: Director of Strategic Project Management, a Director of Enterprise Project Management, Chief Project Officer)

Role Overview

The Project Portfolio Manager's responsibility is ideally enterprise-wide, but in practice is at present usually limited to projects in a particular division, such as IT or R&D. This position manages the corporate or divisional project portfolio by managing the process for identifying, selecting, and prioritizing projects that support corporate business strategy. This is done using a facilitative process where the Portfolio Manager (or PO Director) facilitates decisions with the leadership team by providing data, inputs, analysis and facilitative assistance so the executives reach prioritization conclusions and ultimately "own" the organizational projects. This position reports to an upper-level executive; in a small company, it may report to the CEO. The responsibilities described below may also reside with a CPO or Director of Enterprise Project Management; on a divisional level, they may be rolled into the Project Office Director position.

Suggested Duties and Responsibilities:

- With a team of project stakeholders from all levels of the organization (C-level at the enterprise level; senior managers at the divisional level), responsible for developing formal criteria for identifying, evaluating, prioritizing, selecting and approving the set of projects that form the corporate (or division) project portfolio. (This process should be generally consistent throughout the organization, integrated at the CPO level. In other words, the CPO should form the corporate process, integrating corporate strategy, then corporate

strategy should flow down to the divisional level; while portfolio decisions by the division management should first account for delivering projects against corporate strategies, then balance specific divisional strategies into the workload)

- With an executive committee, administers and facilitates the portfolio management process, including oversight of documentation and periodic reviews
- With senior executives from the finance function, works to establish a system for quantifying project benefits so that project approval decisions can be made objectively (This should be developed within the office of the CPO then flowed down to the divisions who may chose to tailor the process to meet their specific needs.)
- Assist Project Office Director in identifying project interrelationships that will affect priority and resource allocation decisions
- With functional managers and project managers, oversees the process for collecting the project data on which portfolio decisions are based
- Monitors projects in the portfolio (such as milestones, schedule performance, resource constraints, etc.) and updates executives on progress in the portfolio
- With functional and project managers, analyzes the impact to the existing portfolio of changes in existing projects, or the addition of new projects outside of the portfolio process cycle, and identifies strategies (resource allocation, project sequencing) for accomplishing all the desired projects
- Oversees the distribution of project portfolio information to executive management, directors, and other key personnel
- With the director of the project office and project managers, works to translate portfolio decisions into appropriate planning and execution of projects.

Suggested Knowledge, Skills and Abilities:

- Strategic business knowledge; a long-term focus; ability to make recommendations regarding complex strategic decisions
- High-level organization, communication, and facilitation skills; credibility with executive management
- Willing to assume responsibility and ownership for making critical decisions or recommendations related to approving, rejecting, and discontinuing projects
- Negotiation and conflict resolution skills; ability to create an open environment where conflicts as to project priorities and funding decisions can be aired and resolved in an objective manner
- High-level understanding of technical concepts as related to the industry and products/services of the company
- Ability to instill trust, motivate, and work with other people
- Finance, accounting and budgeting knowledge
- Ability to create and deliver executive-level summary reports and presentations.

Suggested Background, Experience and/or Education

- Extensive experience (10+ years) in the management of projects
- PMP® or other project management certification or equivalent experience required
- MBA or equivalent educational experiences and experience in business and finance
- Experience and/or a related degree in the specific industry sector.

Strategic Project Office Director

(Other titles that may be descriptive of this role: Director, Project Management Office, Manager of PMO, Project Office Director)

Role Overview

The SPO Director is responsible for the overall project management function, providing leadership, coordination, and management to SPO activities. Reporting to a C-level director (e.g. Chief Project Officer, or, for a department-level project office, the CIO) Chief Financial Officer, Chief Operating Officer), the person who heads the SPO creates and maintains a uniform approach to project management and serves as change agent for continuous improvement through improved/enhanced methodologies. Either personally or through "a manager of project managers," the SPO Director supports other project managers and leads the development and application of project management methodology and culture. He or she oversees enterprise project management strategy, training, communication, program/project control/analysis/reporting, process development and tool development, and serves on the corporate committee for portfolio review. When no Chief Project Officer position exists, the position of Project Portfolio Manager may be combined with SPO Director and the SPO Director may serve on a corporate leadership team. Essentially, the SPO Director is a "relationship manager": one who serves as a conduit for communications and understanding between the project personnel who carry out corporate initiatives and the senior executives who make strategic decisions.

Suggested Duties and Responsibilities

- Oversees implementation of processes and products to increase project management effectiveness

- Interfaces with senior managers to provide strategic and tactical advice on program/project planning and execution
- Appoints or approves the appointment of project managers
- Facilitates approval (through the Project Review Boards) for scope and objectives, schedule and resources, roles and responsibilities of all projects
- Oversees development and deployment of enterprise project controls tools, methodologies, and systems
- Coordinates recurrent enterprise program/project budgets and resource forecasts
- Facilitates resource, budget, timing, and deliverables issues resolution for all enterprise programs and projects
- Oversees coaching and mentoring of project team members in the use of project management tools and processes and develops training standards for project managers
- With Methodologist, ensures enterprise consistency through the development and implementation of methodology
- Oversees risk management process
- Maintains a master status list of all enterprise projects and provides "dashboard" reports and analysis to senior leadership
- Oversees the development of effective SPO program/project tools to aid in process standardization (project audits, reports, templates, knowledge management tools such as a "Lessons Learned" library, and intranet)
- With business development team, participates in business case and proposal development to ensure integration between the project planning effort and other functional areas, such as engineering, research and development, operations, marketing and sales

- Oversees development of enterprise program/project business cases, plans, budgets, and resource requirements
- Facilitates resolution of enterprise multi-project resource and integration conflicts
- Accountable for SPO budget.

Suggested Knowledge, Skills and Abilities

- Thorough understanding of budgeting, project management, and resource management
- Thorough knowledge of company's industry area
- Strong negotiation, facilitation and influencing skills
- Strong analytical, interpersonal and verbal/written communication skills
- Strong leadership skills
- Customer and results-oriented
- Capable of developing solutions to complex, integrated business problems
- Extensive knowledge of project management tools and methodologies; extensive experience with using relevant project management and business management computer software
- Ability to influence executive-level associates and bring issues to resolution.

Suggested Background, Experience and/or Education

- 7-10 years' project management experience in a business environment; including successful oversight of large, complex projects or programs; at least 5 years' experience in company's industry

- Demonstrated success in management of other project managers or other experience on a management level within a project office
- PMP® or other project management certification
- College degree in a discipline such as Computer Science, Engineering, Business Administration or a discipline related to industry; an MBA or equivalent project management and business experience is desirable
- Experience with roll-out of project management and process improvement in an organization, including implementation of standards and/or methodologies
- Demonstrated ability to manage large, complex projects on time and within budget
- Ability to express complex technical concepts effectively, both verbally and in writing, to diverse groups of people.

Manager of Project Support

(Other titles that may be descriptive of this role: Project Controls Manager, Project Support Manager)

Role Overview

A second tier of management within a large corporate SPO might include this position, which provides line management oversight. This manager reports to the Enterprise SPO Director and manages the day-to-day project controls operations in the implementation of SPO objectives.

Suggested Duties and Responsibilities

- Ensures adherence to enterprise policies and procedures and SPO methodologies, guidelines, and practices

- Oversees maintenance of enterprise program/project controls tools, techniques, methodologies, processes, and procedures
- Manages integration of enterprise project controls tools with corporate financial, procurement, quality, and reporting systems
- Establish communication plans and roll out strategies for implementation and continuous improvement of processes, based on metrics and feedback from SPO members
- Maintains the enterprise program/project portfolio information database
- Coordinates development of the annual enterprise program/project budget
- Integrates divisional project controls reporting for enterprise reporting and analysis
- Ensures consistent application of an effective project management methodology and tools across the enterprise
- Perform corporate dashboard reporting with regard to resources: resource leveling, utilization forecasts, and integrated program/project analysis.

Suggested Knowledge, Skills and Abilities

- Management skill as it relates to the administration of departmental goals and objectives
- Ability to express complex technical concepts effectively, both verbally and in writing, to diverse groups of people
- Strong leadership, facilitation, negotiation, and mentoring and personnel management skills
- Thorough knowledge of project management principles and practices
- Strong knowledge in the use and application of project controls systems and tools

- Understanding of the use and application of business information and reporting systems
- Thorough knowledge of company's industry
- Knowledge of the strategic and operational issues of the project or business unit.

Suggested Background, Experience and/or Education

- College degree in business or related discipline, plus 3-5 years experience in company's industry
- 5 - 10 years of project management (or project controls, depending on the organization) experience in managing multiple, large, and complex divisional or enterprise programs/projects
- PMP® or other project management certification
- Experience in resource capacity planning and accounting processes
- A previous project office role utilizing project management software
- Previous experience integrating enterprise project controls software with business information and reporting systems
- Methodology and/or process implementation background.

Manager of Project Managers

(Other titles that may be descriptive of this role: Manager of Enterprise Project Managers, Project Office Human Resource Manager, Enterprise Program Manager)

Role Overview

In large organizations, where multiple program/project managers are managing diverse enterprise projects, a Manager of Project Managers may be needed to oversee the assignment,

development, and performance of initiative project managers. The Manager of Project Managers will be responsible for the "care and feeding" of this unique set of resources. Enterprise Program/Project Managers are highly experienced and successful in delivering large, very complex, programs/projects which may last several years. These projects may involve highly complex interrelationships within the organization but may also include relationships to entities outside of the enterprise; clients, partners, vendors, government agencies, regulatory agencies, and the citizenry. This manager reports to the Enterprise SPO Director and oversees the performance of enterprise program/project managers.

Suggested Duties and Responsibilities

- Ensures adherence to enterprise policies and procedures and SPO practices; provides SPO interface with corporate Human Resources function
- With enterprise HR staff, participates in design and administration of systems for recruitment, rewards, retention, and professional development of SPO staff; oversees these activities within the SPO.
- In coordination with enterprise HR staff, develops and maintains program/project manager career progression paths, performance measurement systems, and performance incentive/rewards systems
- In coordination with enterprise HR staff, develops and maintains project manager competency measurement programs to ensure project managers are assigned programs/projects commensurate with their traits, skills, and knowledge
- Enhances core project management disciplines by ensuring that project managers and project leads are enabled to consis-

tently deliver projects on-time, within budget, and with high levels of customer satisfaction

- Establish communication plans and roll out strategies for implementation and continuous improvement of processes, based on metrics and feedback from SPO members
- Coordinates formal and informal program/project manager training
- Appoints or approves the appointment of project managers
- Ensures consistent application of an effective project management methodology across the SPO
- Through program/project managers, oversees project activity ensuring critical tasks are identified and target dates are achieved; participates in planning sessions as necessary to assist in determining project approach and overall time lines associated with project requirements; ensures quality standards are met for projects overseen by the respective Project Review Boards
- Ensures that client needs are communicated clearly to other project managers and staff. Ensures that client relations are maintained at the highest level through all phases of project planning and execution
- Ensures that program/project managers adhere to project management methodology and Project Office procedure and that appropriate tracking, reporting and communication take place
- Serves as a mentor/advisor on issues related to corporate politics, external politics, client relations, governmental regulation, project quality, project risk, issues resolution, conflict management, and safety.

Suggested Knowledge, Skills and Abilities

- Ability to express complex technical concepts effectively, both verbally and in writing, to diverse groups of people
- Strong leadership, facilitation, negotiation, mentoring and personnel management skills
- Thorough knowledge of project management principles and practices
- Thorough knowledge of company's industry
- A technical background sufficient to understand the technologies and technical issues involved with the project and industry, to be able to anticipate and identify technical obstacles, and to make accurate technology decisions
- Knowledge of the strategic and operational issues of the project or business unit
- Demonstrated ability in conflict resolution, issues and change management
- Strong understanding of internal/external political environment with demonstrated success in managing diverse internal/external issues
- Understanding of legal issues and dealing with their resolutions for the enterprise programs/projects.

Suggested Background, Experience and/or Education

- College degree in business or related discipline, plus 5-10 years experience in company's industry
- 10+ years of project management experience, with 3 years of experience managing project managers
- Certification, education or experience in human resource management helpful

- PMP® or other project management certification
- Demonstrated success in the management of large, complex, highly interrelated programs/projects
- Previous successful experience working with mid- and senior level executives
- Demonstrated ability working with clients, vendors, and government regulators (if applicable).

Project Management Mentor

Role Overview

A PM Mentor is a project management professional with extensive project and program experience who is capable of working with project managers and project teams to help them grow in the practice of the profession. Mentors are skilled at teaching and coaching project participants. They specialize in helping to put in place the processes, skills and support structure in place to effectively establish and manage projects. Typically, mentors provide consulting services to program managers, project managers, program/project teams and corporate managers. The Project Management Mentor is well versed in leading and managing program/project team members from diverse backgrounds, and within global and virtual settings. In program/project crisis the mentor can be called in to fill-in for an extended period of time for and unexpected absence of the senior project manager or program manager. Mentors play an important role in standardizing the practice of the agreed-upon methodology, in building a project management culture, and in spreading the project management "gospel" throughout the organization by troubleshooting projects in functional areas enterprise-wide. This role is for experienced and highly skilled senior project or program managers with superior or advanced interpersonal skills.

Mentors report to the Manager of Project Managers and work closely with the Manager of Project Support to assist the entire SPO staff in professional development or to effectively deliver enterprise or divisional program/projects.

Suggested Duties and Responsibilities

- Serve as a subject matter expert for project management processes and tools
- Work closely with or supervise Methodologists in the development of project management methodology and tools
- Offer consulting support to new and on-going initiatives
- Work closely with Project Managers and Business Systems Analysts to ensure all projects are managed using corporate accepted tools, techniques and methodology processes
- Serve as a senior advisor on project management issues enterprise-wide
- Able to provide vision and direction for strategic planning within the SPO and across the enterprise
- Provide advise, counsel, and mentoring to program and project managers
- Provides conflict resolution to troubled projects.

Suggested Knowledge, Skills and Abilities

- Superior/advanced competency in project management processes
- Full proficiency with project management tools
- Excellent counseling, facilitation, conflict resolution, and interviewing skills

- Able to provide visionary leadership to SPO staff
- Skilled at internal/external consulting and relationship management
- Well-versed in industry and in organizational politics.

Suggested Background, Experience and/or Education

- Extensive experience (10+ years) in the management of projects, including demonstrated ability to manage large, complex projects or programs on time and within budget
- Extensive experience in relevant industry area and understanding of strategic issues that impact the company and project management
- PMP® or other project management certification
- College degree in finance, accounting, subject related to the industry area, or a technical subject preferred; advanced degree in a business specialty or project management may be useful
- Experience with relevant enterprise project management and enterprise financial software
- Demonstrated success in the mentoring or management of other project managers or other experience on a management level within a project office
- Experience with roll-out of project management and process improvement in an organization, including implementation of standards and/or methodologies
- Ability to express complex technical concepts effectively, both verbally and in writing, to diverse groups of people.

Program Manager

In large organizations with many project managers, project managers may be awarded "grades" based on their span of control; a Program Manager role is a top-grade role to which project managers might aspire. Thus, many of the duties, skills, and background traits listed below are repeated in the role description for Project Manager. However, this position manages complex, strategic projects that span organizational boundaries, so Program Managers should also have experience managing multiple high-risk projects, including projects involving external vendors and multiple business areas. This grade is a logical training ground for Manager of Project Managers, Manager of Project Support, Strategic Project Office Director, and CPO positions for the program manager with business acumen. When groups of related projects are organized into programs, this position may manage multiple project managers whose projects provide specific deliverables; all which must be collectively managed to provide the desired programmatic results.

Suggested Duties and Responsibilities

- Manage and direct multiple medium to large-scale projects
- Translate generalized customer business goals and objectives into concrete strategy and tactical plans
- Work on complex problems where analysis of situation or data requires an in-depth evaluation of various factors to achieve best results
- Exercise judgment within broadly defined policies and practices to develop corporate methods, techniques
- Work effectively with internal and external clients, third party vendors, and senior management in accomplishing project objectives

- Evaluate complex situations accurately and identifies viable solutions that create successful outcomes for the customer
- Work closely with the Program Sponsor and Program Review Board to facilitate decisions necessary for program delivery
- Oversee effective project oversight and reviews to effect program success
- Develop and maintain "lessons-learned" inputs to the project repository for utilization on future programs initiated by the enterprise
- Resolve political, resource, budgeting, change, and legal issues affecting the program
- Serves as a mentor/advisor/decision-maker to project managers for the program for issues related to corporate politics, external politics, client relations, governmental regulation, project quality, project risk, and safety
- Oversee development of proposals and requests for proposals associated with the program
- Oversee vendor relations and procurement related to the program
- Oversee execution and delivery of projects related to successful program execution.

Suggested Knowledge, Skills and Abilities

- Understanding of the strategic and operational issues of the project or business unit
- Ability to train, mentor, and develop project managers in project management methodologies and their application
- Liaison and consultative skills; negotiating skills within a context of high political sensitivity and conflicting interests
- Presentation and written communication skills, including proposal writing

- Ability to advise on complex matters to non-specialists
- Demonstrated ability in managing internal and external client expectations on program requirements and deliverables
- Highly developed business acumen
- Skilled at requirements analysis and management
- Strong writing, mentoring, negotiation, communication, and meeting facilitation skills; ability to utilize a combination of formal authority and persuasion skill sets
- Strong integration skills; ability to coordinate all aspects of a project or program
- Strong leadership, organizational, and interpersonal skills
- Ability to manage in a matrix environment.

Suggested Background, Experience and/or Education

- College degree in a technical discipline; education in finance/accounting or an MBA helpful. Related work experience can be substituted for educational requirement in some industries
- Must have held project management and leadership positions (reflecting increasing levels of responsibility) in an organization of comparable size; 5-7 years project management experience with experience in large, complex projects and management of distributed project resource teams; 3-5 years of experience in the industry with previous supervisory or coaching experience
- Proficiency in relevant computer applications
- PMP® or other project management certification
- Demonstrated experience leading cross-functional teams within a formalized methodology.

References and Resources

Preface

William R. Bigler, Jr., *The New Science of Strategy Execution,* Praeger Publishers, 2004.

Larry Bossidy and Ram Charan, *Execution: The Discipline of Getting Things Done,* Crown Publishing, 2002.

Jim Collins, *Good to Great,* Harper Business, 2001.

Paul C. Dinsmore and Terence J. Cooke-Davies, *The Right Projects Done Right: From Business Strategy to Successful Project Implementation,* Jossey Bass, 2005.

Barnaby S. Donlon, Strategy Execution: Five Major Domains Critical to Any Organization, *DM Review,* Feb. 2007, accessed at http://www.dmreview.com/article_sub.cfm?articleId=1075123.

Amir Hartman, *Ruthless Execution,* Prentice Hall, 2004.

Robert S. Kaplan and David P. Norton, *The Strategy-Focused Organization,* Harvard Business School Press, 2001.

J. Mullich, Human Resources' Goals Work Best When They're Tied to Company Success, *Workforce Management,* December, 2003.

James S. Pennypacker and Paul Ritchie, "The Four Ps of Strategy Execution: Integrating Portfolio, Program, Project, and Performance Management," in the *Proceedings of the 2005 PMI Global Congress,* Project Management Institute, 2005.

George Veth, Strategy Execution: The New Science of Strategy Execution, *DM Review,* March 2006. Accessed at http://

www.dmreview.com/article_sub.cfm?articleId=1048493; and Initiative Portfolio Management: Making Decisions, *DM Review,* August 2006, accessed at http://www.dmreview.com/article_sub.cfm?articleId=1060159.

Chris Zook, *Profit from the Core: Growth Strategy in an Era of Turbulence,* Harvard Business School Press, 2001.

Introduction

—, *Strategy & Projects: A Benchmark of Current Business Practices,* Center for Business Practices, 2005.

Neville Turbit, "IT Governance Project Governance," accessed at http://www.projectperfect.com.au/info_governance.php, June, 2007.

—, Institute for Governance—http://www.iog.ca/boardgovernance/html/gov_wha.html.

—, Corporate Performance Management (CPM) Portal—http://www.dmreview.com/portals/portal.cfm?topicId=230180.

—, Strategic Intelligence Portal—http://www.dmreview.com/portals/portal.cfm?topicId=230636.

Chapter One

Jeannette Cabanis-Brewin, and James S. Pennypacker, Best Practices for Aligning Projects to Corporate Strategy, *Proceedings of the 2006 PMI Global Congress,* Project Management Institute, 2006.

—, *Strategy & Projects: A Benchmark of Current Best Practices,* Center for Business Practices, 2005.

Robert M. Grant, *Contemporary Strategy Analysis,* Blackwell Publishing, 2007.

Lawrence G. Hrebiniak, *Making Strategy Work,* Wharton School Publishing, 2005.

Chapter Two

Jeannette Cabanis-Brewin: Project Portfolio Management: Four-Part Series, *Primavera Magazine,* http://www.primavera.com/news/primavera_magazine.html#Archives. See also John Howell, III, et al. Implementing Portfolio Management: Integrating Process, People, and Tools, www.portfoliodecisions.com.

—, *Project Portfolio Management Maturity: A Benchmark of Current Business Practices,* Center for Business Practices, 2005.

—, *Project Portfolio Management: A Benchmark of Current Business Practices,* Center for Business Practices, 2003.

Robert G. Cooper, Scott J. Edgett, and Elko J. Kleinschmidt, *Portfolio Management for New Products,* Perseus Books, 1998.

Jim Johnson "Turning Chaos into Success," *Software,* Dec. 1999.

Gerald Kendall, Project Portfolio Management, in *The AMA Handbook of Project Management, Second Edition,* Amacom, 2007.

Jim Pennypacker and Jeannette Cabanis-Brewin, Why Corporate Leaders Should Make PPM a Priority, White paper, Center for Business Practices, 2002.

Frank Toney, *The Superior Project Organization,* Marcel Dekker/Center for Business Practices, 2001.

Gary Tritle. Gary L. Tritle et al., Resolving uncertainty in R&D portfolios, *Research Technology Management,* Nov. 2000.

Chapter Three

—, *Troubled Projects – Project Failure or Project Recovery: A Benchmark of Current Business Practices,* Center for Business Practices, 2006.

J. Kent Crawford, *Project Management Maturity Model, Second Edition,* Auerbach Books/Center for Business Practices, 2006.

—, Managing Successful Programmes, UK Office of Government Commerce, 2004.

Karen R. J. White, et al. Describing PM Maturity, White paper, PM Solutions, 2002.

Chapter Four

Tony Appleby, et al., *Advancing Organizational Project Management Maturity,* Center for Business Practices, 2006.

Dianne Bridges and Kent Crawford, "How to Startup and Rollout a Project Office," *Proceedings of the PMI Annual Seminars and Symposium,* Project Management Institute, 2000.

—, *The State of the PMO 2007: A Benchmark of Current Business Practices,* Center for Business Practices, 2007.

—, *Proceedings of the Project Management Benchmarking Forum: Project Office Best Practices,* Center for Business Practices, 2006.

Dennis Comninos, Anton Verwey, Business focused project management, *Management Services,* January, 2002; see also Robert Graham and Randall Englund, *Creating an Environment for Successful Projects,* Jossey-Bass 1997; and J. M. Nicholas, *Managing Business & Engineering Projects: Concepts and Implementation,* Prentice Hall, 1990.

J. Kent Crawford, *The Strategic Project Office,* Marcel Dekker/Center for Business Practices, 2001.

Soren Dressler, *Strategy, Organization & Performance Management,* Universal Publishers, 2004.

M. Light and T. Berg, "The Project Office: Teams, Processes and Tools," Gartner Strategic Analysis Report, 1 Aug. 2000.

Chapter Five

—, The *Value of Project Management: A Benchmark of Current Business Practices,* Center for Business Practices, 2000.

Paul C. Dinsmore, Flat, Flexible Structures, in Paul C. Dinsmore, ed., *The AMA Handbook of Project Management, Amacom,* 1993.

Schacht, Nicholas "Project Management Culture: An Anthropological Perspective", *PM Network,* September 1997.

Benjamin Schneider, Arthur P. Brief, Richard A. Guzzo, *Creating a Climate and Culture for Sustainable Organizational Change, Organizational Dynamics,* Spring 1996

Cheryl J. Walker, PMP and Jean Erickson Walker, Ed.D. Transitioning Functional Organizations into Project Organizations, *Proceedings of the PMI Annual Seminars and Symposium,* Project Management Institute, 1999.

Chapter Six

—, U.S. Workers Give Performance Management Programs a Failing Grade, Watson Wyatt Survey Finds, PRNewswire, April 19, 2003.

—, *The Value of Project Management Trainin: A Benchmark of Current Business Practices,* Center for Business Practices, 2001.

Jeannette Cabanis-Brewin, What's Wrong with this Team? *Projects@Work,* Oct. 2002.

J. Kent Crawford and Jeannette Cabanis-Brewin, *Optimizing Human Capital with a Strategic Project Office,* Auerbach Books/Center for Business Practices, 2005.

Christopher Sauer, et al., Where Project Managers are Kings, *Project Management Journal,* Dec. 1999.

Frank Toney, *The Superior Project Manager,* Marcel Dekker/ Center for Business Practices, 2001.

—, *The Human Capital Index,* Watson Wyatt, www.watsonwyatt.com.

Chapter Seven

Dianne Bridges, Software to Support the Project Office, *Project Management Best Practices Report,* March 2000.

Jack Steele, Transforming the BSC into a Strategy Execution System, Performance-measurement.net, March 15, 2002.

Chris Vandersluis, Enterprise Project Management: Elements and Deployment Issues in *The AMA Handbook of Project Management,* Amacom, 2006.

Chris Vandersluis, Enterprise Project Management Systems: Design Trends Reflect Reality, *Best Practices Report,* March 2002.

—, *Project Management Software Survey,* Project Management Institute, 1998.

Chapter Eight

Jeannette Cabanis-Brewin, Project Management Metrics—Moving Towards a Balanced Approach: Randall Russell of the Balanced Scorecard Collaborative (interview), *Best Practices Report,* Sept. 2000.

Jac Fitz-enz, *The ROI of Human Capital,* Amacom, 2000.

Thomas P. Lawler, III and Karen Dieterle, Leveraging Project Management for Process Improvement, *Proceedings of the PMI Annual Seminars and Symposium,* Project Management Institute, 1999.

James S. Pennypacker, Top 10 Project Management Benchmarking Measures, internal document of PM Solutions, 2005.

Mel Schnapper, Measure, Manage and Magnify Performance, *Best Practices Report,* Sept. 2000.

Ray W. Stratton, Forecasting Project Performance with Metrics, *ProjectWorld Proceedings,* December 1999.

About the Authors

J. Kent Crawford, PMP, is CEO of PM Solutions and author of *The Strategic Project Office, Project Management Maturity Model,* and co-author of *Optimizing Human Capital with a Strategic Project Office.* He lectures worldwide on project management issues and is a Fellow and former Chair of the Project Management Institute.

James S. Pennypacker is the Director of the Center for Business Practices and editor of *Project Portfolio Management, Project Portfolio Management Maturity Model, Managing Multiple Projects,* and *Justifying the Value of Project Management.* He has conducted numerous research studies on a wide range of project management issues.

Jeannette Cabanis-Brewin is Editor-in-Chief of the Center for Business Practices, the editor of the e-newsletter *Best Practices e-Advisor,* co-author of *Optimizing Human Capital with a Strategic Project Office* and co-editor of the *AMA Handbook of Project Management* and the author of numerous articles covering a wide range of project management issues.

Art Kleiner is Editor-in-Chief of *strategy+business,* a quarterly management magazine published by Booz Allen Hamilton. He is the author of *Who Really Matters* (Doubleday, 2003) and *The Age of Heretics* (Doubleday, 1996) – which will be published in a revised edition by Jossey-Bass in 2008. He was the keynote speaker at the 2006 CBP Summit on Strategy and Projects.

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