Chapter 1

Introduction

About This Book

This book is designed to help make the *A Guide to the Project Management Body of Knowledge* (*PMBOK® Guide*)—Fifth Edition more accessible to project managers. The *PMBOK® Guide* is a standard, therefore it defines **what** is considered to be a good practice on most projects most of the time. Notice it does not define *best* practices, it defines *good* practices. Best practices tend to be industry and organization specific. Because the *PMBOK® Guide* is a standard, it is not descriptive. In other words, it doesn't tell you **how** to implement those practices, it merely identifies them.

The *PMBOK® Guide* also promotes a common vocabulary for project management, thereby enabling effective communication about project management between project managers, their sponsors, and their team members.

Many project managers, PMOs, and organizations mistake the *PMBOK® Guide* as a project management methodology. It is not. A project management methodology is a set of practices, policies, procedures, guidelines, tools, techniques, and so forth that are used to manage projects. This book is not a methodology. This book takes the information in the *PMBOK® Guide* and describes it in easily understandable language and explains how to apply the various tools and techniques. In short, it makes the *PMBOK® Guide* easier to understand and helps you implement the practices described therein.

The information in this book is based solely on information from the *PMBOK® Guide*—Fifth Edition. Therefore you will find identical definitions and some of the same tables and figures.

To help make this book easier to read we are using various features such as definitions, examples, tips, and data flow diagrams. At the beginning of each process we describe the process, show inputs, tools and techniques, and outputs and then show a data flow diagram from the *PMBOK® Guide* so you can see how information flows through the process, where it comes from, and where it goes next. In some instances, we provide a list of elements typically found in a particular document. Sometimes we include references of forms that show how you can record the information in the document. These forms can be found in the Appendix and are available in print and electronic form in *The Project Manager's Book of Forms*, published by PMI and John Wiley & Sons.

Project Management Process Groups

The project management standard is presented as 47 discrete processes. A process is a set of interrelated actions and activities performed to achieve a pre-specified product, result, or service. Processes are comprised of inputs, tools and techniques, and outputs. Therefore, this book will follow that structure of presenting a process and then discussing the individual inputs, tools and techniques, and outputs that comprise the process.

> **Input.**   Any item, whether internal or external to the project, that is required by a process before that process proceeds. May be an output from a predecessor process.
>
> **Tool.**   Something tangible, such as a template or software program, used in performing an activity to produce a product or result.
>
> **Technique.**   A defined systematic procedure employed by a human resource to perform an activity to produce a product or result or deliver a service, and that may employ one or more tools.
>
> **Output.**   A product, result, or service generated by a process. May be an input to a successor process.

To facilitate understanding of the processes, PMI has identified five Process Groups. These groups are: Initiating Process Group, Planning Process Group, Executing Process Group, Monitoring and Controlling Process Group, and the Closing Process Group.

> **Initiating Process Group.**   Those processes performed to define a new project or new phase of an existing project by obtaining authorization to start the project or phase.
>
> **Planning Process Group.**   Those processes required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve.
>
> **Executing Process Group.**   Those processes performed to complete the work defined in the project management plan to satisfy the project specifications.

Monitoring and Controlling Process Group.   Those processes required to track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes.

Closing Process Group.   Those processes performed to finalize all activities across all Process Groups to formally close the project or phase.

Note in Figure 1-1 how the Process Groups interact with each other in each phase of the project and for the project overall. The processes in the Initiating Process Group are used to identify the high-level definition of the project or phase and obtain authorization to proceed. Once this is accomplished the high-level information can be further elaborated in the Planning Process Group. Of course, we don't only plan at the start of the project. We spend much of the first part of our project planning, but as we get into the Executing Process Group, where we are actually creating and developing the work of the project, we will need to plan in finer levels of detail and re-plan when things do not go as expected. In fact, the Monitoring and Controlling Process Group is used to compare our planned progress to our actual progress. If the two are acceptably consistent, we continue on with the project work. If they are not, we will need to plan corrective or preventive actions to get our performance aligned with our plan. Finally, we will use the Closing Process Group to finalize the work and archive the phase or project information.
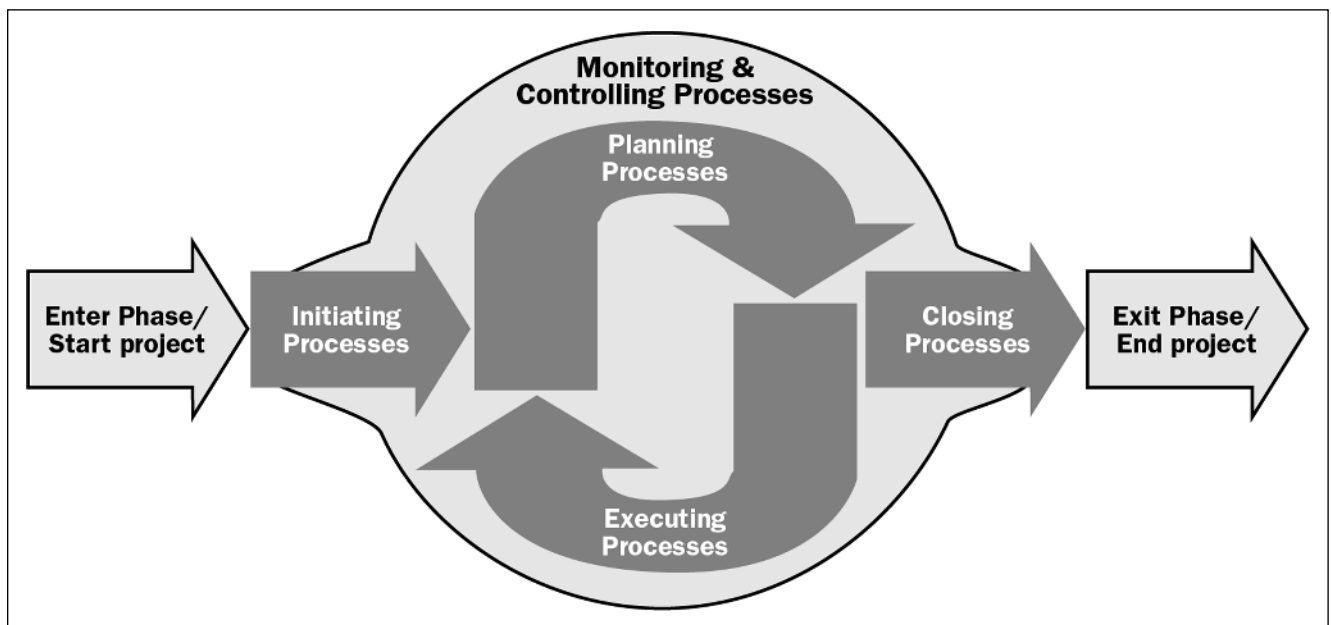
Figure 1-1
Project Management Process Groups
Source: *PMBOK® Guide,* Fifth edition

Project Management Knowledge Areas

Another way to categorize the project management processes is by Knowledge Area. PMI identifies ten Knowledge Areas:

- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management
- Project Stakeholder Management

Figure 1-2 shows how each of the 47 project management processes aligns with the Project Management Process Groups and the Project Management Knowledge Areas.

This book will use the Process Groups rather than the Knowledge Areas to present information. In Chapter 2 we will review some of the key concepts in project management; in Chapter 3 we will discuss the Initiating Processes. The next several chapters will discuss the Planning Processes. This will be followed by chapters on the Executing Processes, Monitoring and Controlling Processes, and finally, the Closing Processes.

Project Integration Management.   Project Integration Management includes the processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups.

Project Scope Management.   Project Scope Management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully.

Project Time Management.   Project Time Management includes the processes required to manage the timely completion of the project.

Project Cost Management.   Project Cost Management includes the processes involved in estimating, budgeting, funding, managing, and controlling costs so that the project can be completed within the approved budget.

Project Quality Management.   Project Quality Management includes the processes and activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken.

Project Human Resource Management.   Project Human Resource Management includes the processes to organize, manage, and lead the project team.

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work	4.4 Monitor and Control Project Work 4.5 Perform Integrated Change Control	4.6 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Time Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Resources 6.5 Estimate Activity Durations 6.6 Develop Schedule		6.7 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
8. Project Quality Management		8.1 Plan Quality Management	8.2 Perform Quality Assurance	8.3 Control Quality	
9. Project Human Resource Management		9.1 Plan Human Resource Management	9.2 Acquire Project Team 9.3 Develop Project Team 9.4 Manage Project Team		
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Control Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses		11.6 Control Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	12.4 Close Procurements
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Management	13.3 Manage Stakeholder Engagement	13.4 Control Stakeholder Engagement	

Figure 1-2

Project Management Process Groups and Knowledge Areas Mapping

Source: *PMBOK® Guide,* Fifth edition

Project Communications Management.   Project Communications Management includes the processes that are required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the disposition of project information.

Project Risk Management.   Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project.

Project Procurement Management.   Project Procurement Management includes the processes to purchase or acquire the products, services, or results needed from outside the project team.

Project Stakeholder Management.   Project Stakeholder Management includes the processes required to identify all people or organizations impacted by the project, analyzing stakeholder expectations and impact on the project, and developing appropriate management strategies for effectively engaging stakeholders in project decisions and execution.