# THE COMPLETE Project MANAGEMENT METHODOLOGY AND TOOLKIT

GERARD M. HILL



 The Complete Project Management Methodology and Toolkit

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### GERARD M. HILL



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## Acknowledgments

In my recent publication, *The Complete Project Management Office Handbook, Second Edition* (Auerbach Publications, 2007), I indicated the importance of methodology management as a key function of the project management office (PMO) at any stage in its development. As well, in my recent conference keynote addresses, webinar presentations, and even consulting engagements, I have prompted audiences to consider project management methodology development and deployment within the organization as possibly the most important and primary responsibility of both new and existing PMOs. In such venues, I have responded to inquiries about the "who, how, when, and where" of project management methodology development and deployment. These inquiries caused me to think more and more about the need for methodology implementation within the organization.

Therefore, it is the various professionals I have encountered in the field of project management who have influenced me to prepare the project management methodology guidance and toolkit contained in this publication. The need for such methodology guidance also appeared supported by a number of recent studies that I reviewed in which the use of an established organizational project management methodology process was presented as a recommended means to achieve not only project success but also business success. I believe most practitioners would agree that an effective methodology solution also contributes significantly to increased organizational maturity in project management.

It is with those thoughts that I am extremely pleased to present this published version of the ProjectPRISM<sup>™</sup> Project Management Methodology that was created a few years ago based on my 15-plus years of methodology development experience with internationally recognized clients. It has been revised and refined to present a methodology solution that can be used by most individuals and virtually all organizations.

Finally, and once again, my third publication was made possible by the love, encouragement, and support of my wife, Rita, who continues to shine a persistent light on the paths I take to pursue my life's work and my professional interests.

Gerard M. Hill

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### Introduction

#### PROJECT MANAGEMENT METHODOLOGY INTRODUCTION

Project management has been emerging as a professional discipline for some time now, and it is coming into the mainstream just when it appears to be most needed as a business solution. The author has been noted for saying in published works and presentations that "project management, in so many ways, is business management." To that end, it is appropriate that the processes of project management be aligned with business needs and interests. It is likewise important for business processes to be aligned with needs and interests in the project management environment. The introduction of an effective project management methodology within the organization will help to achieve that prescribed alignment.

The basis or foundation for project and business management alignment already exists in many organizations today, but too often resides in a latent state that is still awaiting management acknowledgment and active collaborative use. That foundation exists in organizational processes that are common to both project and business management, but which are sometimes still applied as separate and uncoordinated sets of activities. That foundation is also seen in organizations where standard and repeatable processes are established to compile or aggregate results at the project, program, and portfolio management levels as a means to provide relevant and timely information to strategic managers and business decision makers in the organization.

Basic business processes are often performed, knowingly or unknowingly, at the project level when project management practices are applied to achieve business results for each project. Organizations need to recognize the business contributions of project management, and ensure that they achieve the maximum business value and return on the project management investment. An effective project management process, introduced through methodology implementation across the organization, is an essential component for achieving the desired project and business management alignment.

#### Evolution from a Technical Background

In earlier years, an organization's technical methodologies were expected to fulfill project management process needs. They often fell short of applying what we know today as "professional project management" concepts and practices. This is because the technical methodologies that were used to achieve desired levels of excellence in technical products and services still had a technical focus and did not particularly address all of the essential activities of project management.

Some technical methodologies were subsequently "enhanced and improved" to serve broader project management interests by introducing key concepts and practices of modern project management. However, while such methodology adaptations gave the technical manager expanded insight into project management, the basic processes—the critical processes of the methodology—were still technical in nature. Still, some of the adaptations did serve to demonstrate a relationship between technical management and project management.

Many of today's technical methodologies have considerably improved project management content over earlier adaptations. However, to a large extent, they are still intended for primary use by technical managers rather than by project managers. They simply lack essential pieces and parts of a rigorous project management process.

It is important to note that there is and will continue to be an ongoing need for technical methodologies—each as a guide toward excellence in the technical effort for which it was created. But a distinction is still warranted. A good technical process will ensure product and service design, development, and delivery excellence. In contrast, a good project management process will ensure project success and, by extension, business success.

Over time, it has often been shown by many practitioners that project management fits well into the scheme of most technical methodologies and can be supportive of technical activities and objectives. Today, public and private sector organizations alike are coming to realize the benefits of having one standard and repeatable project management process that can be used across the enterprise. That implies use of the same, common project management practices across the different technical functions and business units in the organization. Implementing a project management methodology that provides a standard and consistent approach to project management across the enterprise should also inherently contribute to technical achievements.

Therefore, today's consideration of an enterprise-wide project management methodology reverses the earlier scheme of the technical methodology. Now, instead of integrating key project management activities into the preferred technical process, the enterprise approach examines the ways in which the various technical methodologies (used in the different organizational business units) can be integrated and aligned with the project management methodology that is prescribed for use across the enterprise. Thereby, each business unit that conducts projects will integrate its own technical activities and intricacies at relevant points in the prescribed project management process. (See how this integration works in a diagram presented in the *Methodology Practice Guide* Introduction section.)

Today, it is also being shown that project management processes can be viewed as an extension of business processes. This project and business management relationship is not usually addressed by technical processes. However, it is consistent with the concepts of modern project management, and it is usually endorsed in the specification of responsibilities of the professional project manager. This consideration prompts the need for the organization to implement a project management process that recognizes and responds to business needs and interests across the enterprise.

#### The ProjectPRISM<sup>™</sup> Project Management Methodology

The *ProjectPRISM Project Management Methodology* is an innovative, matrix-based approach to conducting project management that introduces relevant concepts, practices, and tools in a project management solution that has a distinct purpose toward fulfillment of organizational business needs and interests. It was originally conceived and created by the author a few years ago, and has since been reviewed and revised several times to achieve consistency of content. A subsequent detailed review of concepts and content was performed, and refinements were made for purposes of this publication.

A detailed description of the *ProjectPRISM Project Management Methodology*, along with its structure and components, is presented in the *Methodology Process Guide* Introduction section, as contained in Section I of this publication. This methodology is particularly intended for broad implementation within an organizational or enterprise setting. It can be examined and will serve as an exceptional basis for customization. But for organizations with limited time for methodology development and implementation, it also provides a ready-to-use project management solution. Its prescribed processes, practices, and tools will ensure that essential project management activities are being conducted consistent with widely accepted project management standards.

As well, individuals will gain benefits from using this methodology when they follow prescribed guidance to ensure that all essential project management activities are being accomplished on every project. For some users, the process and practice guidance contained in this publication may help expand individual skill and knowledge in applying concepts of project management. At a minimum, individual users will have a comprehensive reference document for conducting project management activities.

#### Implementation as a Business Solution

The concepts, practices, and tools of the *ProjectPRISM Project Management Methodology* provide a combined project and business management solution that will be valuable for most project managers and their organizations. It is a "business-ready" methodology that can be introduced across many different industries and business environments, and it provides relevant guidance for use by both novice and seasoned project managers.

That broad description means the *ProjectPRISM Project Management Methodology* is ready for use "off-the-shelf" or "out-of-the-book," as you care to reflect on it. It means that it is aligned with common business practices that already exist within many organizations. And, it means that it includes comprehensive guidance for completing all the essential activities of project management.

That broad description also means that it is not finetuned for any particular technical endeavor, business organization, or industry. It does not address either unique technical or business requirements within the organization, or any unique personal expectations of senior and executive managers. However, it does provide an exceptional basis for creating a fine-tuned project management practice and business solution in the organization.

Therefore, each user and using organization should examine the methodology concepts and content for customization to achieve greater consistency with organizational needs and interests. The individual user or small business organization may not require any methodology customization. However, medium- to larger-sized organizations will likely want to consider some customization to make the methodology more consistent (and complementary) to existing business practices. Customization considered, the ultimate potential for finding success in the methodology as a project management solution lies in and is directly associated with its implementation. Such implementation, when properly performed, represents a significant change that must be managed within the organization. Please be sure to take a look at the next section, *Project Management Methodology Implementation*, for some additional insight into recommended methodology implementation activities. You may find it necessary to consider using professionals who are experienced in project management methodology deployment to assist in your methodology development, customization, and implementation efforts. It will save you time, and it will undoubtedly be cost effective for your organization.

#### PROJECT MANAGEMENT METHODOLOGY IMPLEMENTATION

Methodology implementation is the means by which a project management process is presented for use with other business processes in the organization. The individual who selects a methodology for personal use will normally already have some level of interest and intent to learn the content and proper use of the methodology process. However, these conditions may not necessarily be present for all potential methodology users across the entire organization. Therefore, organizations will need to consider planning and conducting a series of activities to implement the methodology to achieve maximum benefit from its use.

#### Benefits of Methodology Implementation

It is recommended that a structured and planned approach be used when implementing a project management methodology. When the methodology is properly implemented as an organization-wide solution, there is potential to achieve several if not most of the following benefits:

- A standard approach to the practice of project management

   Consistent use of repeatable processes and documentation
  - Reduced need to "reinvent" project management tools and techniques
  - Access to shared project management history, experience, and best practices
  - Greater assurance that critical project management activities are accomplished
  - A common frame of reference for project team members and stakeholders
  - A common understanding of project responsibilities in the organization

- An effective business communication and reporting mechanism
  - Use of standard project management terminology in the organization
  - Consistent information and data processing across all projects and programs
  - Ability to roll-up (aggregate) project reports and information to the executive level
  - More effective project team interactions and customer relationships
- A state-of-the-art project management practice
  - Increased customer satisfaction
  - Conformance to customer requirements and project objectives
  - Ability to achieve planned project schedules
  - Effective project cost control
  - Shortened development and implementation cycles
  - More predictable project (and business) performance
  - Increased profitability and reduced project costs
  - Improved resource planning, allocation, and management
  - Use of tools that provide a competitive business edge
- Enhanced business benefits
  - Quicker realization of profit or payback on investment
  - Earlier availability of products to market (or for internal use)
  - Clearer business case evaluation and ongoing business case validation
  - More effective, more knowledgeable business decisions

The potential for achieving these benefits can be realized when methodology implementation is properly planned and conducted in the organization.

#### Methodology Implementation Activities

An organizational methodology package could be used erratically or even remain dormant until the prominent stakeholders in the organization in general and the end users in particular (1) understand how to use it, (2) recognize benefits from using it, and (3) develop motivation, through personal interest or organizational mandate, to actually use it.

Methodology implementation issues can affect the entire organization, even business areas not traditionally viewed as having involvement in or responsibility for project management. Therefore, the complexity of methodology implementation is often increased when it is conducted on a national or global basis, or when multiple organizations, each with its own basis for implementation, are involved. The following list provides a broad outline of several areas of activity that should be considered to ensure an adequate and proper project management methodology implementation effort. Many of these activities represent early planning that is important for achieving successful methodology deployment in the organization.

#### Plan Methodology Implementation

- Establish executive management support. Identify (or assign) an executive sponsor at the highest reasonable level in the organization that will use the methodology; ideally this is the CEO for an enterprise-wide implementation. Conduct collaboration across senior management to achieve senior-level buy-in and to create personal understanding and support for the initiative at the highest levels in the organization. Plan and conduct executive-level announcements about the importance of the methodology deployment initiative, the progress being made toward implementation, and any anticipated mandate or requirements for methodology use within the organization.
- Form the methodology implementation team. Identify members of the team who will have responsibility for planning and conducting the methodology customization and implementation effort, usually from among senior managers and project managers already involved in project oversight. Ensure representation from all affected business areas. Identify any external resources (i.e., experienced project management methodology consultants) needed to guide or otherwise assist the implementation team in areas of implementation planning, customization, rollout, training, mentoring, etc. In some organizations, this responsibility will be assigned to the project management office (PMO) for staffing and fulfillment purposes; in others, the methodology implementation team represents the initial structure of a PMO-like business unit. In all cases, ensure selected team members are inherently available and allotted sufficient time to participate in the various activities of the methodology deployment initiative.
- Specify methodology implementation scope. Determine the extent to which the project management methodology will be needed and deployed within the organization to include the identification of business units as well as local, regional, national, and international rollout locations. Specify collaboration requirements for locations involved in the methodology deployment initiative. This may include the preliminary identification of business units or locations that can be used for any "pilot implementation" activities, with resulting details incorporated into the methodology implementation plan.

- Determine methodology utilization policies. In collaboration with the executive sponsor, and any other involved senior managers, begin developing the policies for methodology distribution and use. Specify who will use it (e.g., project managers, team members) and the extent to which it must be applied to project work: always, sometimes, occasionally, or at the discretion of the project manager. It is recommended that the methodology utilization policies mandate methodology use on every project conducted within the relevant organization or business unit conducting the implementation. Options for the depth of methodology process use can be developed for different types of projects found within the organization (i.e., project classification), and other variations from routine use can be incorporated during methodology customization.
- Develop methodology promotions for user awareness and acceptance. Plan, prepare, and issue announcements, newsletters, or other media to inform individuals within the organization of the new methodology implementation initiative. In particular, inform potential users of the methodology about progress, actions, and timelines that will directly affect them. When possible, use senior management and executive-level announcements to demonstrate support for the initiative, and to convey the importance of methodology implementation and use for the organization.
- Develop a methodology training plan. Determine the roles and positions within the organization that will represent the end users of the methodology, and thereby identify associated individuals who will require some level of methodology training. Normally, a complete methodology training program is needed for all project managers (including managers of project managers and program managers). Many organizations will also include and schedule project team members for the complete methodology training program. Such a program can usually be completed in two to three days, depending on the depth of coverage desired by the organization. Executives and senior managers, along with peripheral project stakeholders and parttime members of project teams, can be introduced to the project management methodology using a shorter methodology familiarization program—usually onehalf to one day in duration. This planning might also warrant an examination of additional project management training needed for individuals within the project management environment, and extended training can be specified in this plan as well.
- Plan user support during methodology implementation. Consider the support activities that will be needed by methodology users during the methodology implementation period, and plan and assign resources to satisfy

those needs. Prominent among the support activities to consider is the need for project management mentors-experienced individuals who are qualified to answer user questions about project management concepts and methodology use, and who are available on site to respond to user problems and dilemmas during the implementation period. An alternative activity might include creating a "help center" that new users can contact when they have questions about project management or methodology use. Additionally, user support should include a methodology user feedback mechanism, whereby users can identify problems and issues that can be examined and resolved in advance of methodology implementation at subsequent locations. Another user support mechanism to consider is the formation of a methodology user group that can facilitate information sharing and problem resolution among key participants in the methodology implementation initiative.

Prepare the project management methodology implementation plan. Prepare a plan that will be approved, distributed, and used to guide project management methodology implementation. This plan should present a timeline of activities to be pursued that includes incorporating most of the previous and subsequent items in this list. Like any project plan, this implementation plan becomes a central document for the methodology deployment initiative. This plan should also identify plans for collaborating activities of the methodology initiative with customers and vendors, as needed.

#### Customize the Project Management Methodology

Any methodology customization to be accomplished can be planned and begun in conjunction with methodology implementation planning—after the requisite executive or senior management support and endorsement have been obtained. Methodology customization can be used to adapt the foundation methodology processes for better alignment with current project management practices. It can also serve to integrate important existing technical and business processes of the organization.

Methodology customization usually entails a review of the foundation methodology within the organization, usually by members of the methodology implementation team (which may be called the methodology development team at this point in time). The next step involves one or more meetings to resolve differences of opinion and to specify how the content of the foundation methodology should be modified. This second step will often include facilitation by the methodology developer or a consultant experienced in methodology design, who can lead the development team in their design and modification deliberations. The final step is that of preparing the new methodology content that will be ultimately distributed and used within the organization.

Sometimes the customization effort includes identifying the use of an automated platform on which the project management methodology will reside and provide electronic access to users. This sometimes involves an examination of current automated systems to determine how the methodology can be incorporated or otherwise linked electronically. Otherwise, it may involve the review and selection of a new system in the marketplace that is compatible with the methodology and with anticipated use in the organization.

A final note regarding customization is one that prompts methodology implementation managers to recognize that actual transition to use of the new methodology cannot and should not occur until an approved project management methodology is (1) fully developed and finalized, (2) published (or otherwise accessible online), and (3) ready for use by project managers, project team members, and other designated stakeholders in the project management environment.

#### Plan Project Transition

The project transition plan is often considered a component of the methodology implementation plan, but it is separated here for purposes of discussing recommended transition plan content. Smaller organizations or those having fewer projects will usually be able to plan for project transition in a simplified manner—what is the project, when will it transition, and how will it transition to the new methodology (i.e., at what methodology point will it start). This same basic information is also used by larger organizations and those with a high volume of projects. However, the increased number of projects offers a plan with more complexity, and this complexity is increased further when there are multiple business units and implementation locations involved. It can be seen that transition plan preparation time will normally be longer for organizations with more complex conditions.

In general, the following elements are recommended for inclusion in the project transition plan.

Prepare the project transition strategy. Specify the approach that will be taken for project transition. Identify broad criteria that will help determine how projects will be transitioned: (1) a new (or recently started) project that will commence using the new methodology at the beginning of the methodology, (2) a project in progress that will transition to some point in the new methodology, or (3) a project near completion that will not transition to the new methodology. The transition strategy may also account for

when project transition will take place, which is particularly important for the methodology implementation that will take place across multiple regional, national, or international locations. Finally, the strategy could include conducting one or more pilot transition and implementation programs as a means to learn and improve upon plans for subsequent project transition and implementation activities.

- Survey and review project status. Identify and examine each and every project currently under way within the organization, and then add to the list those projects that are expected to start during the methodology implementation period. Review project status and progression, and make a preliminary determination about the transition strategy (criteria) that will be applied for each project.
- *Conduct project transition interviews.* In personal meetings with each affected project manager, review the planned transition strategy and transition schedule for his or her project. Consider that some projects will have unique conditions to be managed in association with methodology implementation, and be prepared to make adjustments to the transition plan in collaboration with each project manager. Complete individual project manager meetings by establishing mutual agreement regarding the project transition strategy and schedule.
- Prepare the project transition plan. Compile the results from all transition planning meetings and prepare the final project transition plan. Include the overall transition schedule, which should be consistent with other implementation activities such as user training and planned user support. The transition plan can be incorporated into the broader methodology implementation plan or used as a stand-alone document.

#### Conduct Methodology Implementation

Methodology implementation actually begins in advance of user training and methodology deployment, such as when preliminary executive and senior management support is pursued and established, and such activities can be included in the overall implementation plan. Nevertheless, there are several key activities to monitor and manage during methodology implementation, as highlighted in the following list:

- Execute the methodology implementation plan.
- Conduct methodology user training.
- Provide for methodology document distribution to users (or online access).
- Execute the project transition plan.
- Conduct user support and mentoring in association with methodology deployment.

Methodology implementation is the beginning of an investment for the organization. To gain the maximum return on that investment, the organization should ensure that all essential implementation activities are conducted in a timely manner. A decision to implement an organizationwide project management methodology may warrant consideration of an external consulting resource who can apply expert knowledge and experience to help guide the organization toward a successful project management methodology implementation effort. The support of a qualified project management consultant or consulting team can often reduce implementation time by months or, in some circumstances, by a year or more.

#### PROJECT MANAGEMENT METHODOLOGY MAINTENANCE

After the project management methodology is deployed in the workplace, a reasonable effort is needed to oversee its use and maintain its viability. The implementing organization's PMO, the methodology implementation team, and potentially an expert external consultant or consultant team can be used to perform several important methodology maintenance activities at appropriate intervals in time.

The following are highlights of three prescribed methodology maintenance activities.

#### Evaluate Methodology Deployment

Beginning with the initial or "pilot" methodology implementation, and continuing through any subsequent implementation periods, the organization should examine how well the introduction of new project management processes and practices is being accomplished and received by methodology users. This usually includes looking at

- Completion or progress of the methodology training schedule
- Completion or progress of methodology implementation activities
- Completion or progress of project transitions
- Achievement of initial methodology performance capability
- User acceptance of the new methodology
- Stakeholder acceptance of the new methodology
- Management support factors
- Implementation feedback results and trends

If there are multiple deployment actions such as a pilot implementation followed by successive location deployments, interim results from the initial evaluation can be examined to help improve successive methodology deployment activities.

#### Analyze Methodology Performance

Examine methodology performance to ascertain methodology utilization levels, methodology effectiveness, and the achievement of benefits from methodology implementation. The analysis can include an examination of the following indicators:

- Number of users—full or partial methodology use
- Type of users—project managers, team members, business managers, etc.
- Extent of nonuse—reasons for nonuse
- Project planning improvements—project work plan, management plans, support plans
- Project tracking and controlling improvements—variation identification and analysis
- Project performance results—cost, schedule, and resource utilization
- Project success factors—customer satisfaction, deliverable quality and acceptance, etc.

The implemented methodology should be reviewed for these elements on an annual or sometimes an 18-month basis. To that end, evaluators should analyze current conditions, performance results, and issues associated with indicators in the above list. Corrective actions should be taken to rectify weak analysis indicators. This recurring examination is normally the responsibility of the PMO or the methodology implementation team.

#### Manage Methodology Improvements

Simply stated, the originally implemented methodology will undoubtedly need some adjustment, correction, or other improvement action over the course of time. Processes can be adapted, or new processes can be added or changed for better integration with business operations. New tools, including project management software tools, can be introduced to support methodology use. In general, the methodology is updated to reflect the current organizational needs and the "best practices" available for conducting project management.

As well, the initial methodology implementation may have been simply a set of fundamental processes, and with time the initial methodology has been expanded to contain a full life-cycle solution for project management. This will require attention to ensure that all approved changes are being properly implemented within the prescribed user group.

Likewise, new project managers, project team members, and other project stakeholders may be introduced into the project management environment, and they will require methodology training or familiarization as a part of the continuous improvement effort within the organization.

### **Methodology Process Guide**

#### INTRODUCTION—PROJECT MANAGEMENT PROCESS OVERVIEW

The *Process Guide* describes the essential activities of project management that should be performed for each project undertaken in an organization. It addresses four project management phases—Profile, Plan, Perform, and Post—and matches these phases against the following six project management performance areas: customer, project, staff, vendor, business, and management. Through this matrix approach, the essential activities of project management are accounted for, and each can be scaled to meet the needs of size and scope for the various types of projects encountered.

The phases and performance areas of this methodology are depicted in the **process matrix** shown in Figure I.1, with the phases described in the next section. The *process elements* shown with their *process steps* in this matrix are described in subsequent sections of this process guide.

The flow or sequence of process element performance is generally numerical, where process element 1.1 is followed by process element 1.2, and so on. To a large extent, multiple process steps will be performed concurrently. Also, the methodology uses a design feature whereby each process step offers single-location point-of-data collection ("repository") for relevant information related to that project process step. Therefore, when considering process flow or sequence, users will necessarily return to or go forward to use or update process elements in the matrix. Therefore, it is suggested that this process matrix be used as the basis for guiding and reviewing the project management effort.

The **process flowchart** can be referenced (Figure I.2) and may be helpful in showing the general sequence and flow across process elements at the process-step level. The depicted process flow is very generic and can be adapted by users for application in their organization.

#### THE FOUR PHASES OF THE PROJECT MANAGEMENT METHODOLOGY

The *ProjectPRISM*<sup>®</sup> *Project Management Methodology* defines four phases of interrelated project management activities. This guidance is often distinct from any technical methodology that may also be used. Such a technical methodology, which sometimes can have five, six, seven, or more phases, can be embedded into the project management methodology phases to present a seamless interface. To a large extent, technical work will be associated in the *plan* and *perform* phases of this process guide. However, technical methodology alignment can be achieved throughout the project management life cycle.

The technical methodology will help ensure a quality technical product, including product design, development, implementation, and testing. The project management methodology will help ensure a successful project in terms of managing and fulfilling cost, schedule and resource utilization objectives, project deliverables, and relevant business interests. The following sections describe the nature and purpose of the four phases of this methodology.

#### **Profile Phase**

The Profile Phase encompasses the processes needed to translate an external or internal customer opportunity into a valid project effort. It specifies the relevant aspects of the project in terms of "profiles" for each of the six performance areas. The Profile Phase compiles the basis or reason for conducting the project, and several profiles should be examined at intervals during the project to ensure that the basis is still accurate and applicable—from the customer's perspective and from an internal business perspective.

The Profile Phase is designed to identify the opportunity and the customer. It will focus on selecting the project as a bona fide work effort within the organization, accomplished through detailed information collection, reviews,

4    = -	1-PROFILE 1.1-CUSTOMER PROFILE	2-PLAN 2.1-CUSTOMER PLAN	3-PERFORM 3.1-CUSTOMER PERFORMANCE	4-POST 4.1-CUSTOMER POSTING
Customer Directory Customer Business Customer Opportunity Customer Record		<ul> <li>Customer Requirements</li> <li>Customer Technical Solution</li> <li>Customer Change Control Plan</li> <li>Customer Quality Management Plan</li> </ul>	<ul> <li>Customer Meeting</li> <li>Customer Status Report</li> <li>Customer Change Management</li> <li>Customer Acceptance Management</li> </ul>	<ul> <li>Customer Lessons Learned</li> <li>Customer Evaluation</li> <li>Customer Satisfaction Survey</li> <li>Customer Transition &amp; Closeout</li> </ul>
<ul> <li>1.2-PROJECT PROFILE</li> <li>Project Definition</li> <li>Project Estimates</li> <li>Project Classification</li> <li>Project Record</li> </ul>		<ul> <li>2.2-PROJECT PLAN</li> <li>Project Work Plan</li> <li>Project Risk Management Plan</li> <li>Project Communication Plan</li> <li>Project Support Plans</li> </ul>	<ul> <li>3.2-PROJECT PERFORMANCE</li> <li>Project Tracking &amp; Control Report</li> <li>Project Risk Management</li> <li>Project Communication Management</li> <li>Project Plan Management</li> </ul>	<ul> <li>4.2-PROJECT POSTING</li> <li>Project Lessons Learned</li> <li>Project Performance Evaluation</li> <li>Project Administration Closeout</li> <li>Project Plan Closeout</li> </ul>
		<ul> <li>2.3-STAFF PLAN</li> <li>Staff Requirements</li> <li>Staff Management Plan</li> <li>Staff Acquisition (Request)</li> <li>Staff Assignments</li> </ul>	<ul> <li>3:3-STAFF PERFORMANCE</li> <li>Staff Meeting</li> <li>Staff Status Report</li> <li>Staff Performance Review</li> <li>Staff Management Report</li> </ul>	<ul> <li>4.3–STAFF POSTING</li> <li>Staff Lessons Learned</li> <li>Staff Performance Evaluation</li> <li>Staff Performance Recognition</li> <li>Staff Reassignment &amp; Closeout</li> </ul>
<ul> <li>1.4-VENDOR PROFILE</li> <li>Vendor Directory</li> <li>Vendor Business</li> <li>Vendor Qualification</li> <li>Vendor Record</li> </ul>		<ul> <li>2.4-VENDOR PLAN</li> <li>Vendor Solicitation</li> <li>Vendor Management Plan</li> <li>Vendor Proposal Evaluation</li> <li>Vendor Contract</li> </ul>	<ul> <li>3.4-VENDOR PERFORMANCE</li> <li>Vendor Meeting</li> <li>Vendor Status Report</li> <li>Vendor Performance Review</li> <li>Vendor Contract Administration</li> </ul>	<ul> <li>4.4-VENDOR POSTING</li> <li>4.4-VENDOR POSTING</li> <li>Vendor Lessons Learned</li> <li>Vendor Performance Evaluation</li> <li>Vendor Invoice Management</li> <li>Vendor Contract Closeout</li> </ul>
<ul> <li>1.5-BUSINESS PROFILE</li> <li>Business Case</li> <li>Business Risk Examination</li> <li>Business Financial Analysis</li> <li>Business Recommendation</li> </ul>		<ul> <li>2.5-BUSINESS PLAN</li> <li>Business Requirements</li> <li>Business Proposal</li> <li>Business Contract</li> </ul>	<ul> <li>3.5-BUSINESS PERFORMANCE</li> <li>Business Meeting</li> <li>Business Status Report</li> <li>Business Performance Review</li> <li>Business Contract Administration</li> </ul>	<ul> <li>4.5-BUSINESS POSTING</li> <li>Business Lessons Learned</li> <li>Business Performance Evaluation</li> <li>Business Invoice Management</li> <li>Business Contract Closeout</li> </ul>
<ul> <li>1.6-MANAGEMENT PROFILE</li> <li>Management Directory</li> <li>Management Portfolio</li> <li>Management Charter</li> <li>Management Record</li> </ul>		<ul> <li>2.6-MANAGEMENT PLAN</li> <li>Management Oversight Plan</li> <li>Management Audit &amp; Review Plan</li> <li>Management Facility Plan</li> <li>Management Supply &amp; Equipment Plan</li> </ul>	<ul> <li>3.6-MANAGEMENT PERFORMANCE</li> <li>Management Meeting</li> <li>Management Status Report</li> <li>Management Performance Review</li> <li>Management Audit &amp; Review Report</li> </ul>	<ul> <li>4.6-MANAGEMENT POSTING</li> <li>Management Lessons Learned</li> <li>Management Evaluation</li> <li>Management Satisfaction Survey</li> <li>Management Closeout</li> </ul>

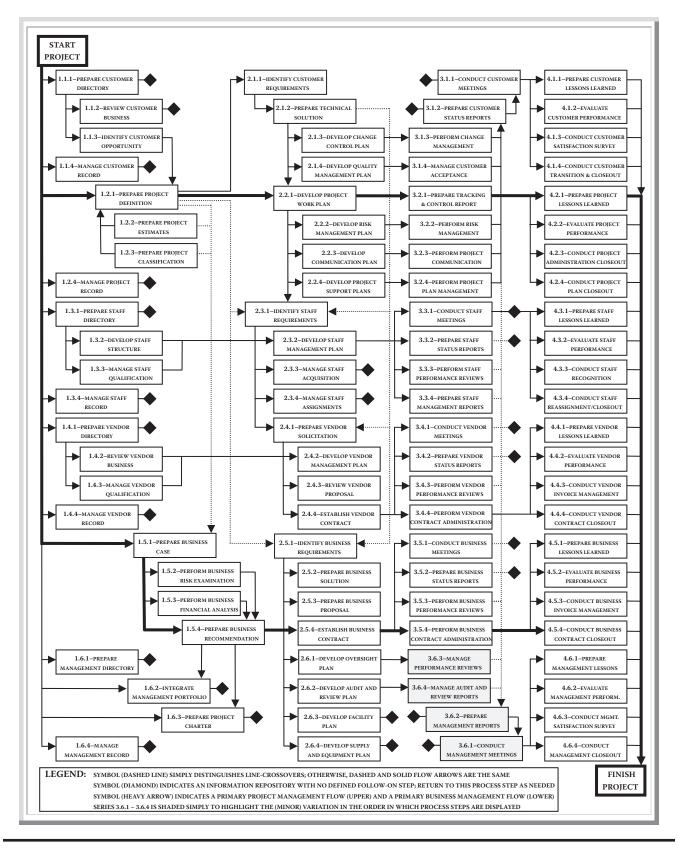


Figure I.2 ProjectPRISM<sup>™</sup> Methodology Process Flowchart.

and analyses, including financial analyses. Project selection is a business commitment that reflects a more or less formal confirmation that the project will fulfill internal business needs, interests, and objectives; a sufficient number of qualified resources are available to staff the work effort; adequate and necessary project funding is available and will be applied as needed to the work effort; and the customer, internal or external, is similarly committed to a successful project outcome.

If projects are a means of revenue from external customers, the Profile Phase will facilitate the transition from business development (sales) to project management. It ensures that everything the business manager knows is conveyed to the project manager. In turn, the project manager will review information from a variety of sources on a recurring basis and expand or modify several profiles over the course of the project. When the opportunity is identified as internal, it will also help to initiate early interactions with the internal customer.

The Profile Phase of project management is used to define the project, that is, what the work effort or initiative to be undertaken is all about. It captures preliminary thoughts on project scope and project objectives, and allows for a preliminary high-level estimate of project cost, schedule, and resource utilization to be performed. It identifies the key players and stakeholders of the project, and provides for information collection across the several profiles that can be used to facilitate management of stakeholder requirements, interests, and participation in the project.

The Profile Phase prompts users to establish directories customer, staff, vendors, and management—to enable identification and contact with key project participants, and to track and oversee relevant project stakeholder participation, as needed.

If the project management in your organization has executive and senior management-level interest, this phase will help integrate management participation for fulfillment of project management oversight responsibilities, including portfolio management. To that end, it identifies and assigns a project executive/sponsor or an executive control board that has the responsibility of fulfilling the project objectives—and, in turn, they will prepare the project management charter for use by the project manager and project team members.

#### Plan Phase

The Plan Phase encompasses the processes needed to establish requirements for customer, staff, business, and management. It also develops the required project management plans that all together comprise the *Project Plan*. This means that a *Project Plan* is not necessarily one single document, but rather a collection of several plan documents or components.

Organizations will normally specify the minimum content required for their *Project Plan*. This guide prescribes several project management plans as essential to every project.

First, many practitioners would likely agree that the Project Work Plan is the most critical of plans that are developed to support the project management effort. The Project Work Plan represents the preparation of the project work breakdown structure (WBS), and the incorporation of cost, schedule, and resource utilization estimates at the work package level.

There are six primary project management plans also prescribed as essential documents for project management, including

- Customer—Change Control Plan
- Customer—Quality Management Plan
- Project—Risk Management Plan
- Project—Communications Plan
- Staff—Management Plan
- Vendor—Management Plan

The selection and use of these plans can be determined by the project manager upon entry into the Plan Phase. While these plans are considered essential, there will be some projects (usually those smaller in scope and lower in overall value) that inherently do not require the full set of six plans. Conversely, larger projects (usually those of significant business interest and value) may require an expansion of prescribed plan content as well as the preparation of additional project management support plans.

There is a large number of optional project management support plans that can be developed to support the project management, business management, and technical management needs of the project. A partial list of support plans is presented for user consideration in the *Practice Guide*. The organization can examine this list to determine and specify if any support plan should routinely be prepared for every project conducted within the organization.

The Plan Phase is designed to guide users through the process of developing the planning documents needed for the project. It contains guidance that will assist users in the information and content collection process for each of the prescribed project plans, and it inherently provides for the reuse of standard content for recurring plan development. It also is a guide that enables users to construct and compile documents related to proposal submittals and contract acquisitions. When needed for projects that have outsourcing needs, the Plan Phase also includes process steps to plan and conduct the vendor acquisition process.

The Plan Phase begins by prompting users to thoroughly review customer requirements to ensure that they have a complete understanding of technical needs and a solid basis for creating the required project management plans. This leads to creating the Technical Solution, a process whereby users identify the technical approach and specify project milestones and deliverables.

Similarly, the Plan Phase also prompts users to review business requirements. It then helps users to create the Business Solution, including an examination of business issues and the development of solicitation fulfillment, customer pricing, and contracting strategies.

The Technical Solution and the Business Solution are then integrated for presentation to the customer in a consolidated proposal document. Users will be able to monitor and manage proposal preparation and submittal in the Plan Phase.

In specific process elements, users will be guided to establish staffing requirements in a resource requirements matrix and identify project documentation and reporting requirements for project and portfolio reviews and other oversight activities during the project. A highlight of the Plan Phase is the inclusion of a series of relevant project management logs. The Plan Phase elements provide users with the ability to track and manage project information resulting from project plan implementation, including the following 17 logs:

- Customer Requirements—Documentation Management Log
- Customer Technical Solution—Deliverables Log
- Customer Technical Solution—Milestones Log
- Customer Change Control Plan—Change Request and Approval Log
- Customer Quality Management Plan—Quality Testing and Acceptance Log
- Customer Quality Management Plan—Quality Technical Reviews Log
- Project Risk Management Plan—Risk Management Log
- Staff Management—Training and Development Activity Log
- Staff Assignments—Individual Assignment and Activity Tracking Log
- Vendor Management Plan—Training and Development Activity Log
- Vendor Contract—Modification Log
- Business Contract—Modification Log
- Business Contract—Contract and Negotiation Activity Log
- Management Oversight Plan—Oversight Activity Log
- Management Audit and Review Plan—Audit and Review Log
- Management Facility Plan—Facility Management Activity Log
- Management Supply and Equipment Plan—Supply and Equipment Log

To a limited extent, these logs can be used independently or in a manner that applies an abbreviated process to manage the project.

#### **Perform Phase**

The Perform Phase encompasses the processes needed to conduct the ongoing project execution effort and associated project management activities to oversee project progress, performance, and fulfillment. It enables the project manager to attend to the variety of actions and activities that are happening concurrently within the project, and to identify and respond to any issues and problems that may surface. In addition, it provides for general and specific communication among the key participants and stakeholders of the project.

The Perform Phase prompts and helps arrange the conduct of meetings and the preparation and distribution of reports that inherently facilitate necessary communication and collaboration on the project. Meetings and reports relevant to all key project participants are addressed, including

- Customer meetings and status reports
- Project tracking and control reports
- Staff meetings and status reports
- Vendor meetings and status reports
- Business meetings and status reports
- Management meetings and reports

The Perform Phase is highlighted by activities that will help manage project performance, and it prescribes relevant activities for project tracking and controlling. It facilitates the collection of information and project data that can be contrasted and compared to the established project plans to ascertain project earned value and variance. In turn, it will help document and manage project control actions that are applied to correct a veering project and get it back on track toward success. This includes activities to identify and respond to issues and problems across the project, as well as to influence or otherwise request customer and management attention to such matters.

The Perform Phase is designed to help the project manager oversee work performance, and provides the ability to monitor and document staff and vendor performance. It provides for reporting of work progress and assessment of associated project status and progress. As may be needed or required, it provides for the conduct of project, project management audits, and technical reviews, and oversees the achievement of prescribed project deliverables.

An important focus of the Perform Phase is in its facilitation of contract administration activities for the customer contract and any vendor contracts. This ensures proper management of billing and invoicing, oversight of the fulfillment of contractual obligations, and contributions to the oversight of other business aspects of the project.

#### Post Phase

The Post Phase presents the processes needed to close out the project and all associated business, technical, and project management activities. It includes obtaining project stakeholder acknowledgment and acceptance of project closure.

The Post Phase attends to the closeout of customer activities and associated discontinuation of further project-based affiliation with the customer. Although normally achieved in the Perform Phase, closeout activities will monitor completion of customer project deliverables acceptance actions. They will also prompt a postproject examination of customer participation, including an associated evaluation of customer satisfaction.

The Post Phase has a major focus on the collection and documentation of lessons learned as a means to improve and enhance future project and project management performance. Lessons learned are prescribed in all six methodology performance areas—customer, project, staff, vendor, business, and management. This phase provides the guidance for conducting and documenting project lessons learned from all relevant sources.

The Post Phase further prescribes steps for the evaluation of performance across most project stakeholders, particularly the evaluation of staff and vendor performance. It likewise provides capability for evaluation of PMO management, project manager, and customer performance.

The Post Phase also ensures closeout of contractual obligations and contract documents. This includes steps to monitor final invoice payments (incoming and outgoing) as important criteria for project closure.

#### PROCESS ROLES AND RESPONSIBILITIES

The *Process Guide* identifies individuals having roles and responsibilities within the various process steps. The following list provides a general description of those individuals and their associated roles and responsibilities. Position titles (roles) and responsibilities will vary from organization to organization and across industries. *Process Guide* users should examine these descriptions against existing titles and terminology in order to align and assign individual methodology responsibility in the organization.

The primary roles used in this process guide are presented in the following list.

Business Development Manager—This individual has the responsibility for acquiring new business, maintaining revenue from current business, and often managing customer relationships. In many organizations, this role is represented by the sales staff; in others, it may be handled by a customer program manager or customer representative.

- Business Operations Manager—This individual has responsibility for managing a technical function, business operation, or business unit. Resources, including project managers, may be aligned with business managers. Business operations managers are project stakeholders to the extent that projects affect their business operations. They are generally concerned with project performance in terms of how well projects fulfill business interests and objectives.
- Contract Manager—This individual has responsibility for contract oversight, and this role might be represented by a team of contract managers. Similarly, this role could be a staff position within the more mature PMO. The contract manager oversees administration of customer and vendor contracts and advises the project manager on contract management matters that do not require professional legal intervention.
- Executive Control Board-The executive control board is the senior-level management group that is responsible for providing business guidance and direction for application in the project management environment. It is also normally responsible for deliberating business opportunities and selecting projects to be pursued. This executive-level body may exist within the organization under different naming conventions. It might be called the project control board, management oversight committee, project portfolio committee, or, in a technical organization, the systems control group. It may report to a higher-level executive or board of executives, or may itself be the group of senior executives in the organization. The project executive or sponsor should normally be a member of this group, and ideally the PMO head is also a member. In some instances in smaller organizations, a single executive may perform the deliberation and decision-making functions of this group.
- *Opportunity Manager*—The opportunity manager is the individual who has responsibility and relevant authority for examining new business opportunities and managing the associated project selection process. The opportunity manager combines technical expertise with business acumen to fulfill these responsibilities. In some organizations, this is a distinct and separate role or one aligned with the PMO. In others, this may be a part of the business development manager's responsibility. In some smaller organizations, the project manager may also serve as the opportunity manager.
- Proposal Team—This team is a group of individuals formed to develop and submit the combined technical and business proposal to the customer. The proposal team may include project team members, and, in

smaller organizations, the proposal team is the project team. However, a proposal team member could also be part of the PMO staff that regularly assists in or facilitates the proposal development process, or an individual assigned to just the business aspect of the proposal development effort (usually as a specialist in such areas as pricing strategy, contract negotiations, legal terms and conditions, etc.). The proposal team can be disbanded upon contract award (or upon proposal submittal to the customer).

- Project Customer—The project customer is the internal or external recipient of project deliverables based on the needs and requirements that have been established, and thereby the customer has a vested interest in project progress and project status. Customers warrant active involvement in all phases of the project, but customer participation levels may sometimes vary. Customer interaction and management is a prominent activity of project management, and customers should be encouraged to participate in collaboration, coordination, and acceptance or approval activities in a timely manner. External customers usually conduct projects as a business endeavor, using some type of formal contract or agreement that maintains accountability for both parties. Similarly, a contract or agreement should be established for internal customers and used in a manner so as to maintain mutual accountability and to guide outcomes for internal projects.
- Project Executive (Sponsor)—The project executive is the individual who has responsibility for achieving strategic business objectives through project selection and performance. This role usually has particular interest in four business areas: revenue generation, operational efficiency, customer satisfaction, and new product development. The project executive is the likely owner of a portfolio of projects that have been selected to achieve strategic business objectives. In addition, the project executive may sit on or possibly chair an aligned executive control board (or some other committee) that is used to review, select, and prioritize project work efforts. For purposes of this methodology, the terms project executive and project sponsor are used interchangeably. The project sponsor normally has authority to allocate resources, assign project managers, and terminate the project at any time. In some larger organizations, the project sponsor may be a distinct role from that of project executive. If distinct, the project sponsor works with the project executive to ensure strategic business alignment.
- Project Management Office—The PMO is the internal entity (possibly a business unit) that has responsibility for central project management oversight, control, and support. In this role, it represents project managers

and project performance to executive management, and executive management policies and guidance to the project management environment. Its charter can include specific project management functionality or full authority to act in areas of business and technical process integration within the project management environment. It normally has central responsibility for developing, implementing, and maintaining the preferred project management methodology and associated practices.

- Project Manager—The project manager is the individual who is assigned responsibility and relevant authority for achieving the objectives of a specific project. The professional project manager should have combined technical and business expertise to fulfill this role. Under the concepts of modern project management, there is a wide range of activities to be performed and a number of diverse responsibilities to fulfill. Therefore, this should be a full-time position on most projects. The project manager should be designated by and work under an established project charter, issued by either the PMO or the project executive (sponsor), which identifies the roles and responsibilities to be fulfilled. On larger projects, project management assistants can be designated to reduce the burden on one person. Sometimes this assistance resides in the PMO, where it can be accessed simultaneously by multiple project managers.
- Project Planning Team Member-The project planning team member is a resource assigned to conduct planning activities for a specific project. This may be a full-time or part-time role. The project planning team member may also be a project team member, who will remain on the project after preliminary planning is completed. Where practical, the project planning team should be composed of project team members. However, the project planning team member could also be a member of the PMO staff who regularly assists in or facilitates the planning process, or an individual assigned just to the planning aspect of the project (usually as a specialist in such areas as quality control, project estimating, project scheduling, etc.). The project planning team can be disbanded upon completion of the initial planning effort, but team members usually remain on call (if not already assigned as project team members) for the duration of the project in order to refine or update project plan components as the need arises.
- Project Team Member—The project team member is an assigned resource for a specific project. This may be a full-time or part-time role. In general, anyone who works within one or more phases of the project can be considered a project team member. This means there are points in time at which the so-called "operational" personnel are participating as project team members.

However, for many organizations, the project team member is represented as an element of the technical, administrative, or labor staff who is specifically assigned to the project for a prescribed period and for the purpose of performing specific types of work.

- Resource Manager—The resource manager is the individual who has responsibility for providing the resources needed for assignment to specific projects. This person can be a supervisor or resource "owner" at various levels in the organization. In a matrix-based project management organization, the resource manager is normally external to the project but supplies the resources needed to accomplish the technical work upon requests from project managers, consistent with allocations made by the project executive (sponsor). In an integrated project management organization, the project manager or PMO may be the resource manager.
- Vendor—The vendor is an external individual or organization whose products, services, and capability are acquired for a specified performance period associated with the pending opportunity or project at hand. The term vendor is used to represent the outsourcing of work to resources that have demonstrated the staff qualification and capability to achieve required project deliverables. This term can be used interchangeably with related external product and service providers such as contractor, consultant, supplier, etc.

#### SCALING PROJECTS USING THE METHODOLOGY

The *Process Guide* prescribes guidance for accomplishing the essential elements of project management. It uses a process step format, in which each process step is supported by a process tool contained in the accompanying *Process Toolkit.* This allows users to know that when a tool is completed, the associated process step is similarly completed, or at least initially completed.

Project management is inherently a rigorous activity. However, rigor will increase or decrease based on the size, value, and complexity of the project. The *Process Guide* supports a rigorous approach to project management when it is needed. However, it can also be adapted for projects that do not require such rigor.

There are three ways that users can adapt the *Process Guide* to different types of projects: (1) scaling the methodology process, (2) creating a methodology "Lite" toolkit, and (3) using project management logs as the primary tool.

#### Scaling the Methodology Process

This methodology might be considered a rigorous process because of its comprehensive approach to project management. The focus, however, should be on how the methodology presents the several or, more precisely, the 24 "essential" elements of project management. These elements are the things that need to be done on each project to ensure that it is properly managed. The greater detail with which projects are managed will provide a higher level of confidence that a project will be successfully completed—on time and on budget.

Performing these essential elements of project management is recommended for every project undertaken by the organization. It is the depth to which they are performed and the time available (or needed) to perform each element that are variable and somewhat negotiable. For example, a highvalue, multiyear project might warrant forming a team of several people to perform an extensive project risk assessment that takes several days, or even weeks, and then requires frequent tracking and follow-up action. Conversely, a smaller project that is barely a month long might simply require the project manager to follow fundamental aspects of the prescribed process, set aside some time, maybe an hour or less, and then consider and document some thoughts on project risks. The point made here is that a project risk assessment was performed for both the complex project and the simple project; the depth of performance was adjusted according to project needs. In a similar manner, all primary process elements should be performed for every project.

The example here shows adaptation or scaling of the process element for risk between two extremes. All process elements can (and probably should) be scaled for virtually all projects. Consider the following ways to scale the methodology for use on different projects:

- Requirements Scaling—The organization identifies the outputs that will be required for each process element, and then specifies how that output will vary for different types of projects. This is translated into specifying what information collection and analysis is conducted using the *Process Toolkit*, that is, which sections of each tool will be required and which will be designated as optional for different types of project work.
- Process Step Scaling—The organization determines which of the process elements require full attention and completion on every project, and then specifies which underlying process substeps may be adapted for limited or optional use.
- Project Manager Scaling—The individual project manager determines the depth and extent to which each methodology process element will be completed to ensure effective project management.

It is appropriate to mention at this juncture that some organizations may also wish to increase the rigor of the methodology (or selected process elements) by incorporating or integrating additional processes, by adding more information collection and reporting requirements, or by expanding the management-level reviews of project management processes accomplished.

#### Scaling Projects by Creating a Methodology "Lite" Toolkit

The organization or end user may wish to develop a set of downsized tools that will be designated as the Methodology "Lite" Toolkit. It can be used for smaller projects in place of the standard toolkit. It can also be used in combination with the standard toolkit to customize and conduct the process step scaling described earlier.

A recommended approach for doing this is to take key extracts from the standard toolkit. That is, take and use only the key content items of each standard tool. For example, the first section of each tool within each of the 24 process areas can be combined. This results in having 24 tools rather than 96 tools to manage, and reduces the number of tools necessary to perform a process element to one instead of four. The standard toolkit remains available for use, should one or more process elements require a more detailed management capability.

#### Scaling Projects Using Project Management Logs

Another feature of this methodology is the inclusion of a wide assortment of management logs in the various tools. If

the methodology process has to be extremely limited, then the organization or end user may wish to extract a relevant series of logs for use as an alternative approach that will still provide a reasonable level of project management effectiveness, although not quite as good as when using the complete methodology toolkit.

When such a Logbook is created, it enables the end user to capture much of the critical project management information that transcends the project. Constant maintenance and frequent review of the Logbook will ensure that no major problems occur to hinder project progress.

#### STANDARD FEATURES OF THE PROCESS GUIDE

The *ProjectPRISM*<sup>®</sup> *Process Guide* is constructed to provide the following information for each process element:

- Process Description
- Schedule or Timing
- Process Steps and Toolkit Reference
- Responsibility (for performing the process element)
- Process Input
- Process Output (project management deliverable)

This information can be used to guide project progress, as well as to monitor and manage the accomplishment of project management activities to ensure project success. The text following presents the process elements prescribed for each of the four project management life-cycle phases.

### Chapter 1

### Phase 1: Profile Processes

#### **1.1 CUSTOMER PROFILE**

This process element creates a *Customer Profile* that enables the project manager, project team, and other key project stakeholders to learn about the customer's organization relative to the work to be undertaken. This knowledge or awareness about the customer will allow stakeholders in the performing organization to manage customer contacts and expectations, and to gain insight into the nature of the customer's business. It will provide for the collection and review of preliminary information about the opportunity the customer has identified, and it will facilitate the transition from prospect to customer. Over time, the information compiled in this process element will assist the project manager and others in making and communicating decisions that are consistent with the customer's business interests and requirements for the project.

#### Schedule/Timing

The *Customer Profile* is created during the initial examination of the customer's needs, interests, and ability to fund the project. It can be started upon identification or notification of the customer opportunity. The resulting profile may be used and updated throughout the project's duration.

#### Process Steps and Toolkit Reference

The following four process steps will be accomplished to create the *Customer Profile*:

1.1.1 Customer Directory—Identify the customer's organization as well as the key business and technical

contacts in the customer's organization who will convey needs and requirements, establish the contract or agreement, collaborate on the project planning effort, and manage the performance and payment of project services and deliverables.

- 1.1.2 Customer Business—Compile and review the customer's business information to gain reasonable insight into the customer's business operations. This information can be used to facilitate subsequent business activities, project solution planning, and future business opportunities through demonstrated awareness of the customer's business.
- 1.1.3 Customer Opportunity—Obtain and examine relevant information to gain a reasonable understanding of the customer's business needs and interests as a basis for describing the customer opportunity. Use this information when preparing the project definition and in planning and collaborating the business and technical solutions with the customer.
- 1.1.4 Customer Record—Compile any current or previous work performed for this customer to review the customer's business history. Use this to examine business risk, reasonableness of the customer's pursuit of the opportunity, and probability of selection by the customer. Monitor and manage issues associated with the customer.

#### Responsibility

#### Primary

- Business Development Manager
- Project Manager

#### Alternates and Adjuncts

- Opportunity Manager (Alternate)
- PMO (Alternate)
- Project Customer
- Project Executive (Sponsor)

The Customer Profile may be started by the business development manager if the customer is external and is acquired through business development or sales efforts. If there is no accompanying sales activity, the project manager (or alternatively, opportunity manager or PMO) will have responsibility for fulfilling the prescribed process element. An opportunity manager may be assigned to oversee organizational interests and control the opportunity prior to a project manager being assigned. The opportunity manager may reside within the PMO, or the PMO may have direct responsibility for this process element. The project customer may be contacted directly (or through the business development manager) to assist in completing this profile. The project manager then has responsibility for maintaining this profile for the duration of the project. The project executive (sponsor), as well as other project stakeholders, may conduct initial and interval examinations of the Customer Profile, usually as a part of subsequent business case reviews and project gateway reviews.

#### **Process Input**

The following information, actions, materials, and resources represent relevant inputs to this process:

- Customer business telephone directories
- Customer organizational charts
- Customer brochures and prospectus materials
- Business articles and information pertaining to the customer from Internet business Web sites
- Market information on publicly held companies from Internet business Web sites
- Technical information on previous customer project work from the internal project archives
- Business information on previous customer project work from the internal project archives
- Opportunity information from meetings and telephone calls with relevant customer contacts
- Issues and actions information related to the customer opportunity
- Solicitation documents (e.g., requests for proposals [RFPs], requests for information [RFIs], etc.), as released and provided by the customer

#### Process Output (Project Management Deliverable)

The primary output of this process is the *Customer Profile*. This profile contains information that facilitates project management, develops the customer relationship, and helps achieve the customer's expectations.

#### **1.2 PROJECT PROFILE**

This process element creates a Project Profile that enables the project manager, along with various adjunct participants, to prepare a complete description of the project effort. A project *definition* is created to ensure that project planners and project team members have a clear and common understanding of the purpose and boundaries of the pending work effort. Project estimates for cost, schedule, and resource utilization are prepared and aligned with the project definition. A project classification is established not only to align the effort with internal business interests but also to identify the extent and depth of project management required. Finally, a project record is created to examine stakeholders and manage project issues, and project archives are accessed to contrast the current opportunity with previously performed projects by review of any related lessons learned that should be applied to the pending effort.

#### Schedule/Timing

The *Project Profile* is created during the initial examination of the business opportunity concurrent with the identification or notification of the customer opportunity. It requires sufficient information and input from the customer to properly capture the purpose and boundaries of the project. The resulting profile is used and updated throughout the project's duration.

#### Process Steps and Toolkit Reference

The following four process steps will be accomplished to create the *Project Profile*.

- 1.2.1 Project Definition—Compile relevant information to develop a complete and comprehensive description of the project work effort. Specify project objectives and scope. Prepare initial project estimates (use process step 1.2.2 for more detailed planning estimates). Identify and associate project deliverables. Examine project assumptions and constraints.
- 1.2.2 Project Estimates—Initial project estimates are usually order-of-magnitude estimates associated with the Project Definition. Budget and definitive estimates are more detailed and aligned with the project work

plan and work breakdown structure (WBS). Use lessons learned reviews to help prepare project estimates.

- 1.2.3 Project Classification—Determine project classification based on an examination of criteria that describes and evaluates project business interests, project performance characteristics, and project complexity. The initial determination of project classification may be adjusted following subsequent business and opportunity analyses.
- 1.2.4 Project Record—Identify the key project stakeholders involved in project performance, deliverable acceptance, and resource assignments. Review and identify lessons learned from previous projects of similar nature to this project to guide project definition development. Monitor and manage issues associated with project performance.

#### Responsibility

#### Primary

Project Manager

#### Alternates and Adjuncts

- Opportunity Manager (Alternate)
- PMO (Alternate)
- Business Development Manager
- Project Customer
- Project Executive (Sponsor)
- Project Team Members

The project manager (or alternatively, opportunity manager or PMO) applies project management skill, knowledge, and experience to construct the Project Profile. An opportunity manager may be assigned to oversee this process element prior to a project manager being assigned. The opportunity manager may reside within the PMO, or the PMO may have direct responsibility for this process element. If a business development manager is assigned, contributions from that source should be solicited. However, the Project Profile is largely a technical document for which the project manager (or alternately, the opportunity manager or PMO) should have the lead responsibility. Project team members qualified in areas of planning, project estimation, and scope management can also become contributors if so delegated. Similarly, the project customer should be solicited for content input and review. If the project customer has issued a solicitation document, one or more clarification meetings might also be arranged. The project manager then has responsibility for maintaining this profile for the duration of the project. The project executive (sponsor), as well as other project stakeholders, may conduct initial and interval examinations of the *Project Profile*, usually as a part of subsequent business case reviews and project gateway reviews.

#### **Process Input**

The following information, actions, materials, and resources represent relevant input to this process:

- Customer Profile (process element 1.1), as concurrently developed
- Technical lessons learned from previous projects from the internal project archives
- Business lessons learned from previous projects from the internal project archives
- Standards, metrics, and methods for estimating cost, schedule, and resource utilization
- Opportunity information from meetings and telephone calls with relevant customer contacts
- Opportunity information from discussions with the business development manager
- Issues and actions information related to the potential conduct of the project
- Solicitation documents (e.g., RFPs, RFIs, etc.), as released and provided by the customer

#### Process Output (Project Management Deliverable)

The primary output of this process is the *Project Profile*. This profile contains information that facilitates business case review and project selection, guides subsequent project planning, contributes to project gateway review decisions, and provides some limited influence for establishing project management oversight requirements.

#### **1.3 STAFF PROFILE**

This process element creates a *Staff Profile* that enables the project manager, along with adjunct participants, to influence the allocation of project resources during the Profile Phase, and to manage resource assignments and performance during the Plan Phase and the Perform Phase. The *Staff Profile* is a summary document that can be used in determining the need of and requesting resources for project assignments. It establishes the project structure that is preferred by the project manager, consistent with organizational guidance. It also identifies and tracks any project-specific qualifications required for project team members. The *Staff Profile* can be an integral part of the business case review conducted by executives and senior managers.

#### Schedule/Timing

The *Staff Profile* can be initiated in conjunction with creating the project definition, but it can be accomplished at any time during project initiation. Its preparation sometimes continues into the Plan Phase (where resource acquisition actually occurs). The resulting profile is used and updated throughout the project's duration.

#### Process Steps and Toolkit Reference

The following four process steps will be accomplished to create the *Staff Profile*:

- 1.3.1 Staff Directory—Identify the staff organizations from which project staff can be acquired. Specify any notable technical leaders assigned to this project team. List the individual staff members of the project team who will be assigned for purposes of performing project work.
- 1.3.2 Staff Structure—Identify and describe the staff organization that will be created to support the project effort. List relevant resource managers who will supply staff resources. Develop a formal or informal depiction of the project organization chart.
- 1.3.3 Staff Qualification—Review and specify project staff qualification requirements—things that have to be accomplished for individuals to work on the project. This includes certifications and licenses, specification and management of security and access clearances, and general training (see process step 2.3.2 for preparing a detailed training and development log).
- 1.3.4 Staff Record—Manage staff resources information relative to project team assignment requirements, individual qualifications, experience, and project history, and manage results of staff work performance and postproject activities.

#### Responsibility

#### Primary

- Project Manager
- Resource Manager

#### Alternates and Adjuncts

- Opportunity Manager (Alternate)
- PMO (Alternate)
- Business Development Manager
- Project Executive (Sponsor)

The project manager (or alternatively, opportunity manager or PMO) applies project management skill, knowledge, and experience to construct the Staff Profile. An opportunity manager may be assigned to oversee this process element prior to a project manager being assigned. The opportunity manager may reside within the PMO, or the PMO may have direct responsibility for this process element. If a business development manager is assigned, contributions from that source should be solicited relative to customer staff performance issues and expectations. However, the Staff Profile is largely a project management document for which the project manager (or alternately, the opportunity manager or PMO) should have the lead responsibility. Although resource acquisition is not formalized until the Plan Phase, the project manager can begin discussions with relevant resource managers in this step in anticipation of identifying specific resource needs. The project manager then has responsibility for maintaining this profile for the duration of the project. The project executive (sponsor), as well as other project stakeholders, may conduct initial and interval examinations of the Staff Profile, usually as a part of subsequent business case reviews.

#### **Process Input**

The following information, actions, materials, and resources represent relevant inputs to this process:

- *Customer Profile* (process element 1.1), as concurrently developed
- Project Profile (process element 1.2), as concurrently developed
- Staff Plan (process element 2.3), as concurrently or subsequently developed
- Technical staff information and performance records
- Staffing information from discussions with the business development manager
- Staffing information from discussions with individual project team members
- Staff training and certification records
- Issues and actions information related to staff selection and performance
- Solicitation documents (e.g., RFPs, RFIs, etc.), as released and provided by the customer

#### Process Output (Project Management Deliverable)

The primary output of this process is the *Staff Profile*. This profile contains information that facilitates team member acquisition and assignment, and team member performance management.

#### **1.4 VENDOR PROFILE**

This process element creates a *Vendor Profile* that enables the project manager, project team, and other project stakeholders to learn about and maintain information on each vendor's organization relative to the work to be undertaken. This information will provide for the collection and review of preliminary information about the vendors' offerings, and contribute to the identification and selection of qualified vendors for project work. Over time, the information compiled in this process element will assist the project manager and others in making and communicating decisions about vendor utilization and performance management.

#### Schedule/Timing

The *Vendor Profile* can be initiated in conjunction with constructing the Staff Profile, but it can be accomplished at any time vendor acquisition occurs during the project. The resulting profile is maintained and updated throughout the project's duration when vendors are assigned or affiliated.

#### Process Steps and Toolkit Reference

The following four process steps will be accomplished to create the *Vendor Profile*:

- 1.4.1 Vendor Directory—Identify the vendor organization and vendor contacts that will establish and manage the vendor contract and agreement, collaborate on the vendor's work planning effort, and perform and manage the vendor's project work as well as invoicing of vendor products and services.
- 1.4.2 Vendor Business—Obtain and examine relevant information about the vendor's business organization as a basis for vendor selection, vendor retention and assignment, vendor management, and for gaining insight into the vendor's business capability and business approach.
- 1.4.3 Vendor Qualification—Track and manage the list of vendors qualified by the organization and eligible to perform work assignments on this project. If desired, maintain two lists: one for vendors who will serve primarily as staff members to provide products and services, and one for vendors who will serve primarily to provide goods and supplies.
- 1.4.4 Vendor Record—Compile and review any previous project or services work conducted by each vendor (for the organization or for the customer) to check for vendor fit with this project. Use this when examining vendor business risk and vendor selection. Monitor and manage issues for this vendor.

#### Responsibility

#### Primary

- Project Manager
- Vendor

#### Alternates and Adjuncts

- Opportunity Manager (Alternate)
- PMO (Alternate)
- Project Executive (Sponsor)

The project manager (or alternatively, opportunity manager or PMO) applies project management skill, knowledge, and experience to construct and manage the Vendor Profile. An opportunity manager may be assigned to oversee this process element prior to a project manager being assigned. The opportunity manager may reside within the PMO, or the PMO may have direct responsibility for this process element. The project manager then has responsibility for maintaining this profile for the duration of the project, as vendors continue to be assigned or affiliated with the project. The vendor is often involved in this process element for purposes of collaborating and communicating vendor capability information and vendor project performance plans for consideration during the vendor selection process. The project executive (sponsor), as well as other project stakeholders, can conduct initial and interval examinations of the Vendor Profile, usually as a part of subsequent business case reviews.

#### **Process Input**

The following information, actions, materials, and resources represent relevant inputs to this process:

- Project Profile (process element 1.2), as concurrently developed
- Staff Profile (process element 1.3), as concurrently developed
- Staff Plan (process element 2.3), as concurrently or subsequently developed
- Vendor Solicitation (process step 2.4.1), as concurrently or subsequently developed
- *Vendor Proposal* (process step 2.4.3), as concurrently or subsequently developed
- Vendor capability brochures
- Vendor performance information and records
- Issues and actions information related to vendor selection and performance
- Solicitation documents (e.g., RFPs, RFIs, etc.), as released and provided by the customer

#### Process Output (Project Management Deliverable)

The primary output of this process is the *Vendor Profile*, and one is created and maintained for each vendor. This profile contains information that facilitates aspects of the vendor selection and acquisition process, and assists in vendor performance management.

#### **1.5 BUSINESS PROFILE**

This process element creates a *Business Profile* that is an essential part of the project selection process. It allows the project manager to document the business advantages to be achieved, and it enables senior and executive managers to examine the opportunity relative to its potential to fulfill business interests and achieve strategic business objectives. The project manager and business development manager, or key alternates, compile a significant amount of information about the opportunity, screen that information against established project selection criteria, conduct an examination of business risk, and prepare the business case along with project selection recommendations for review by decision makers in the organization.

#### Schedule/Timing

The *Business Profile* can be initiated in conjunction with constructing the Customer Profile and Project Profile, and normally should be reviewed for consistency with the Staff Profile. The resulting profile is maintained and updated at intervals in the project to ensure that the business case remains valid for the duration of the project.

#### Process Steps and Toolkit Reference

The following four process steps will be accomplished to create the *Business Profile*:

- 1.5.1 Business Case—Obtain and examine relevant business information as a basis for making a project selection decision. Use this information in combination with other profile sheets to answer the fundamental question, "Why should this project be selected?"
- 1.5.2 Business Risk Examination—Compile and review previous project work and associated business results for business risks that could be encountered with the selection and performance of this project. A general review of risk areas should be followed by a detailed analysis of business risks.
- 1.5.3 Business Financial Analysis—Compile and review any previous project work and associated

business results to ascertain the cost/benefits of performing this project. Select the financial analyses to be performed, conduct the analyses, and enter the results of each analysis.

1.5.4 Business Recommendation—Review the business case, along with other profile information and project definition to develop a recommendation for project selection. Also, identify the prominent selection criteria used, and summarize the prepared proand-con arguments.

#### Responsibility

Primary

- Project Manager
- Business Development Manager

#### Alternates and Adjuncts

- Opportunity Manager (Alternate)
- PMO (Alternate)
- Project Executive (Sponsor)
- Executive Control Board

The project manager (or alternatively, opportunity manager or PMO), usually in collaboration with the business development manager, applies project and business skill and insight to prepare and manage the Business Profile. An opportunity manager may be assigned to oversee this process element prior to a project manager being assigned. The opportunity manager may reside within the PMO, or the PMO may have direct responsibility for this process element. The project manager then has responsibility for maintaining this profile for the duration of the project to ensure that the business case remains valid until project completion. The executive control board is usually responsible for determining and providing the project selection criteria applied in business case preparation. It is also responsible for conducting a review of the business case as a basis for project selection. The project executive (sponsor), as well as other project stakeholders, should conduct initial and interval examinations of the Business Profile, usually as a part of subsequent business case reviews and project gateway reviews.

#### **Process Input**

The following information, actions, materials, and resources represent relevant inputs to this process:

• *Customer Profile* (process element 1.1), as concurrently developed, and when finalized