PART I

Getting Started the Right Way

Using the right tool for the right job in the right way seems simple enough, right? Well, it isn't always the case. Microsoft Project users often jump into the tool, using it the wrong way or for the wrong reasons, paying little or no attention to important project-management concepts and key settings, and creating poor or ineffective project plans. This book will help ensure your success as a project manager by focusing on the most essential concepts and functionality in Project.

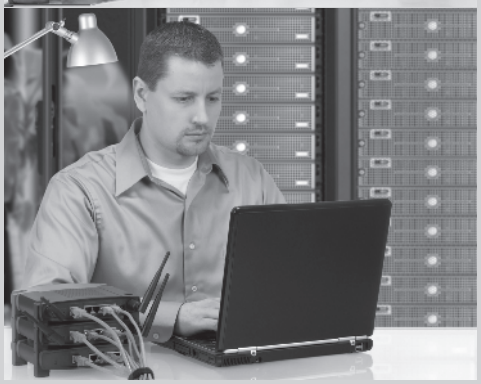
This book isn't a catchall that describes each and every obscure function in Project. Nor is it a catchall for project-management theory. It's the most important parts of each, chosen based on experience, for you to apply as you navigate through your real-world projects.

The first part of this book discusses when to use Project and why it's an essential enabling tool for creating project schedules. It also covers some of the key settings that have a significant effect on your schedule before you enter any task information.

Chapter

1

Project 2010 as an Enabling Tool for Project Managers



IN THIS CHAPTER, YOU'LL LEARN ABOUT THE FOLLOWING:

- ✓ The knowledge gap between using Microsoft Project and understanding project management
- ✓ How key credentials can help your career
- ✓ When to use Project
- ✓ The strategic relevance of project management and Microsoft Project
- ✓ A proven, effective approach to learning Microsoft Project

In this chapter, you'll explore how Project is often misunderstood as being difficult or to complex too use. I'll walk you through why this belief is misplaced and how Project is an enabler, designed to help you succeed in project management. We'll also look at some key project-management concepts and walk through a proven approach to learning Project.

Why Do People Think Project Is Hard to Use?

Project isn't difficult to use. Closing the knowledge gap between project-management concepts and using Project will be important to your success.

Accidental or Not, Knowledge Is Important

Approximately 20 years ago, I began my project-management career—like most other project managers during that time frame, by accident. Even in today's project-focused world, with so much more emphasis on education, certification, and project management as a career, far too many organizations and project managers take an ad hoc approach when it comes to managing projects. I'm not sure who coined the phrase "project management—the accidental profession," but given my experience as a consultant and trainer, and having worked with hundreds of organizations and thousands of people, I can attest to its reality.

How many project managers today thought, "When I grow up I want to be a project manager"? Far too often, we're plunged into managing or leading projects without the right set of skills, training, knowledge, processes, and tools, not to mention organizational support with regard to roles, responsibility, and authority. I'm sure you can relate in one way or another.

But all isn't lost. Over the past few decades, great strides have been taken by organizations such as the *Project Management Institute (PMI)* and accredited educational institutions to enhance skills, knowledge, standards, and credentials. They've provided a clearer path that legitimizes project management as a career and provides a significantly greater level of professionalism. For example, PMI offers certification as a *Project Management*

Professional (*PMP*); and you can become a *Microsoft Certified Technology Specialist* (*MCTS*) for *Microsoft Project*. Over that same period, project-management tools—in this case, software—have moved from mainframe to desktop, from DOS to Windows, and from very difficult to easy-to-use.

You may be thinking, "Microsoft Project, easy to use? I don't think so!" But Project 2010 *is* easy to use, and my primary purpose for writing this book is to prove it to you. I've worked with most of the mainstream project-management applications over the years—some have come and gone, and some are still around. I can assure you that Project 2010 is not only easy to use, especially considering all it can do, but also, in my opinion, one of the best versions of project-management software ever put on the market.

Credentials Will Help Close the Gap

At first glance, it may seem self-serving for Microsoft to offer MCTS credentials in using a tool like Project. However, this and other credentialing programs serve the project-management community. Let's look at the numbers.

I've been told that there are approximately 250,000 credentialed PMPs in the world at this time—give or take a few (thousands, maybe). Compare that to the estimated over 20 million, and growing, Microsoft Project users. You can see the order of magnitude between the number of people using Project (and managing projects) and those who are certified PMPs.

Why is this important to you?

There are two key reasons. First, it illustrates that a large knowledge gap exists. Far more people use Project than understand the core concepts of project management. To use this tool effectively, you should be well versed in project-management techniques and knowledge regardless of how you obtain it. However, I think that if we tested PMPs and non-PMPs, the PMP population would beat out the non-PMPs in comprehension and effectiveness with using Project. (I don't mean that the only people who understand the core concepts of project management are credentialed PMPs.)

Second, it's hard for organizations to assess the skill level of project managers. In the past, you could perhaps get away with writing Project Manager on a résumé and list a knowledge of Project with your skills. But over time, the truth came out as employees struggled not only to manage projects effectively but also to demonstrate their ability to use a tool like Project. I've spent most of my career working with professionals, and times are changing. Organizations are requesting more credentials because they have been burned too many times. Certifications such as PMP and MCTS are becoming common requirements and can be key differentiators for you and your career. Just because you're certified doesn't mean you'll be a good project manager, just as passing the bar doesn't guarantee you'll be a good lawyer—there are many other factors to consider. However, it does allow a benchmark to be set for core knowledge of theory, concepts, and the use of Project.

Real World Scenario

Credentials and Consistency in Career Development

I was working with a good-sized pharmaceutical company. Their project-management department had grown quickly because of success on some recently launched products and a growing pipeline. Included in the department were positions ranging from junior and senior project managers to director level.

The group was experiencing dissension around a lack of clearly defined roles, responsibilities, experience, and required skills for each level. Many on staff felt that they had been misplaced or incorrectly categorized in their position. There was no effective way to demonstrate why each person had been placed in their job classification.

Our job was to map out the roles, responsibilities, experience, and required skills for each position. We broke skills into both soft (leadership-type) and hard (such as creating plans in Project effectively). With input from each group member, we developed a comprehensive list of skills and requirements. After these were defined, we were able to map those positions to the existing staff and look for gaps and inequalities.

Subsequently, each person was given a tailored roadmap to success that outlined their respective career-development path and included information about the specific knowledge and skills they needed to obtain. Part of the roadmap included certification requirements. In order to advance, both internal organizational certifications and external credentials were required, including knowing how to use Project. Credentials such as PMP and MCTS helped us level the playing field and ensure consistency and standards around project-management knowledge and skills.

Is It Me, or Is It the Software?

I train and consult with Project today and plan to do so for the foreseeable future. And I still run into the same old grumbling: this software is too hard to use.

Consider another situation: accounting. Buying accounting software doesn't make you an accountant. Accountants need to bring knowledge to the table. Having the key concepts—understanding balance sheets, income statements, debits, credits, and so on—is essential to be effective with accounting software.

The same principle applies to Project 2010. Project requires you to have some grasp of core concepts and to understand project management before you use the application. The problem isn't the tool but the knowledge gap between understanding fundamental project-management concepts and knowing how to apply them in Project 2010—or any project-management software.

The more you know about the essential concepts of project management, the more success you'll have in managing projects and optimizing Project 2010. You may even find yourself enjoying it. So, ask yourself: "Is it me, or is it the software?"

This book incorporates the core project-management concepts you need to know to be successful with Project 2010. I'll give you a proven, effective approach that has been refined and optimized over many years. You'll learn how Project can be an enabling tool throughout the life cycle of any project. And, in particular, you'll learn to map the key project-management process groups and knowledge areas outlined in *A Guide to the Project Management Body of Knowledge, Fourth Edition* (*PMBOK*; PMI, 2008) to the tool.

How can Project assist you, as a project manager, through the initiating, planning, executing, controlling, and closing stages of a project while supporting you in key project-management areas such as scope, time, cost, resource, and communication? This question will be the primary focus for this book. Finding the answer will help you be more successful with managing your projects.

Real World Scenario

Understanding Project-Management Concepts Will Help with Using Microsoft Project

One of my very early consulting engagements involved a government research organization that was managing and coordinating a number of important projects. The group I was working with were scientists who were responsible for leading each research initiative. They had chosen to put their plans into Project, and I was tasked to teach them how to use the software.

Right away, it became obvious that their troubles had more to do with not understanding key project-management concepts than with learning how to use the tool. Among other things, they weren't familiar with scope management and constructing a well-organized work-breakdown structure. Their lack of awareness of these techniques (and many others) and subsequent difficulties with Project made it clear to me that if you don't have the right understanding of project management concepts and techniques, you'll be unsuccessful in using Project or any other project-management software. It would be like trying to use Word without knowing how to write or Excel without a basic understanding of numbers.

When to Use Project

Throughout many client engagements, I've seen Project used in some fascinating ways. To understand when it's most appropriate to use a tool like Project, it's important to first differentiate between the types of work that take place in organizations. Project is for projects.

As organizations perform work, it can be characterized into two major categories: operations and projects. Although these work categories share many common traits, they differ in some key ways. Consider a *project* as defined in PMBOK: "A project is a temporary endeavor undertaken to create a unique produce, service, or result."

Three key characteristics define a project and differentiate projects from operations. See if you can fill in the blanks with these differentiating characteristics:

1. _____
2. _____
3. _____

If you chose *unique*, *temporary*, and *result* (or *deliverable*), you're on the right path. In contrast, operations focus on ongoing, repetitive activities, geared toward optimizing the value and utilization of existing assets. Projects focus on the creation of new value or unique *deliverables* in the form of tangible or intangible *results*. Based on the PMBOK definition, projects come from all levels in an organization and from any function, department, or group. Project management is no longer limited to traditional engineering, IT, or big research-and-development type projects, but now extends across most industries, departments, and functions.

Look at the first keyword in the definition of a project. Zero in on that word: *temporary*. Every project has a well-defined beginning and a well-defined end. In other words, there is no such thing as an ongoing project (see Figure 1.1).

FIGURE 1.1 No Such Thing as an Ongoing Project

Real World Scenario

How Long Is Temporary?

Temporary doesn't mean projects can't be long or vary in length. I've worked on projects in R&D organizations, particularly in the pharmaceutical and aerospace industries, that went on for years. The typical life cycle of drug-development projects, for example, may range from five to seven years, depending on the stage of development and how many phases are being carried in the project plan.

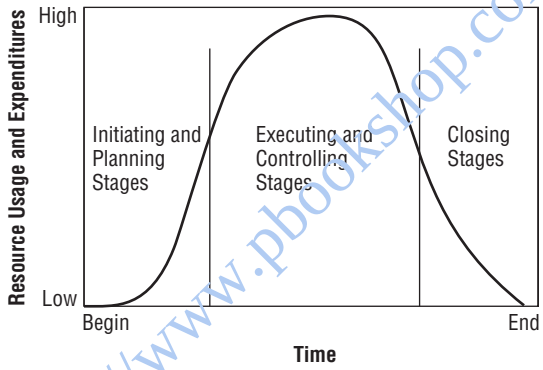
I've also worked on plans for projects that were less than a week in length and yet had all the complexity of longer-duration projects. An extreme example was a plant shutdown for a large mining company that took place over a three-day period. The team worked 24 hours a day in 12-hour shifts. In that time, we had to plan to complete more than 500 work orders and task items. This required detailed planning of tasks, timing, and resources—a great use of a tool like Project. Most projects lie somewhere between these drastically different examples.

Projects Are Supposed to End—Really

If you're working on a project and the end is unclear, stop and take the time to define the finishing point. Too often, confusion exists about when a project stops being a project and becomes part of operations or ongoing support. Even if you do a good job developing the result of a project, if there is confusion during hand-off or putting the result of the project into production, there may the misplaced perception of a poorly managed project. Your project may even be considered a failure. This isn't a good situation to be in, especially after working hard on a project.

PMBOK does a wonderful job differentiating not only between projects and operations but also between *project* life cycles and *product* life cycles. It states that every project has a beginning, a middle, and an end, with a cycle time that can be represented by some version of the curve shown in Figure 1.2.

FIGURE 1.2 Project life cycle bell curve



As the project moves through the initial stages, they're often broken down into phases. PMBOK directs us to organize and structure these phases by deliverables, or what I refer to as *interim deliverables*, which together will constitute the completion of the project and delivery of the final deliverables (the *result*).

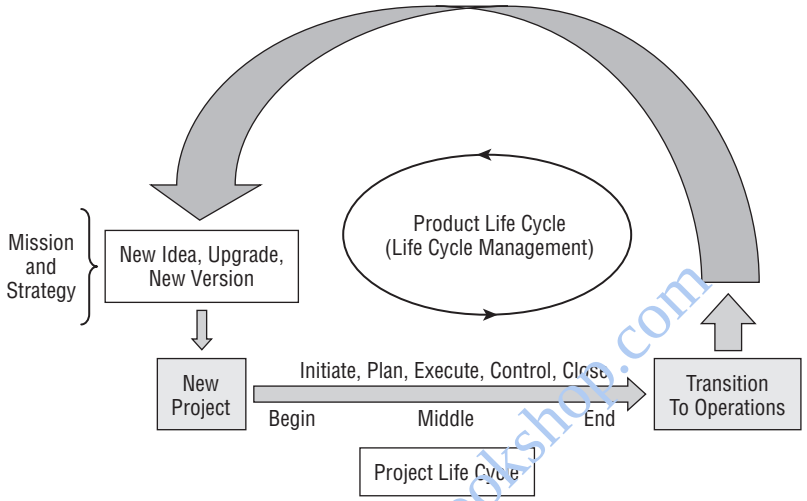
As you move through the project life cycle and project phases, the impact of change on time, cost, and scope becomes increasingly worse and is sometimes catastrophic. If you don't have good initiating and planning processes, supported with the right tools—including Project—then the cost of rework, false starts, do-overs, and canceled or failed projects will be far greater to your organization (and your career) than the cost of the relatively small amount of time it takes to initiate and plan well.

Projects vs. Product Life Cycles

Keeping in mind that projects have defined life cycles, we need to clearly distinguish those life cycles from the life cycle of the product, service, or result that is being created from the project. Projects are unique undertakings that come with some level of uncertainty. As a result of that uniqueness, they eventually move into production or to the operations side

of an organization, to be maintained in a non-unique or routine manner. As I mentioned, PMBOK differentiates project versus product life cycles, to help you know when to apply project-management techniques and tools. Consider Figure 1.3.

FIGURE 1.3 Product vs. project life cycles



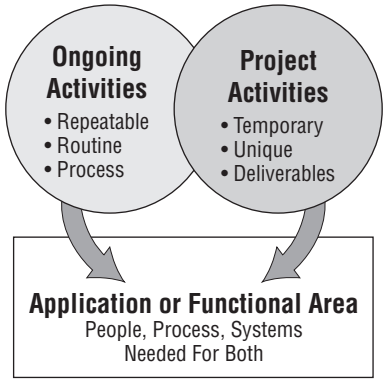
The figure clearly illustrates that product life cycles contain project life cycles and that products may constitute multiple projects, such as new versions or improvements. Often this is referred to as *life cycle management* (LCM). It's easy to draw a parallel to when it's appropriate to use a tool such as Project. During the project life cycle, you should apply project-management techniques and tools. This is where Project becomes an enabling tool.

Figure 1.4 illustrates that for Project to be used in the right way, for its primary intention, it should be applied to the project-activity side of work, leaving other systems and processes to support ongoing, operational activities. It's also becoming more important to pay attention to the need for integration of systems in overlapping areas of operations and projects, such as enterprise resource planning (ERP), financial, and customer relationship management (CRM) systems. Knowing when to use Project and recognizing that it's an enabling tool when used for the right type of activities will go a long way toward enhancing organizational success.

Consider the Impact

Often, we're given tasks that seem to meet the definition of a project but don't appear to warrant the creation of a detailed or even high-level plan in Project. The size of the project does become a differentiating factor for determining when and how to use a tool like Project, but it's important to combine common sense with guidelines.

FIGURE 1.4 Operations vs. projects



I've worked with many project management offices (PMOs) that use criteria such as the number of person hours (effort or work hours) to determine whether an activity warrants the creation of a plan in Project. Other considerations may include duration or the number of tasks involved. It isn't uncommon to see a mixed set of these criteria used to determine not only whether the activity warrants a separate project plan but also whether an appointed project manager is needed.

Keeping your categorization process simple will help ensure your success in implementing a policy around what makes a project a project and when to employ a tool like Project 2010. Always consider the impact that implementing the project will have on the organization.

Real World Scenario

Person Hours as a Guideline

Working with a PMO for an organization that develops custom software solutions, we set up a custom enterprise project-management system using Microsoft Project Professional and Project Server. To facilitate project planning, we created many enterprise templates.

To determine whether a project was to be planned out in detail, we first put the project through a fairly rigorous initiation process. This evaluation determined whether the project was to be deemed a strategic or long-term project or considered a tactical or short-term project.

Project templates were only used to plan strategic or long-term projects that consumed more than 120 person hours. Short-term or tactical projects were also planned in Project but were tracked only as individual line items in a consolidated master plan. This allowed the organization to keep track of all work related to projects.

Another large financial institution used 40 person hours as the discerning factor for whether an activity was large enough to warrant a plan in Microsoft Project.

Strategic Importance of Project 2010

Understanding that Project is an enabling tool to support project-type activities is important. It's also important to understand not only where your projects come from but their strategic relevance to your organization.

Strategy Drives Projects

Strategic decision making may be outside your sphere or responsibilities as a project manager, but understanding which work is mission critical isn't. That information needs to be communicated up and down your organization. Consider Figure 1.5.

FIGURE 1.5 Mission, strategy, projects

Every organization has a *mission*. Some are more formal than others; but generally speaking, the mission defines why an organization exists or what its primary purpose is. A well-defined mission, perhaps in a well-thought-out mission statement, provides high-level direction to the organization. It's hard to tie that directly to the low-level questions we have to answer every day.

To help with the process of tying mission to *strategy*, and ultimately to projects and operational activities, organizations create business plans or strategic plans. These further define an organization's direction for spending its valuable resources to create and support products or services. This process of moving an organization's mission into strategy is critical and essential for providing the framework in which to make decisions about which projects to work on. Well-defined, strategic goals provide the next level in determining what an organization should do to accomplish its mission.

Consider this definition from *The Strategy Process*, by Henry Mintzberg and James Brian Quinn: "A strategy is the pattern or plan that integrates an organization's major goals, policies and action sequences into a cohesive whole. A well-formulated strategy helps to marshal and allocate an organization's resources into a unique and viable posture based on its relative internal competencies and shortcomings, anticipated changes in the environment, and contingent moves by intelligent opponents." (Prentice Hall, 1991).

It's important to understand that strategic goals aren't projects. Referring to the previous definition, it's easy to make the connection between strategy and projects. The components of strategy, action sequences, marshaling and allocating the organization's resources, and achieving major goals all create a need for projects. Generally, many projects go into achieving one strategic goal.

The other important component of this definition is that a strategy can be a pattern or a plan. If you don't have a well-formulated or documented strategy, such a strategy still exists based on the choices you make every day. A significant number of those choices determine which projects to work on and which tasks within those projects to work on. If priorities aren't set and strategy isn't well-directed, your organization may drift.

You can think of a mission statement as being at the 40,000-foot level, which is hard to link directly to your daily task list. Strategic goals are at the 20,000-foot level: they're essential for direction and priority-setting but need to be broken into more manageable pieces to get to a more tactical level. This next level is where projects come into play. Projects are the tactical components of strategy: key mechanisms to take strategy and move it into actionable components.

In practice, all projects should tie directly back to strategic goals. In many organizations, score cards or some form of management by objectives (which can also be derivatives or representations of strategic goals) result in the formation of projects. Projects become the 10,000-foot level view. Your daily task load, which may be a combination of project and operational work, reflects the ground level.

Your perception of the scale of action will depend on your level within the organization. If you're at the 40,000-foot level—say, a CEO or an executive director—a project is a tactical or granular level of detail. However, if you're on a project team with specific tasks assigned to you, the project level is your high-level or big-picture view.

Working on the Right Projects in the Right Way

Strategy helps drive which project to work on, which in turn feeds into the concept of portfolio project management. The processes and tools employed in portfolio management help to determine the right projects to work on, whereas project management deals with how to work on projects the right way. PMI defines a *portfolio* as "a collection of projects or programs and other work that are grouped together to facilitate effective management of that work to meet strategic business objectives." Strategy drives portfolios, and portfolios drive projects.

Let's consider what portfolio management and project management are all about. It's important to discuss portfolio management first, so we can determine the fit for Project 2010.

Here is PMI's definition of *portfolio management*: "The centralized management of one or more portfolios, which includes identifying, prioritizing, authorizing, managing and controlling projects, programs and other related work, to achieve specific strategic business objectives."

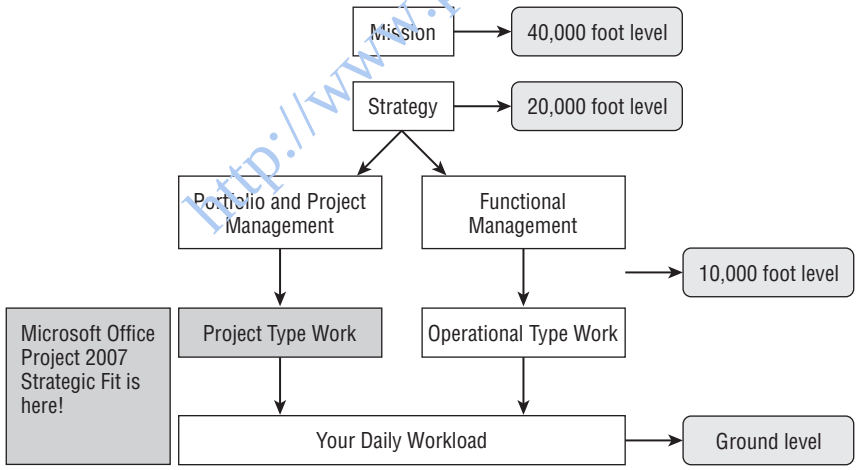
Although there may be some overlap between portfolio management and project management's initiation of processes, Project 2010 isn't specifically designed to support portfolio management. But again, all isn't lost. Microsoft provides Project Server as its enterprise project-management solution. Project Server 2010 provides the necessary tools to conduct portfolio management and integrate with your project-management processes and system.

Now, let's look at a definition of project management, which is the primary focus on this book. Again, I'll turn to PMBOK. (Perhaps you're getting the hint that it may pay to read PMBOK, if you haven't already.) PMI defines project management as follows: "The application of knowledge, skills, tools and techniques to project activities to meet the project requirements."

This definition embodies the foundation for this book. It states that project management combines knowledge, techniques, skills, and tools. What better way to illustrate the necessity of combining project-management knowledge with the power of a software tool such as Project 2010? Considering that PMI and PMBOK represent the current, predominant standard, particularly in the US, given that other methodologies do exist such as Prince2, it is very useful to map how PMBOK relates to the use of Project 2010.

To be clear about when to use Project and its strategic relevance, consider Figure 1.6.

FIGURE 1.6 Strategic Relevance



Ensuring that everyone in your organization is doing mission-critical work is no easy task. Obviously, the bigger the organization, the harder this job becomes. From senior executives to the team-member level, it depends not only on how well *functional management*

or department heads execute on business plans and strategic goals but also on how well portfolio and project management are implemented. The larger the portfolio of projects, the greater the need to invest in project-management people, processes, and tools. The strategic relevance directly correlates to the strategic value of successfully implementing the projects.

Real World Scenario

Strategic Value of Projects

An organization I worked with once estimated the strategic value of successfully completing mission-critical projects at $500 million. Understanding this value made it easy to justify an investment in a tool like Project and also in the people and processes to support the projects. Until that point, the company employed a "just do it" approach. It was able to get away with this ad hoc way of doing things as a smaller company, before growing and reaching a critical mass. Then, it started to feel the pain that comes with aligning mission-critical activities to daily workload in an ad hoc, less-than-organized manner.

Understanding the value of successful project completion leads to support and buy-in to implement a project-management solution. In this situation, much more was involved in the solution than just implementing Project. This company set up a PMO and developed effective portfolio- and project-management processes and systems.

Improving Results with a Proven, Effective Approach

My colleagues and I have refined our approach to teaching Project 2010 over the past 15 years and have proven this approach with thousands of trainees. We've been fortunate enough to work with some of the largest and most successful organizations in the world, as well as hundreds of small to medium-sized companies. We've practiced our approach with private-sector and public-sector organizations with great success, and we want to share it with you so you can experience the same success with Project.

Many of the techniques and approaches discussed in this book are based on best practices around scheduling and apply to previous versions of Project, although I highlight the new and powerful features of Project 2010. If you don't already have Project 2010, you'll want to get it, based on the key new features.

Planning, Communicating, and Tracking

In Chapter 2, "Mapping the Project-Management Process Groups to Project," I map out specifically how Project syncs up with PMBOK, and that is essential to your success. Basically, you're doing one of three things when using Project: planning, communicating, or tracking and analyzing. Knowing the essentials of each of these will enhance your experience with Project and your career as a project manager, coordinator, or leader.

In the planning stages, you should consider the key components of the plan relating to scope, time, resources, and costs and how these will be integrated. After your plan is built, you need to communicate it effectively to the stakeholders: project customers, sponsors, senior management, team members, and functional managers. Communication is key, and Project augments this function significantly. Finally, when a project begins, it's important to monitor and control its execution. Project 2010 has some powerful capabilities to help you manage change, take corrective actions, and stay on track.

Thus the heart and soul of this book, and of using Project, boils down the following:

1. Planning essentials
2. Communicating and reporting essentials
3. Tracking and analyzing essentials

Proven Effective over Time

This approach to using Project and framing your interaction with the software is tried and true. Each of the three major sections listed in the previous section will be broken down into more detailed steps. First, you need to know Project's planning essentials. I'll walk you through proven effective planning processes with Project to ensure that you create the most effective and operational plans possible. I'll tie in best practices related to planning, following a five-step process that will optimize your experience with building plans in Project.

Project 2010 will greatly enhance your ability to ensure alignment among your stakeholders. Project has some incredible new features for reporting, and I'll walk you through the most important ones. You know that communication is a key to success, so why not take advantage of the reporting tools in Project to improve your effectiveness? Too often, Project users get stuck using the default Gantt view as the only communication tool, when its usefulness is limited. This book will open your eyes to new communication techniques available through Project. Even if you don't know what you're doing, you'll look good doing it! Yes, that's a joke. But why not get the recognition you deserve, appear professional, stay on top of communications, and manage them well? Doing so will go along way to developing your successful career.

Finally, I'll discuss tracking and analyzing. After a plan is built and communicated effectively to everyone involved for buy-in and sign-off, the project will begin. During the execution stage, work will be performed by team members, as you outlined in the plan.

At this point, people have a tendency to put the tool aside and forget about it. This isn't the right approach. During execution, you should not only continue to manage communications but also manage change, status, issues, risks, and so on. People put Project aside due to a lack of understanding of how to use it during this stage of a project. The perception is that it's too hard or takes too much time to use Project. Given the right framework for updating, tracking, and analyzing project information using Project (see Figure 1.7), you'll find that there are some powerful, easy-to-use tools that you won't want to be without during your next project.

FIGURE 1.7 Proven, effective, driven results

Summary

The more you learn about project management, the better off you'll be when selecting and applying the right tools at the right time. This is particularly true with Microsoft Project 2010. Although Project is easy to use and equipped with powerful tools to help you manage throughout a project's life cycle, the more you learn about the key concepts that support using the tool, the more effective you'll be as a project manager using Project.

In this chapter, I discussed the importance of credentials and how they can help advance your career. Two key organizations, PMI and Microsoft, offer certifications that help close the knowledge gap between project management and Microsoft Project.

It's important to understand where Project is strategically relevant in its application. Knowing when to use Project is as important as understanding how to use it.

Mission drives strategy, which drives portfolios and projects. Both project activities and operational activities need to be supported by people, processes, and systems relevant to the projects' strategic value. This helps ensure that you're working on mission-critical activities.

My approach to teaching Project has been developed over the past 15 years and has proven effective over and over again. I know you'll benefit from it as thousands of Project users already have.

Key Terms

deliverable
functional management
A Guide to the Project Management Body of Knowledge, Fourth Edition (PMBOK)
Microsoft Certified Technology Specialist (MCTS)
Microsoft Project
mission
Project Management Institute (PMI)
portfolio
portfolio management
project
Project Management Professional (PMP)
result
strategy