# Project Management

ABSOLUTE BEGINNER'S GUIDE

No experience necessary!

## Fourth Edition

Gregory M. Horine

FREE SAMPLE CHAPTER

SHARE WITH OTHERS



# Project Management

## Fourth Edition



Gregory M. Horine



800 East 96th Street, Indianapolis, Indiana 46240 USA

## Project Management Absolute Beginner's Guide, Fourth Edition

Copyright © 2017 by Pearson Education, Inc.

All rights reserved. Printed in the United States of America. This publication is protected by copyright, and permission must be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. For information regarding permissions, request forms, and the appropriate contacts within the Pearson Education Global Rights & Permissions Department, please visit www.pearsoned.com/permissions/. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Nor is any liability assumed for damages resulting from the use of the information contained herein.

ISBN-13: 978-0-7897-5675-6 ISBN-10: 0-7897-5675-7

Library of Congress Control Number: 2016962697

First Printing: February 2017

#### Trademarks

All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. Que Publishing cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

## Warning and Disclaimer

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an "as is" basis. The author and the publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book.

## **Special Sales**

For information about buying this title in bulk quantities, or for special sales opportunities (which may include electronic versions; custom cover designs; and content particular to your business, training goals, marketing focus, or branding interests), please contact our corporate sales department at corpsales@pearsoned.com or (800) 382-3419.

For government sales inquiries, please contact governmentsales@pearsoned.com.

For questions about sales outside the U.S., please contact intlcs@pearson.com.

#### Editor-in-Chief Greg Wiegand

Senior Acquisitions Editor Laura Norman

**Development Editor** Patrice-Anne Rutledge

Managing Editor Sandra Schroeder

Senior Project Editor Tonya Simpson

**Indexer** Erika Millen

**Proofreader** Abigail Bass

**Technical Editor** J. Boyd Nolan

Publishing Coordinator Cindy Teeters

**Cover Designer** Chuti Prasertsith

Compositor codeMantra

## **Contents at a Glance**

	Introduction	1
Part I	Project Management Jumpstart	
1	Project Management Overview	7
2	The Project Manager	
3	Essential Elements for Any Successful Project	
Part II	Project Planning	
4	Defining a Project	
5	Planning a Project	
6	Developing the Work Breakdown Structure	75
7	Estimating the Work	91
8	Developing the Project Schedule	
9	Determining the Project Budget	
Part III	Project Control	
10	Controlling a Project	
11	Managing Project Changes	
12	Managing Project Deliverables	
13	Managing Project Issues	
14	Managing Project Risks	
15	Managing Project Quality	
Part IV	Project Execution	
16	Leading a Project	
17	Managing Project Communications	
18	Managing Expectations	
19	Keys to Better Project Team Performance	
20	Managing Differences	
21	Managing Vendors	
22	Ending a Project	
Part V	Accelerating the Learning CurveEven More	
23	Making Better Use of Microsoft Project	
24	When Reality Happens	
25	The Fun Never Stops	
26	Powerful PMP Exam Tips	
Inde	х	

## **Table of Contents**

Introduction	. 1
About This Book	. 2
Who Should Read This Book?	. 4
How This Book Is Organized	. 4
What's New in This Edition	. 5
Conventions Used in This Book	. 5

#### I Project Management Jumpstart

1	Project Management Overview	7
	What Is Project ManagementExactly? What Is a Project Exactly? Managing Projects. An Academic Look	
	What Is the Value of Project Management?	14
	Why Are Projects Challenging?	15
	Growing Demand for Effective Project Managers	17
	Trends in Project Management	
	Additional Resources	
2	The Project Manager	
	One Title, Many Roles	24
	Key Skills of Project Managers	
	Qualities of Successful Project Managers	
	15 Common Mistakes of Project Managers	
3	Essential Elements for Any Successful Project	
	What Exactly Is a Successful Project?	
	Learning from Troubled Projects	
	Learning from Successful Projects	
	Essential Project Manager Toolkit	

## II Project Planning

4	Defining a Project	
	Setting the Stage for Success	
	How Does Defining a Project Relate to Project Planning?	
	Project Definition Document Required Elements Additional Elements to Consider	
	Project Definition Checklist General Scope Stakeholders Project Approach Other Acceptance	53 53 54 54 54
5	Planning a Project	57
	Key Project Planning Principles	
	Important Questions Project Planning Should Answer	60
	Building a Project Plan	62
	Summary of Supplemental Project Plan Components	70
	Project Plan Checklist	72
6	Developing the Work Breakdown Structure	75
	What Exactly Is a WBS? Isn't WBS Just Another Name for the Project Schedule? Key Differences Between the WBS and the Project Schedule Different Types of Breakdown Structures.	79 82
	Why Is the WBS Important?	
	The Process of Building a WBS Getting Started Guidelines for Effective WBS Knowing When to Stop	85 85
7	Estimating the Work	91
	Next Step in the Schedule Development Process	92
	Managing the Risk, Managing the Estimates	94

	Reasons for Estimating Woes	95
	Powerful Estimating Techniques and Methods	97
	Best Practices	
8	Developing the Project Schedule	105
	The Impact of the Project Schedule	
	The Goal of the Schedule Development Process	110
	Key Inputs for Building a Schedule	110
	Creating a Schedule Determining Task Relationships (Sequencing the Work) Building the Preliminary Schedule Perform Reality Check Shorten the Schedule Walk Through the Schedule Presenting the Schedule	
9	Determining the Project Budget	123
	The Impact of the Project Budget	124
	Principles of an Effective Budget	
	Creating a Project Budget Sources of Project Costs Developing an Initial Budget Finalizing a Budget	127 130
	Common Budget Challenges	131

#### III Project Control

10	Controlling a Project	135
		136 137 138
	Management Fundamentals for Project Control	139
	Powerful Techniques for Project Control	141
	Performance Reporting	144
	Variance Responses	146

	Leveraging Earned Value Management Concepts	146
	Common Project Control Challenges	
	Lessons from Project Recoveries	151
11	Managing Project Changes	155
	What Exactly Is a Project Change and What's the Big Deal, Anyway? Project Change Types—More Than Scope Relation to Configuration Management and Organizational Change Management	157
	Fundamentals for Managing Project Change	
	What Causes Unplanned Scope Changes?	
	Essential Elements of a Project Change Control System Principles Guidelines Components	162 162
	Powerful Techniques for Minimizing Project Changes	164
	Common Project Change Control Challenges	
12	Managing Project Deliverables	171
12	Managing Project Deliverables "Managing Project Deliverables" Means What, Exactly?	
12		172
12	"Managing Project Deliverables" Means What, Exactly?	172 173
12	"Managing Project Deliverables" Means What, Exactly? Why Do This? It's Too Much Work Identify, Protect, and Track: The Principles of Managing Work	172 173 174
12	"Managing Project Deliverables" Means What, Exactly? Why Do This? It's Too Much Work Identify, Protect, and Track: The Principles of Managing Work Products	172 173 174 175
12	"Managing Project Deliverables" Means What, Exactly? Why Do This? It's Too Much Work Identify, Protect, and Track: The Principles of Managing Work Products Best Practices	172 173 174 175 180
	<ul> <li>"Managing Project Deliverables" Means What, Exactly?</li> <li>Why Do This? It's Too Much Work</li> <li>Identify, Protect, and Track: The Principles of Managing Work</li> <li>Products</li> <li>Best Practices</li> <li>Configuration Management Plan</li> </ul>	172 173 174 175 180 182
	<ul> <li>"Managing Project Deliverables" Means What, Exactly?</li> <li>Why Do This? It's Too Much Work</li> <li>Identify, Protect, and Track: The Principles of Managing Work</li> <li>Products</li> <li>Best Practices</li> <li>Configuration Management Plan</li> <li>Common Challenges and Pitfalls</li> </ul>	172 173 174 175 180 182 
	<ul> <li>"Managing Project Deliverables" Means What, Exactly?</li> <li>Why Do This? It's Too Much Work</li> <li>Identify, Protect, and Track: The Principles of Managing Work</li> <li>Products</li> <li>Best Practices</li> <li>Configuration Management Plan</li> <li>Common Challenges and Pitfalls</li> <li>Managing Project Issues</li> </ul>	172 173 174 175 180 182 185 186
	<ul> <li>"Managing Project Deliverables" Means What, Exactly?</li> <li>Why Do This? It's Too Much Work</li> <li>Identify, Protect, and Track: The Principles of Managing Work</li> <li>Products</li> <li>Best Practices</li> <li>Configuration Management Plan</li> <li>Common Challenges and Pitfalls</li> <li>Managing Project Issues</li> <li>The Goals, Objectives, and Principles of Project Issue Management</li> </ul>	172 173 174 175 180 182 185 186 187
	<ul> <li>"Managing Project Deliverables" Means What, Exactly?</li> <li>Why Do This? It's Too Much Work</li> <li>Identify, Protect, and Track: The Principles of Managing Work</li> <li>Products</li> <li>Best Practices</li> <li>Configuration Management Plan</li> <li>Common Challenges and Pitfalls</li> <li>Managing Project Issues</li> <li>The Goals, Objectives, and Principles of Project Issue Management</li> <li>Key Features of Issue Management Systems</li> </ul>	172 173 173 175 180 182 185 186 187 187

## viii

14	Managing Project Risks	195
	Key Risk Management Principles	. 196
	The Essential Process for Managing Project Risks Risk Response Options Key Risk Management Tools	. 199
	The Common Sources of Project Risk	.201
	Typical Problems	.206
	Powerful Risk Control Strategies	.208
	Are You Sure It's a Risk?	.209
15	Managing Project Quality	213
	What Is "Project Quality"?	.214
	Unique Aspects of Managing Project Quality	.215
	Principles of Managing Project Quality	.215
	Powerful Tools and Techniques for Project Quality	.217
	Powerful Quality Strategies	.220
	Typical Quality-Related Challenges	.221

## IV Project Execution

16	Leading a Project	225
	More Than Managing	.226
	Where Is Leadership Needed on a Project?	.229
	Twelve Keys to Better Project Leadership	230
	Power of Servant Leadership Approach	.234
17	Managing Project Communications	237
	What Are Project Communications?	.238
	The Importance of Project Communications	.240
	Why Communicating Can Be Tough	.240
	Seven Powerful Principles	.242
	Best Practices of Effective Project Communicators	.245

	General Communications Management	
	Communications Options	
	Tips for Email (and Other Text-Only) Communications	
	Status Reporting	
	Meetings Interpersonal Skills	
18	Managing Expectations	257
	Value of Reviewing Stakeholder Expectation Management	
	Critical Aspects of Expectations	
	Balancing Reality and Perception	
	Not Just Scope Management	
	Seven Master Principles of Expectation Management	
	Essential Elements of Managing Expectations	
	Project Planning and Control Elements—A Quick Review	
	Leveraging Kickoff Meetings Requirements Management—The Difference Maker	
	Requirements Management—The Difference Maker	
19	Keys to Better Project Team Performance	277
	High-Performing Teams	278
	Ten Key Management Principles	
	Proven Techniques for Better Team Performance	
	Special Situations	
20	Managing Differences	
	Five Key Principles	
	Proven Techniques for Leading Cross-Functional Projects	
	Proven Techniques for Leading Cross-Cultural Projects	
	Proven Techniques for Leading Virtual Projects	
21	Managing Vendors	303
	First, Let's Clarify a Few Terms	
	Ten Proven Principles of Vendor Management	
	Twelve Tips for Buyers	
	Seven Tips for Sellers	
	Twelve Key Project Management Skills for Better Vendor Management	

	Stuff You Need to Know About Contracts	311
	Conditions for a Legal Contract	311
	Key Contract Elements	312
	Primary Contract Types	312
	The Impact of Each Contract Type	313
22	Ending a Project	317
	Three Key Principles	318
	Project End Checklist: 13 Important Steps	318
	Common Project Closing Challenges	320
	Methods for Ending a Contract or a Project	321
	Terminating a Contract	321
	Terminating a Project	322

## V Accelerating the Learning Curve...Even More

23	Making Better Use of Microsoft Project	325
	Understand Thisand It All Becomes Easier	.326
	Need-to-Know Features	.329
	New Project Best Practices	.337
	Keys to Making Resource Leveling Work	.341
	Powerful Reporting Secrets	.343
	More Insights to a Better Project Schedule	.349
	Project 2010—The Game Changer	.352
	What Do I Need to Know About Project 2013, Project 2016, Project Online, and Office 365 Planner? Project Online Project 2013 Project 2016. Office 365 Planner	.355 .356
24	When Reality Happens	361
	What If I'm in a Project Management "Lite" Culture?	.362
	What If I Can't Develop a Detailed Schedule?	.364
	What If I Must Manage to a Hard Milestone Date?	.365
	What If I Have Difficult Resources?	.368

	What Can I Do About Turnover?	
	Tips for Managing a Selection Process	
	Tips for Managing a Testing Process	
25	The Fun Never Stops	
	Agile Approaches	
	HIPAA, Privacy, and Security	
	Project Management Offices. Traits of Successful PMOs.	
	Portfolio Project Management	
	Governance Processes	
	Critical Chain Project Management	
	Web-Based Project Management and Collaboration Tools	
	Requirements Management Tools	
	Mind Mapping Tools	
	Value of Certifications	
	Project Management Training	
26	Powerful PMP Exam Tips	
	Common "Context" Differences	
	Common "Experience" Differences	
	Common Terminology Differences	410
	What's Important to PMI?	411
	Key PMI Assumptions and Themes	412
	What Is the PMP Exam Like?	414
	Exam Topics Not Covered by PMBOK	415
	Exam Preparation Strategies	416
	Exam-Taking Tips	417
Index		

## About the Author

**Gregory M. Horine** is a certified (PMP, CCP) business technology and IT project management professional with more than 27 years of successful results across multiple industries using servant leadership principles. Primary areas of expertise and strength include the following:

- Project management and leadership
- Complete project lifecycle experience
- Complex application development
- Package implementation and integration
- Enterprise solution development
- Effective use of project management tools
- Microsoft Project
- Project and portfolio management tools
- Data analysis and transformation
- Business process analysis and improvement
- Vendor and procurement management
- Mind mapping tools
- Quality and risk management
- Regulatory and process compliance

In addition, Mr. Horine holds a master's degree in computer science from Ball State University and a bachelor's degree in both marketing and computer science from Anderson College (Anderson, Indiana).

Through his servant leadership approach, Mr. Horine has established a track record of empowering his teammates, improving project communications, overcoming technical and political obstacles, and successfully completing projects that meet the targeted objectives.

Mr. Horine is grateful for the guidance and the opportunities that he has received from many mentors throughout his career. Their patience and influence has helped form a rewarding career marked by continuous learning and improvement.

## Dedication

This book is dedicated to the "students" that I constantly visualized in my mind as I developed this book—the bright and caring family that surrounds my life, including my wife, parents, siblings, in-laws, aunts, uncles, cousins, and grandparents.

This book is also dedicated to the parents, families, practitioners, and researchers who are diligently fighting to rescue children from autism spectrum and bipolar disorders.

This book is dedicated to my key inspirational sources: my incredible wife, Mayme (I still wake up every day with a smile in my heart knowing I am married to her), and my "fabulous five" children: Michael, Victoria, Alex, Luke, and Elayna (each one is a hero to me).

## Acknowledgments

I am grateful for the patience, support, and teamwork demonstrated by the following individuals: my editor, Laura Norman; the Que Publishing team, my family; and my parents, Carla and Bud.

In addition, I want to acknowledge the talents and professionalism of Mr. Craig Thurmond for his graphical design contributions to this book.

## We Want to Hear from You!

As the reader of this book, *you* are our most important critic and commentator. We value your opinion and want to know what we're doing right, what we could do better, what areas you'd like to see us publish in, and any other words of wisdom you're willing to pass our way.

We welcome your comments. You can email or write to let us know what you did or didn't like about this book—as well as what we can do to make our books better.

Please note that we cannot help you with technical problems related to the topic of this book.

When you write, please be sure to include this book's title and author as well as your name and email address. We will carefully review your comments and share them with the author and editors who worked on the book.

Email: feedback@quepublishing.com

Mail: Que Publishing

ATTN: Reader Feedback 800 East 96th Street Indianapolis, IN 46240 USA

## **Reader Services**

Register your copy of *Project Management Absolute Beginner's Guide* at quepublishing.com for convenient access to downloads, updates, and corrections as they become available. To start the registration process, go to quepublishing.com/register and log in or create an account\*. Enter the product ISBN, 9780789756756, and click Submit. When the process is complete, you will find any available bonus content under Registered Products.

\*Be sure to check the box that you would like to hear from us to receive exclusive discounts on future editions of this product.

## As organizations continue to move toward "project-based" management to get more done with fewer resources—and as the demand for effective project managers continues to grow—more and more individuals find themselves with the opportunity to manage projects for the first time.

INTRODUCTION

In an ideal world, every new project manager candidate would complete certified project management training programs and serve as an apprentice before starting a first project manager opportunity, but...this is the real world. In many cases, a quicker, more accessible, and more economical alternative is needed to guide these candidates in managing projects successfully the first time.

Absolute Beginner's Guide to Project Management, Fourth Edition, is intended to provide this alternative in a helpful, fun, and practical style.

## **About This Book**

The objectives of this book include the following:

- To be a pragmatic guide that prepares a new project manager for the "real world."
- To be an easy-to-use tutorial and reference for any person managing a first project.
- To teach the key concepts and fundamentals behind project management techniques. When you understand these, you can apply them effectively independent of toolset, environment, or industry.
- To reduce the on-the-job learning curve by sharing the traits of successful projects and "lessons learned" from less-than-successful projects.
- To balance the breadth of topics covered with adequate depth in specific areas to best prepare a new project manager.
- To review the skills and qualities of effective project managers.
- To emphasize the importance of project "leadership" versus just project "management."

Consistent with the Absolute Beginner's Guide series, this book uses a teaching style to review the essential techniques and skills needed to successfully manage a project. By teaching style, I intend the following:

- A mentoring, coaching style that is fun, easy to read, and practical.
- Assumes that the reader does not have previous hands-on experience with project management.
- Teaches the material as if an instructor were physically present.
- Presents the material in task-oriented, logically ordered, self-contained lessons (chapters) that can be read and comprehended in a short period of time (15 to 30 minutes).
- Emphasizes understanding the principle behind the technique or practice.
- Teaches the material independent of specific tools and methodologies.
- Teaches the material with the assumption that the reader does not have access to organizational templates or methodologies.
- Provides a summary map of the main ideas covered at the end of each chapter. Research has shown that this type of "mind-map" approach can drive better memory recollection when compared to traditional linear summary approaches.

## **OUT-OF-SCOPE**

The scope of this book is clearly outlined in the table of contents, but as I cover later, it is always good to review what is out of scope to ensure understanding of the scope boundaries. Because the field of project management is extremely broad, and we needed to draw the line somewhere, this book focuses on the proper management of a single project. As a result, the following advanced project management subjects are not covered in this book:

- Program management
- Enterprise portfolio management
- Enterprise resource management
- Advanced project risk management topics
- Advanced project quality management topics
- Advanced project procurement management topics

## DISCLAIMER

Although there are definitely concepts, fundamentals, and techniques covered in this book that are of enormous assistance to anyone taking the PMP certification exam, this book is not intended to be an exam preparation guide.

The focus is not on theory, academia, or the *PMBOK Guide* (PMI's A *Guide to the Project Management Body of Knowledge*). The focus is on getting the first-timer ready to manage a first project in the real-world environment.

Although the PMBOK is an admirable industry standard, it is updated every four years to better capture the evolving knowledge in the field and to improve the consistency and clarity of the standards. It is not intended to be a "how-to" guide for a first-time practitioner.

That being said, I have added some PMP exam-preparation pointers in Chapter 25, "The Fun Never Stops."

## Who Should Read This Book?

Absolute Beginner's Guide to Project Management, Fourth Edition is recommended for any person who fits into one or more of the following categories:

- Individuals unsatisfied with other introductory project management books
- Individuals new to project management, such as
  - Technologists
  - Knowledge workers
  - Students
  - Functional managers
- Professionals taking a first project management assignment, such as
  - Team leaders
  - Project coordinators
  - Project administrators
  - Project support
- Experienced project managers needing a refresher course
- Experienced project managers with limited formal project management education

## How This Book Is Organized

This book has been divided into five parts:

- Part I, "Project Management Jumpstart," sets up the general framework for our project management discussion and accelerates your project management learning curve, including an insightful review of successful projects and project managers.
- Part II, "Project Planning," reviews the processes that establish the foundation for your project.
- Part III, "Project Control," reviews the processes that enable you to effectively monitor, track, correct, and protect your project's performance.

- Part IV, "Project Execution," reviews the key leadership and people-focused skills that you need to meet today's business demands.
- Part V, "Accelerating the Learning Curve...Even More," provides experienced insights and tips to better handle real-life project situations that will further accelerate the knowledge base and skill level of the new project manager. Key topics include making better use of Microsoft Project, dealing with realworld situations, and other concepts that a new project manager is likely to encounter. And new to the fourth edition is a bonus section on PMP exam preparation.

## What's New in This Edition

While the key principles of project management, leading teams, and effective communication that this book has focused on since 2005 are timeless, this book has always been ahead of the curve in addressing leading-edge trends in projects and project management and in providing powerful tips to help reduce the learning curves for new project managers. Hot key trends in project management, such as agile approaches, leading virtual/remote teams, leading disparate teams, and cloud collaboration tools, have been included since the first edition.

However, it has been four years since the third edition.

In this edition, existing sections have been enhanced with more references to those trends mentioned before, especially the sections on Microsoft Project (in Chapter 23) and agile approaches (in Chapter 25). Also, a new section was added in Chapter 25 to cover key security, HIPPA compliance, and privacy learning points.

On top of that, all references to the PMBOK have been updated with the *PMBOK Guide* – Sixth Edition references (currently scheduled for release in 2017), and a new bonus chapter (Chapter 26) on PMP exam preparation has been added.

## **Conventions Used in This Book**

Throughout the book, I use the following conventions and special features:

- At the beginning of each chapter, you find a quick overview of the major topics that are expounded upon as you read through the material that follows.
- The end of each chapter provides a list of key points along with a visual summary map.

• You also find several special sidebars used throughout this book:



**NOTE** These highlight specific learning points or provide supporting information to the current topic.



**TIP** These highlight specific techniques or recommendations that could be helpful to most project managers.



**CAUTION** These highlight specific warnings that a project manager should be aware of.

## IN THIS CHAPTER

- Review the different roles played by the project manager
- Review the key skills every project manager should possess
- Learn why some project managers are much more successful than others
- Understand the common mistakes made by many project managers



1

## THE PROJECT MANAGER

As we reviewed in Chapter 1, "Project Management Overview," the project manager has many activities to perform, challenges to overcome, and responsibilities to uphold over the life of a project. Depending on your individual experiences, your industry background, and the manner in which project management has been implemented, this review might have been quite enlightening to you.

To ensure that we have a common understanding of what a project manager does, in this chapter I review the different roles a project manager plays over the life of a project and discuss the prerequisite skills that you need to perform those roles. Most importantly, I accelerate your learning curve by sharing the characteristics of successful project managers and the common mistakes made by many others.

## **One Title, Many Roles**

You've likely heard many of the analogies before to describe the role of project manager—the "captain" of the ship, the "conductor" of the orchestra, the "coach" of the team, the "catalyst" of the engine, and so on. There's truth and insight in each of the analogies, but each can be incomplete as well. To gain better understanding of what a project manager does, let's briefly discuss each of the key roles played by the project manager:

- **Planner**—Ensures that the project is defined properly and completely for success, all stakeholders are engaged, work effort approach is determined, required resources are available when needed, and processes are in place to properly execute and control the project.
- **Organizer**—Using work breakdown, estimating, and scheduling techniques, determines the complete work effort for the project, the proper sequence of the work activities, when the work will be accomplished, who will do the work, and how much the work will cost.
- **Point Person**—Serves as the central point of contact for all oral and written project communications.
- **Quartermaster**—Ensures the project has the resources, materials, and facilities it needs when it needs it.
- **Facilitator**—Ensures that stakeholders and team members who come from different perspectives understand each other and work together to accomplish the project goals.
- **Persuader**—Gains agreement from the stakeholders on project definition, success criteria, and approach; manages stakeholder expectations throughout the project while managing the competing demands of time, cost, and quality; and gains agreement on resource decisions and issue resolution action steps.
- **Problem Solver**—Utilizes root-cause analysis process experience, prior project experience, and technical knowledge to resolve unforeseen technical issues and take any necessary corrective actions.
- **Umbrella**—Works to shield the project team from the politics and "noise" surrounding the project, so they can stay focused and productive.
- **Coach**—Determines and communicates the role each team member plays and the importance of that role to the project's success, finds ways to motivate each team member, looks for ways to improve the skills of each team member, and provides constructive and timely feedback on individual performances.

- **Bulldog**—Performs the follow-up to ensure that commitments are maintained, issues are resolved, and action items are completed.
- **Librarian**—Manages all information, communications, and documentation involved in the project.



**NOTE** Although there is consensus that the disciplines and techniques used in project management can be applied in any industry, there is no consensus on whether individual project managers can be effective in a different industry.

There is no doubt that the more knowledge and experience that a project manager has in the subject matter area of the project, the more value he or she can offer. However, depending on the size of the initiative and the team composition, a project manager with different industry experience can bring tremendous value if that person is strong in the other four key skill categories discussed.

- **Insurance Agent**—Continuously works to identify risks and develop responses to those risk events in advance.
- **Police Officer**—Consistently measures progress against the plan, develops corrective actions, and reviews the quality of both project processes and project deliverables.
- **Salesperson**—An extension of the Persuader and Coach roles, but this role is focused on "selling" the benefits of the project to the organization, serving as a "change agent," and inspiring team members to meet project goals and overcome project challenges.

## **Key Skills of Project Managers**

Although a broad range of skills is needed to effectively manage the people, process, and technical aspects of any project, it becomes clear there is a set of key skills that each project manager should have. Although these skill categories are not necessarily exclusive of each other, let's group them into five categories to streamline our review and discussion:

1. **Project Management Fundamentals**—The "science" part of project management, covered in this book, including office productivity suite (such as Microsoft Office, email, and so on) and project management software skills.

**2.** Business Management Skills—Those skills that would be equally valuable to an operations or line-of-business manager, such as budgeting, finance, procurement, organizational dynamics, team development, performance management, coaching, and motivation.



**TIP** Active listening is one of the secret weapons of effective project managers.

- **3. Technical Knowledge**—The knowledge gained from experience and competence in the focal area of the project. With it, you greatly increase your effectiveness as a project manager. You have more credibility, and you can ask better questions, validate the estimates and detail plans of team members, help solve technical issues, develop better solutions, and serve more of a leadership role.
- 4. Communication Skills—Because communication is regarded as the most important project management skill by the Project Management Institute (PMI), I feel it is important to separate these out. Skills included in this category include all written communication skills (correspondence, emails, documents), oral communication skills, facilitation skills, presentation skills, and—the most valuable—active listening. Active listening can be defined as "really listening" and the ability to listen with focus, empathy, and the desire to connect with the speaker.



**NOTE** The specific combination of skills that are required for a project manager to be successful on a given project vary depending on the size and nature of the project. For example, as a general rule, on larger projects, technical knowledge is less important than competence in the other skill categories.

**5.** Leadership Skills—This category overlaps with some of the others and focuses on the attitude and mindset required for project management. However, it also includes key skills such as interpersonal and general people relationship-building skills, adaptability, flexibility, people management, degree of customer orientation, analytical skills, problem-solving skills, and the ability to keep the big picture in mind.



**NOTE** In *PMBOK Guide* – Sixth Edition, PMI combines these key skill sets into three groups in the PMI Talent Triangle (shown in Figure 3.2):

**Technical project management**—The knowledge, skills, and behaviors related to specific domains of project, program, and portfolio management. The technical aspects of performing one's role.

**Leadership**—The knowledge, skills, and behaviors needed to guide, motivate, and direct a team, to help an organization achieve its business goals.

**Strategic and business management**—The knowledge of and expertise in the industry and organization that enhances performance and better delivers business outcomes.

I know, I know...after reading this, you are probably thinking either one or more of the following:

- "You must be kidding! I need to be good in all those areas to manage a project?"
- "Wait! I've been on projects before, and I've yet to see a project manager who could do all that."
- "Wait, you must be kidding! If anyone was excellent in all those areas, they'd be a CxO of our company."

To help answer all these questions, please understand two important observations:

- 1. Many projects are not successful.
- **2.** You do not need to get an "A" in all these categories to be successful as a project manager.

The key is that the project manager has the right mix of skills to meet the needs of the given project. In addition, a self-assessment against these skill categories enables you to leverage your strengths, compensate for your deficiencies, and focus your self-improvement program.

## **Qualities of Successful Project Managers**

Given the many roles played by a project manager, the broad range of skills needed, and the inherent challenges in successfully delivering a project, we need to find ways to accelerate the learning process. Two key ways to accelerate our learning are understanding the qualities of successful project managers and understanding the common mistakes made by project managers. Successful project managers do not share personality types, appearances, or sizes, but they do share three important features:

- They excel in at least two of the five key skill categories (Project Management Fundamentals, Business Management Skills, Technical Knowledge, Communication Skills, Leadership Skills) and are either good enough in the other categories or staff their teams to compensate for their deficiencies.
- 2. They avoid the common mistakes described in the next section.
- **3.** They bring a mindset and approach to project management that is best characterized by one or more of the following qualities:
  - **Takes ownership**—Takes responsibility and accountability for the project; leads by example; brings energy and drive to the project; without this attitude, all the skills and techniques in the world will only get you so far.
  - **Savvy**—Understands people and the dynamics of the organization; navigates tricky politics; has the ability to quickly read and diffuse emotionally charged situations; thinks fast on his feet; builds relationships; leverages personal power for benefit of the project.
  - Intensity with a smile—Balances an assertive, resilient, tenacious, resultsoriented focus with a style that makes people want to help; consistently follows up on everything and their resolutions without annoying everyone.
  - Eye of the storm—Demonstrates ability to be the calm eye of the project hurricane; high tolerance for ambiguity; takes the heat from key stakeholders (CxOs, business managers, and project team); exhibits a calm, confident aura when others are showing signs of issue or project stress.
  - **Strong customer-service orientation**—Demonstrates ability to see each stakeholder's perspective; able to provide voice of all key stakeholders (especially the sponsor) to the project team; has strong facilitation and collaboration skills; and has excellent active listening skills.
  - **People-focused**—Takes a team-oriented approach; understands that methodology, process, and tools are important, but without quality people it's very difficult to complete a project successfully.
  - Always keeps "eye on the ball"—Stays focused on the project goals and objectives. There are many ways to accomplish a given objective, which is especially important to remember when things don't go as planned.

- **Controlled passion**—Balances passion for completing the project objectives with a healthy detached perspective, which enables him to make better decisions, to continue to see all points of view, to better anticipate risks, and to better respond to project issues.
- Healthy paranoia—Balances a confident, positive outlook with a realism that assumes nothing, constantly questions, and verifies everything.
- **Context understanding**—Understands the context of the project—the priority that your project has among the organization's portfolio of projects and how it aligns with the overall goals of the organization.
- Looking for trouble—Constantly looking and listening for potential risks, issues, or obstacles; confronts doubt head-on; deals with disgruntled users right away; understands that most of these situations are opportunities and can be resolved upfront before they become full-scale crisis points.

## **15 Common Mistakes of Project Managers**

Although we review many of the common errors made in each of the fundamental areas of project management throughout this book (so you can avoid them), understanding the most common project management mistakes helps focus our efforts and helps us to avoid the same mistakes on our projects. The following are some of the most common mistakes made by project managers:

- **1.** Not clearly understanding how or ensuring that the project is aligned with organizational objectives.
- 2. Not properly managing stakeholder expectations throughout the project.
- **3.** Not gaining agreement and buy-in on project goals and success criteria from key stakeholders.
- **4.** Not developing a realistic schedule that includes all work efforts, task dependencies, bottom-up estimates, and assigned leveled resources.
- 5. Not getting buy-in and acceptance on the project schedule.
- 6. Not clearly deciding and communicating who is responsible for what.
- 7. Not utilizing change control procedures to manage the scope of the project.
- 8. Not communicating consistently and effectively with all key stakeholders.

- 9. Not executing the project plan.
- **10.** Not tackling key risks early in the project.
- **11.** Not proactively identifying risks and developing contingency plans (responses) for those risks.
- **12.** Not obtaining the right resources with the right skills at the right time.
- **13.** Not aggressively pursuing issue resolution.
- 14. Inadequately defining and managing requirements.
- **15.** Insufficiently managing and leading the project team.

## THE ABSOLUTE MINIMUM

At this point, you should have a high-level understanding of the following:

- The different roles played by the project manager
- The five key skill areas every project manager should master
- The common qualities of successful project managers
- The common mistakes made by project managers





The map in Figure 2.1 summarizes the main points we reviewed in this chapter.

#### FIGURE 2.1

Project manager overview.

This page intentionally left blank

## Index

## Numbers

15% completion rule, 140 "90% done" phenomenon, 150

## Α

absorption of projects, 322 AC (Actual Costs), 148 acceptance criteria, 62 acceptance of risk, 199 accountability, 152 accuracy levels for work estimation, 99 acquisition of resources, 63 action, 138 active listening, 26 Actual Costs (AC), 148 agendas (meeting), 252 agile project management, 382-386 aligner role, 227 alignment of projects, 35, 294 allocation of resources, 116–117 Alternative Project Approaches section (Project Definition documents), 51 analogous (top-down) estimating, 97 Approvals section (change request forms), 164 archive folders, 179-180 assigned resources, displaying in Microsoft Project, 350 assignments, 283-284

assumptions avoidance of, 266 defined, 209 document assumptions, 50, 126 tracking, 166 Assumptions section (Project Definition documents), 50 audio conferencing, 249 auditors (QA), 143, 208, 218 Audits section (CM Plans), 181 autolinked tasks (Microsoft Project), 338 avoidance of risk, 199

## В

BAC (Budget at Completion), 148 backlogs, 384 backups, repository, 178 baselines establishing, 141, 176 in Microsoft Project, 329, 336 resetting, 146, 152 best practices configuration management, 175-180 issue management, 191–192 Microsoft Project, 337–343 project communications communications option, 247-250 email and text-only communication, 250-251 general communications management, 245-247

interpersonal skills, 252 - 253meetings, 252–253 status reporting, 251-252 work estimation, 99 big-picture scope, 385–386 BOM (Bill of Materials), 83 bottom-up estimating, 97 breach of contract, 322 budget accuracy level, 99 Budget at Completion (BAC), 148 budgets challenges of, 131–132 finalizing, 130-131 impact of, 124–125 initial budget development, 130 overview of, 123-124 planning, 126–127 principles of, 125–126 project costs, sources of, 127-129 as source of risk, 205 summary of, 133 buffers efficiency of, 396 feeder buffers, 395 including in budgets, 126 monitoring flow of, 396 project buffers, 395 resource buffers, 395 build/release process, 178 Bulldog role, 25 business management skills, 26 business risk factors, 204 buyer organizations, management of, 307–309

#### С

calendars (Microsoft Project), 328-330 calmness under pressure, 28 canceled projects, 146 cancelled projects, 322 CAPM (Certified Associate Project Management Professional), 401 CCB (change control board), 164 CCPM (critical chain project management), 100, 394-396 central information repository establishing, 175 updating, 319 certification (PMP), 18 eligibility for, 408 exam tips "context" differences, 408-409 exam preparation strategies, 416-417 exam topics not covered by PMBOK, 415 exam-taking tips, 417-418 "experience" differences, 409-410 key resources, 419 overview of, 407-408 PMI PMP Examination Content Outline, 416 PMI's vision of project management, 411-412 question types and formats, 414-415 summary of, 419 terminology differences, 410-411 types of, 401-402 value of, 401-402 Certified Associate Project Management Professional (CAPM), 401 challenges of project management difficult resources, 368-369 hard milestone data, 365-367

lack of schedule detail, 364-365 project management "lite" cultures, 362-364 resource turnover, 369-370 testing process, 375-378 vendor selection, 370-375 change (project) CCB (change control board), 164 challenges of, 166–167 change control management change control plans, 70 defined, 138 lack of, 37 change request forms, 163-164 change request tracking logs, 164 configuration management, relationship with, 157–158 defined, 156 impact of, 37, 202 management fundamentals for, 159-160 minimizing, 164-166 organizational change management, relationship with, 157-158 overview of, 155-156 project change control systems components of, 163-164 defined, 156 guidelines for, 162 principles of, 162 scope creep and, 155–156 summary of, 169 types of, 157 unplanned scope changes, causes of, 160-161 change control board (CCB), 164 Change Information section (change request forms), 163 change requests forms, 42, 163-164 tracking logs, 164 Change Working Time option (Microsoft Project), 339 charters (team), 282

charts Gantt charts, 119, 410 milestone charts, 41, 119 project organization charts, 41, 67-68 checklists project definition checklist, 52 - 55project end checklist, 318 project plan checklist, 72 value of, 217 checkpoints, 142 clarity, importance of, 36, 152, 243, 278 client acceptance, documenting, 318-319 Closing process group, 11. See also closure, project closure, meeting, 253 closure, project challenges of, 320-321 checklist for, 318 contract termination, 321-322 key principles, 318 overview of, 317 project termination, 322 summary of, 324 CM Plans, 70, 172, 180–181 coach role, 24, 227 collaboration, 16 collaborative development, 384 fostering on project teams, 281 project/team collaboration tools, 250 tools for building issue logs with, 190 web-based project management, 396–398 collapse of projects, 322 color-coding reports, 252 commitment of project teams, 278 from resource managers, 293-294

communications management challenges of, 240-242 communication plans, 41 communications options, 247-250 communications plans, 70 cross-cultural projects, 296 cross-functional projects, 293-295 defined, 238-239 description of, 13 email and text-only communication, 250-251 general communications management, 245-247 importance of, 240 interpersonal skills, 252-253, 255 meetings, 252-253 overview of, 237 planning, 242-243 political implications, 244 poor communication, 36 principles of, 242-244 proactive communication, 244 push/pull, 246 skills, 26 status reporting, 251-252 team differences, managing, 291-292 virtual projects, 299 compelling communication, 243 competing demands, 15 completion criteria challenges of, 150 importance of, 142, 218 lack of, 38 completion of projects, 322 comprehensive budgets, 126 compressing project schedules, 117-118 conceptual understanding questions (PMP exam), 414 conciseness, importance of, 243 confidentiality agreements, 374 configuration management advantages of, 173-174

best practices, 175–180 challenges of, 182 CM Plans, 70, 172, 180-181 defined, 139, 172 overview of, 171-172 principles of, 174–175 project change, relationship with, 157-158 summary of, 184 conflicts resolution of, 283 resource conflicts, 37 consensus (team) estimating, 99 consistency importance of, 243 as leadership skill, 232 project control and, 140, 151 constraints defined, 209 project definition, 50 tracking, 166 Constraints section (Project Definition documents), 50 "context" differences (PMP exam), 408-409 context understanding, 29 contracts, 311-314 elements of, 312 legality of, 311-312 terminating, 321-322 types of, 312-314 Contractual WBS (CWBS), 83 control, project. See project control copy feature (Project 2010), 354 Copy Picture function (Microsoft Project), 334, 345 corporate governance processes, 393-394 cost management budgets impact of, 124–125 initial budget development, 130 overview of, 123-124 planning, 126–127 principles of, 125-126

sources of project costs, 127-129 description of, 13 time and cost accounting logistics, 150 Cost Performance Index (CPI), 148 Cost Reimbursable (CR) contracts, 312-314 Cost Variance (CV), 148 courtesy, importance of, 243 CPI (Cost Performance Index), 148 CR (Cost Reimbursable) contracts, 312-314 critical chain project management (CCPM), 100, 394-396 critical paths, 338 critical success factors, 260-263 cross-cultural projects, 296 cross-functional projects, 292-295 culture cross-cultural projects, 296 organizational culture, 140 custom fields (Microsoft Project), 330 customer-service orientation, 28, 216, 220 CV (Cost Variance), 148 CWBS (Contractual WBS), 83

#### D

daily standup, 384 databases Microsoft Project autolinked tasks, 338 baselines, 329, 336 calendars, 328–330 Copy Picture function, 334, 345 custom fields, 330 date entry, 327, 337 default settings, 329, 337

How can we make this index more useful? Email us at indexes@quepublishing.com

dependencies, 340 filters, 335 Gantt Bar format, 333 Group By feature, 335–336 milestones, 339 new project best practices, 337-343 Office 365 Planner, 356-357 overview of, 325-329 Project 2010, 352-354 Project 2013, 355 Project 2016, 356 Project Online, 355 project scheduling with, 349-351 reporting, 343-349 resource leveling, 341-342 Show Outline feature, 335 summary of, 359 task display, 333 task duration, 328 timescale, 334 version comparison, 357 visual indicators, 331-333 WBS (work breakdown structure), 334-335 pros and cons of, 190 dates, entering into Microsoft Project, 327, 337 defects, 209 definitive accuracy level, 99 deliverables, managing advantages of, 173–174 best practices, 175–180 challenges of, 182 configuration management plans, 172, 180-181 defined, 172 deliverable summary, 42 deliverable trackers, 177 managing to, 364-365 overview of, 171-172 pre-verifying, 220 principles of, 174-175 summary of, 184 dependencies defined, 209 in Microsoft Project, 340

deployments product/system release deployment process, 178 verifying, 208 detection, 137 deterioration of projects, 322 development versus operations, 179 diagrams, network, 120 differences, managing, 290-301 cross-cultural projects, 296 cross-functional projects, 293-295 management principles, 290-293 virtual projects, 296-299 difficult resources, managing, 368-369 direct audio (telephone) communication, 248 directory structure, 176 Directory Structure section (CM Plans), 180 discipline, 187 displacement of projects, 322 disposal costs, 129 distributed teams, 151 documents assumptions, 126 **Project Definition** documents, 40, 48 optional elements, 51-52 required elements, 49-50 validating, 62 project plans alternate terms for, 410 building, 62–70 checklist for, 72 description of, 81 key principles, 58-60 overview of, 42, 57-58 questions to ask, 60–62 review and acceptance process, 72 rolling wave planning, 58 summary of, 74 supplemental components, 70-72

double reverse logic questions (PMP exam), 414 Drawing Tools (Project 2010), 354 dysfunctional relations, 294

#### Ε

EAC (Estimate at Completion), 148 Earned Value (EV), 148 Earned Value Management (EVM), 146–150, 396 effective leadership, elements of, 230–233 effort distribution estimating, 97 email (electronic mail), 248, 250-251 end dates, entering into Microsoft Project, 327, 337 ending projects challenges of, 320-321 checklist for, 318 contract termination, 321–322 key principles, 318 overview of, 317 project termination, 322 summary of, 324 epic scope, 384 equipment costs, 128 escalation procedures, 143–144, 188 Estimate at Completion (EAC), 148 Estimate to Complete (ETC), 148 estimating project work accuracy levels, 99 best practices, 100–101 challenges of, 17 common problems with, 95-97 methods of, 98–99 overview of, 91-92 risk management and, 94–95 role in overall planning process, 92-94

summary of, 103 techniques for, 97–98 ETC (Estimate to Complete), 148 EV (Earned Value), 148 evaluation process (vendors), 373-374 EVM (Earned Value Management), 146-150, 396 exam tips (PMP) "context" differences, 408-409 exam preparation strategies, 416-417 exam topics not covered by PMBOK, 415 exam-taking tips, 417-418 "experience" differences, 409-410 key PMI assumptions and themes, 412-413 kev resources, 419 overview of, 407-408 PMI PMP Examination Content Outline, 416 PMI's vision of project management, 411-412 question types and formats, 414-415 summary of, 419 terminology differences, 410-411 exception-based reporting, 252 Executing process group, 11 execution of projects, expectation management and, 261-264 expectation management components of, 260-265 control and execution elements, 268 kickoff meetings, 268-270 planning elements, 266–267 principles of, 265-266 for project control, 140 for project quality, 216 for project teams, 279 reality/perception balance,

259

requirements management, 270–273 summary of, 275 value of, 258 "experience" differences (PMP exam), 409–410 expert judgement, 98 expertise, leveraging, 221, 283 external risk factors, 203 extreme programming (XP), 385

#### F

face-to-face communication, 248 facilitating meetings, 252 facilitator role, 24, 227, 232 facilities, as source of risk, 203 feeder buffers, 395 File Naming Conventions section (CM Plans), 181 file-naming conventions, 176, 181 filters (Microsoft Project), 335 finalization of budgets, 130-131 Fixed Price (FP) contracts, 312-314 focus, maintaining, 279 footers (Microsoft Project), 339 formal signoffs, 142 forms, change request forms, 163-164 FP (Fixed Price) contracts, 312-314 functional leaders, 293 funding, as source of risk, 203

## G

Gantt Bar format (Microsoft Project), 333, 344 Gantt charts, 119, 333, 344, 410 gatekeepers, 175 general communications management, 245–247

Goals and Objectives section (Project Definition documents), 49

gold-plating, 222

governance process, 393-394

Greenleaf, Robert, 234

Group By feature (Microsoft Project), 335–336

groups, process, 10-13

## Η

hammock tasks, 351 hard milestone data, 365-367 headers (Microsoft Project), 339 Health Insurance Portability and Accountability Act (HIPAA), 386-388 healthy paranoia, 196 Help menu (Microsoft Project), 327 heuristic estimating, 97 hidden work, 151 high-maintenance staff, 286 high-performing teams, traits of, 278 HIPAA (Health Insurance Portability and Accountability Act), 386–388 historical information, 98

Identification section (change request forms), 163

impact assessment, 163, 198, 261–263

Impact Assessment section (change request forms), 163

independent QA auditors, 143, 218

How can we make this index more useful? Email us at indexes@quepublishing.com

initial budget development, 130 Initiating process group, 11 instant messaging, 249 integration management, 13 interim milestones, 367 interpersonal skills, 252–253 issue data points, 188–189 issue logs, 188-191 administrators, 188 issue data points, 188-189 special situations in, 192-193 tools for, 189-190 visibility of, 192 issue management best practices, 191–192 defined, 139 escalation procedures, 188 issue logs, 188–191 issue resolution, 152 objectives of, 186-187 overview of, 185-186 principles of, 186-187 process of, 188 risk management, 209 special situations in, 192–193 summary of, 194 iterative development, 382 iterative process, budgets and, 125

#### J-K

Keyword Conventions section (CM Plans), 181 keywords, 176, 181 kickoff meetings, 268–270, 282, 294 knowledge areas (*PMBOK Guide*), 13

labor costs, 128, 132 leadership skills for cross-cultural projects, 296

for cross-functional projects, 292-295 effective leadership, elements of, 230-233 functional leaders, 293 importance of, 26 integration of, 225-226 leadership qualities, 227-228 leadership roles, 226-227 project leadership areas, 229-230 servant leadership approach, 234-235, 291 shared leadership, 285 summary of, 236 for virtual projects, 296-299 legality of contracts, 311–312 lessons learned, 319 leveling resources, 116–117 Librarian role, 25 license costs, 129 listening, active, 26 logs, project, 42 change request tracking logs, 164 issue logs, 188–191 administrators, 188 issue data points, 188-189 special situations in, 192-193 tools for, 189-190 visibility of, 192 risk registers, 201

## Μ

management. See project management management reserve, 126 management support, lack of, 35 marketability, improving, 280 materials, bill of (BOM), 83 materials costs, 129 meetings best practices, 252–253 daily standup, 384

kickoff meetings, 268–270, 282, 294 retrospectives, 385 status meetings, 141 time management in, 282 virtual meetings, 298 memorization questions (PMP exam), 414 Microsoft Office 365 Planner, 356-357 Microsoft Project autolinked tasks, 338 baselines, 329, 336 calendars, 328-330 Copy Picture function, 334, 345 custom fields, 330 date entry, 327, 337 default settings, 329, 337 dependencies, 340 filters, 335 Gantt Bar format, 333 Group By feature, 335-336 milestones, 339 new project best practices, 337-343 Office 365 Planner, 356-357 overview of, 325-326 Project 2010, 352-354 Project 2013, 355 Project 2016, 356 Project Online, 355 project scheduling with, 349-351 reporting, 343-349 resource leveling, 341-342 Show Outline feature, 335 summary of, 359 tables, 327-329 task display, 333 task duration, 328 timescale, 334 version comparison, 357 visual indicators, 331-333 WBS (work breakdown structure), 334-335 Microsoft Project files, 59 milestones hard milestone data, 365-367 importance of, 142

interim milestones, 367 managing to, 364 in Microsoft Project, 339 milestone charts, 41, 119 Mindjet MindManager, 115 mind-mapping tools, 399-400 minimizina project change, 164–166 scope changes, 159-160 minutes of meetings, 253 mitigation of risk, 200 modified WBS (work breakdown structure), 120 Monitoring and Controlling process group, 11, 137. See also project control monitoring risk, 199 Move Project feature (Project 2010), 354 mutual agreement, contract termination by, 322

## Ν

NDA (nondisclosure agreements), 374 network diagrams, 120 New Tasks Created Scheduling Option to Auto Schedule setting (Microsoft Project), 339 nondisclosure agreements (NDA), 374 notebooks, project, 43 note-taking during meetings, 253

OBS (Organizational Breakdown Structure), 83 Office 365 Planner, 356–357 online resources, 20, 419 operational costs, 129 operations versus development, 179

versus projects, 8-10 order of magnitude accuracy level, 99 organization culture of, 140 **OBS** (Organizational Breakdown Structure), 83 organizational change management, 157-158 organizational impacts, 16 as source of risk, 202 Organizational Breakdown Structure (OBS), 83 Organizational Change Issues section (Project Definition documents), 51 organizer role, 24 orientation of team members. 284

Out-of-Scope Specifications section (Project Definition documents), 49

overhead costs, 129

ownership, taking, 28, 232

## Ρ

Page Setup (Microsoft Project), 339, 345 parametric estimating, 98 paranoia, 29 Parkinson's Law, 395 passion, controlled, 29 paste feature (Project 2010), 354 PBS (Project Breakdown Structure), 83 PDA (prevention, detection, and action), 137-138 PDF output (Project 2010), 354 people-focused project management, 28, 384 perception/reality balance, 259 performance of project teams high-performing teams, traits of, 278

management principles for, 278-281 overview of, 277-278 performance evaluations, 320 problem situations with, 285-286 summary of, 288 team differences, 290-301 cross-cultural projects, 296 cross-functional projects, 292-295 management principles for, 290-293 summary of, 301 virtual projects, 296-299 techniques for, 282-285 performance reporting, 138, 144-145 Personally Identifiable Information (PII), 387 persuader role, 24 PERT (weighted average), 98 PfMP (Portfolio Management Professional), 401 PgMP (Program Management Professional), 401 phased deployment, 208, 367, 383 phased estimating, 98 PHI (Protected Health Information), 387 PII (Personally Identifiable Information), 387 plan-do-review model, 383 Planned Value (PV), 148 planner role, 24, 227 Planning process group, 11. See also plans plans communications plans, 41, 242-243 configuration management plans, 180–181 expectation management, 266-267 inadequate planning, 37

How can we make this index more useful? Email us at indexes@quepublishing.com

Planning process group, 11 project plans, 42 alternate terms for, 410 building, 62-70 checklist for, 72 description of, 81 key principles, 58-60 overview of, 57-58 questions to ask, 60-62 rolling wave planning, 58 summary of, 74 supplemental components, 70-72 quality management plans, 42, 216, 219 relationship with project definition, 47 response plans, 198 risk management plans, 71, 201 risk response plans, 42 staffing management plans, 42 team planning, 279 work plans, 82 PMBOK Guide -Sixth Edition, 3, 10 exam topics not covered by **PMBOK**, 415 knowledge areas, 13 PMI Talent Triangle, 26–27 process groups, 10–13 updates to, 13 PMI (Project Management Institute). See also PMBOK Guide - Sixth Edition; PMP (Project Management Professional) certification key assumptions and themes, 412–413 key PMI assumptions and themes, 412-413 key resources, 419 project management, definition of, 10 projects, definition of, 9 standards documents, 19-20 Talent Triangle, 26–27 vision of project management, 411-412 website, 10

PMI-ACP (PMI Agile Certified Practitioner), 382 PMI-PBA (PMI Professional in Business Analysis), 401 PMI-RMP (PMI Risk Management Professional), 401 PMI-SP (PMI Scheduling Professional), 401 PMOs (project management offices), 105 responsibilities of, 388-390 successful PMOs, traits of, 390-392 PMP (Project Management Professional) certification, 18 eligibility for, 408 exam tips "context" differences, 408-409 exam preparation strategies, 416-417 exam topics not covered by PMBOK, 415 exam-taking tips, 417-418 "experience" differences, 409-410 key resources, 419 overview of, 407-408 PMI PMP Examination Content Outline, 416 PMI's vision of project management, 411–412 question types and formats, 414-415 summary of, 419 terminology differences, 410-411 types of, 401-402 value of, 401-402 point person role, 24, 227 Policies and Standards section (Project Definition documents), 51 political implications of communication, 244 Portfolio Management Professional (PfMP), 401 PPM (Portfolio Project

Management), 48, 392–393

Preliminary Cost, Schedule, and Resource Estimates section (Project Definition documents), 51 preliminary schedules, building, 115-116 presenting project schedules, 119-120 prevention, 137 pre-verifying deliverables, 220 price wars, 36 priorities focus on, 139 risk, 198 privacy, 386-388 proactive communication, 244 proactive project management, 59 probability determining, 197 probability/impact matrix, 201 problem solver role, 227 Process and Procedures section (CM Plans), 181 process groups (PMBOK Guide), 10-13 procurement management, 139 description of, 13 plans, 71 productivity, facilitating, 279 product/system release deployment process, 178 profiles, risk, 197, 201 Program Management Professional (PgMP), 401 progress tracking, 38 Project. See Microsoft Project project alignment, 294 project approach, 54 Project Breakdown Structure (PBS), 83 project budgets challenges of, 131-132 finalizing, 130-131 impact of, 124-125

initial budget development, 130 overview of, 123-124 planning, 126–127 principles of, 125-126 as source of risk, 205 sources of project costs, 127-129 summary of, 133 project buffers, 395 Project calendars (Microsoft Project), 328-329 project cancellation, 146 project change CCB (change control board), 164 challenges of, 166–167 change request forms, 163-164 change request tracking logs, 164 configuration management, relationship with, 157–158 defined, 156 management fundamentals for, 159-160 minimizing, 164–166 organizational change management, relationship with, 157–158 overview of, 155-156 project change control systems components of, 163–164 defined, 156 guidelines for, 162 principles of, 162 scope creep and, 155–156 summary of, 169 types of, 157 unplanned scope changes, causes of, 160-161 project change control systems components of, 163–164 defined, 156 guidelines for, 162 principles of, 162 project charters, 40, 410

project closure challenges of, 320-321 checklist for, 318-320 contract termination. 321-322 key principles, 318 overview of, 317 project termination, 322 summary of, 324 project communications challenges of, 240-242 communications option, 247-250 defined, 238-239 description of, 13 email and text-only communication, 250-251 general communications management, 245–247 importance of, 240 interpersonal skills, 252-253 meetings, 252-253 overview of, 237 planning, 242-243 political implications of, 244 principles of, 242-244 proactive communication, 244 push/pull, 246 status reporting, 251-252 summary of, 255 Project Context section (Project Definition documents), 49 project control action, 138 challenges of, 150-151 components of, 138–139 defined, 136–137 detection, 137 EVM (Earned Value Management), 146–150 management fundamentals for, 139-140 overview of, 135-136 performance reporting, 144-145 prevention, 137 project recovery, 151-152 summary of, 154 techniques for, 141–144 variance responses, 146

Project Definition documents, 40,48 required elements, 49–50, 51-52 validating, 62 project definition process checklist, 52-55 project definition checklist, 52 - 55**Project Definition** documents, 48 recommended additions to, 51-52 required elements, 49-50 questions to ask, 46 relationship with project planning, 47 as source of risk, 205 summary of, 56 project deliverables, managing advantages of, 173–174 best practices, 175–180 challenges of, 182 configuration management plans, 172, 180-181 defined, 172 deliverable trackers, 177 overview of, 171-172 principles of, 174-175 summary of, 184 **Project Dependencies** section (Project Definition documents), 49 project end checklist, 318 project execution, expectation management and, 261-264 project impact, 261-263 Project Information dialog (Microsoft Project), 337 project issue management best practices, 191–192 escalation procedures, 188 issue logs, 188–191 objectives of, 186-187 overview of, 185-186 principles of, 186–187 process of, 188 special situations in, 192–193 summary of, 194

How can we make this index more useful? Email us at indexes@quepublishing.com

project logs, 42, 164 project management CCPM (critical chain project management), 394-396 challenges of, 15–17 difficult resources. 368-369 hard milestone data, 365-367 lack of schedule detail, 364-365 project management "lite" cultures, 362-364 resource turnover. 369-370 testing process, 375-378 vendor selection, 370-375 definition of, 8 demand for, 17-18 key aspects of, 10 knowledge areas, table of, 13 online resources, 20 portfolio project management, 48 process groups, 10-13 as source of risk, 204-205 summary of, 21, 380 training, 402-403 trends in, 18-19 triple constraint of, 16 value of, 14-15 web-based project management, 396-398 Project Management Institute. See PMI (Project Management Institute) project management "lite" cultures, 362-364 project management offices. See PMOs (project management offices) Project Management Professional (PMP) certification. See PMP (Project Management Professional) certification project managers common mistakes of, 29-30 inadequate managers, 37

key roles of, 24-25, 226-227 kev skills of, 25-27 gualities of, 27-29, 227-228 summary of, 31 tools for, 40-43 project notebooks, 43 project organization charts, 41, 67-68 project phases, managing to, 365 project plans alternate terms for, 410 building, 62-70 checklist for, 72 description of, 81 key principles, 58-60 overview of, 42, 57-58 questions to ask, 60-62 review and acceptance process, 72 rolling wave planning, 58 summary of, 74 supplemental components, 70-72 project quality management challenges of, 221-223 description of, 13 overview of, 213-214 principles of, 215-217 quality defined, 214-215 strategies for, 220–221 summary of, 224 tools and techniques for, 217-219 project recovery, 151-152 project repositories. See repositories project schedules, 13, 41 challenges of hard milestone data, 365-367 lack of schedule detail, 364-365 compared to WBS (work breakdown structure), 79-82 creation process, 112-113 description of, 81 goals of, 110

impact of, 106-109 key inputs for, 110–111 in Microsoft Project, 349-351 overview of, 105-106 preliminary schedules, building, 115-116 presenting, 119-120 reality checks, performing, 116-117 scheduling software, 115 shortening, 117-118 short-term schedules, 383 as source of risk, 203, 205 summary of, 121 task relationships, determining, 113-115 walking through, 118–119 project scope management, 13 project size, as source of risk, 202 Project Solver role, 24 project sponsors, 36, 202 project teams high-performing teams, traits of, 278 management principles for, 278-281 overview of, 277-278 problem situations with, 285-286 project/team collaboration tools, 250 as source of risk, 203 summary of, 288 team differences cross-cultural projects, 296 cross-functional projects, 292-295 key principles for, 290–293 management principles for, 290-293 summary of, 301 virtual projects, 296-299 techniques for, 282–285 project termination, 322 projects, definition of, 8 Protected Health Information (PHI), 387

pull communications, 246 Purpose section (Project Definition documents), 49 push communications, 246 PV (Planned Value), 148

#### Q

QA auditors, 143, 208, 218 quality management, 139 challenges of, 221–223 description of, 13 overview of, 213–214 plans, 42, 71, 219 principles of, 215–217 quality defined, 214–215 quality management plans, 42 strategies for, 220–221 summary of, 224 tools and techniques for, 217–219 quartermaster role, 24

## R

RACI matrix, 64-67 RASIC matrix, 64–67 **RBS** (Resource Breakdown Structure), 83 reality checks, performing, 116-117 reality/perception balance, 259 **Recommended Project** Approach section (Project Definition documents), 50 recovery, 151-152 References to Supporting Documents section (Project Definition documents), 51 Relation to other CM Plans section (CM Plans), 181 relationships building, 244 between tasks, determining, 113-115

remote development, 386 Reporting section (CM Plans), 181 reports color-coding, 252 Microsoft Project reporting, 343-349 performance reporting, 138, 144-145 status reports, 41, 251-252 repositories, 43, 283 backups, 178 central information repository establishing, 175 updating, 319 Repository section (CM Plans), 180 Requester Information section (change request forms), 163 requirements management, 41, 139 challenges of, 270-271 guidelines for, 273 principles of, 272 requirements as source of risk, 202 requirements definition, 161, 295 requirements traceability matrix, 142 tools for, 398-399 requirements traceability matrix, 142, 217 resetting baselines, 146, 152 resiliency, 232 Resource Breakdown Structure (RBS), 83 resource buffers, 395 Resource calendars (Microsoft Project), 328-329 resource leveling, 116-117, 335, 341-342 resource management acquisition of resources, 63 description of, 13 difficult resources, 368-369

in Microsoft Project, 335, 339, 341-342, 349-350 plans, 71 resource buffers, 395 resource conflicts, 37 resource leveling, 116–117, 335 resource needs, determining, 63 resource schedules, updating, 320 resource turnover, 369-370 vendor selection, 370-375 resource managers, commitment from, 293-294 resource overallocation, detecting in Microsoft Project, 335 respect, earning, 231, 296 response plans, 198, 199-200 responsibility matrix, 41, 64-67.71 retrospectives, 385 reviews of project schedules, 118-119 of projects, 142 types of, 218 rewards, 281 risk, definition of, 209 risk management, 139, 209 agile approaches, 384 assumptions, 209 constraints, 209 defects, 209 dependencies, 209 description of, 13 gaps in, 206–207 issues, 209 overview of, 195-196 plans, 71, 201 principles of, 196–197 response options, 42, 199-200 risk assessment, 201 risk factors, 99 risk level, scaling process to, 371 risk profiles, 197, 201

How can we make this index more useful? Email us at indexes@quepublishing.com

risk registers, 201 sources of risk, 201-205 strategies for, 208 summary of, 211 terminology, 209 tools for, 200-201 unacknowledged risks, 206 undetected risks, 206 work estimation and, 94–95 risk profiles, 197, 201 risk registers, 201 risk response plans, 42 **Risks section (Project Definition** documents), 50 roles of project managers, 24-25, 226-227 updating in project plans, 65-67 Roles and Responsibilities section (CM Plans), 181 rolling wave planning, 58

## S

salesperson role, 227 scale of project, 139 schedule management, 13, 41 challenges of hard milestone data. 365-367 lack of schedule detail, 364-365 description of, 13 in Microsoft Project, 349-351 project schedules creation process, 112-113 description of, 81 goals of, 110 impact of, 106–109 key inputs for, 110–111 overview of, 105-106 preliminary schedules, building, 115-116 presenting, 119-120 reality checks, performing, 116–117

shortening, 117-118 as source of risk, 203, 205 summary of, 121 task relationships, determining, 113–115 walking through, 118–119 resource schedules, updating, 320 scheduling software, 115 short-term schedules, 383 Schedule Performance Index (SPI), 148 Schedule Variance (SV), 148 scheduling software, 115 scope creep, 155-156 scope management, 13 big-picture scope, 385-386 description of, 13 project definition checklist, 53 - 54scope changes, minimizing, 159-160 scope creep, 155-156 unplanned scope changes, causes of, 160-161 Scope Specifications section (Project Definition documents), 49 SCRUM, 385 security, 386-388 selection process (vendors), 370-375 self-control, 233 seller organizations, management of, 310 The Servant as Leader (Greenleaf), 234 servant leadership approach, 234-235, 291 shortening project schedules, 117-118 short-term schedules, 383 Show Outline feature (Microsoft Project), 335 Show Project Summary Task checkbox (Microsoft Project), 337

signoffs, 142 situational questions (PMP exam), 414 SMART goals, 52 SMEs (subject matter experts), 385 smoke tests, 222 social networking tools, 250 SPI (Schedule Performance Index), 148 sponsorship, project, 202, 293 spreadsheets, 190 sprints, 384, 386 staffing management plans, 42 stakeholders analysis of, 245 buy-in, 36 definition of, 14 educating, 159 engagement of, 165 expectation management components of, 260-265 control and execution elements, 268 kickoff meetings, 268-270 principles of, 265-266 project planning elements, 266-267 reality/perception balance, 259 requirements management, 270-273, 275 value of, 258 management of, 13 perspective of, 231 project definition checklist, 54 as source of risk, 202 Stakeholders section (Project Definition documents), 50 standards quality standards, 218 standards documents, 19-20 start dates, entering into Microsoft Project, 327, 337 status checks, frequency of, 152

Status Information section (change request forms), 164 status meetings, 141 status reports, 41, 251-252 stories, 384 story problem questions (PMP exam), 414 strategic and business management, 27 student syndrome, 395 subject matter experts (SMEs), 385 Success Criteria section (Project Definition documents), 49 suppliers. See vendor management SV (Schedule Variance), 148 synergy of project teams, 278, 281

## Т

T&M (Time and Materials) contracts, 312-314 Table menu (Microsoft Project), 327 tables (Microsoft Project), 327 Talent Triangle, 26–27 targets, identifying, 216 Targets section (CM Plans), 180 Task calendars (Microsoft Project), 328-329 Task Display format (Microsoft Project), 333 Task Inspector (Project 2010), 353 tasks assignments, 283-284 defined, 384 duration, 328 entering into Microsoft Project, 339 hammock tasks, 351 relationships, determining, 113-115

Tasks Will Always Honor Their Constraint Dates checkbox (Microsoft Project), 338 teacher role, 233 team (consensus) estimating, 99 Team Planner (Project 2010), 354 teams high-performing teams, traits of, 278 management principles for, 278-281 overview of, 277-278 problem situations with, 285-286 project/team collaboration tools, 250 as source of risk, 203 summary of, 288 team differences cross-cultural projects, 296 cross-functional projects, 292-295 key principles for, 290-293 management principles for, 290-293 summary of, 301 virtual projects, 296-299 techniques for, 282-285 technical project management, 27 technology as source of risk, 203 technical difficulties, impact of, 38 technical knowledge, 26 telephone communication, 248 templates, 218 terminating contracts, 321-322 projects, 322 terminology differences, 410-411 testing process, 375-378 prioritizing, 221 risk management and, 208 smoke tests, 222

text wrap (Project 2010), 354 texting, 249 text-only communication, 250-251 Time and Materials (T&M) contracts, 312-314 timeboxing, 383 timeline summary, 119 Timeline View (Project 2010), 352 time-phased budgets, 125 timescale (Microsoft Project), 334, 345 time-zone conventions, 298 tools collaboration tools building issue logs with, 190 web-based project management, 396–398 mind-mapping tools, 399–400 project/team collaboration tools, 250 requirements management tools, 398-399 risk management tools, 200-201 social networking tools, 250 Tools section (CM Plans), 181 top-down (analogous) estimating, 97 top-down summary tasks (Project 2010), 353 total lifecycle, budgets and, 125 tracking deliverables, 177 training, 129, 402-403 transference of risk, 200 travel costs, 129 triple constraint of project management, 16 troubled projects, common reasons for, 35-38 trust earning, 231 in project teams, 278 turnover, managing, 369–370

How can we make this index more useful? Email us at indexes@quepublishing.com

## U

umbrella role, 24, 227 unacknowledged risks, 206 undetected risks, 206 unique identification numbers, 164 unplanned scope changes, 160–161 unstated expectations, 271 updating resource schedules, 320 user-controlled scheduling (Project 2010), 352–353

## V

V method, 143, 219 variance analysis, 146-150 variance management plans, 72 variance responses, 146 vendor management buyers, 307-309 contracts, 311-314 management principles for, 304-307 overview of, 303-304 sellers, 310 skills for, 311 summary of, 316 vendor selection, 370-375 vendors as source of risk, 203 verification of deployments, 208 importance of, 217

version numbering, 176 videoconferencing, 248 virtual projects, 296–299 virtual teams, 151 visibility, 152 visual indicators (Microsoft Project), 331–333 Visual Scope Summary section (Project Definition documents), 52 visualizing goals, 231 voice mail, 248

## W

walkthrough of project schedules, 118-119 WBS (work breakdown structure) building, 84-88 compared to project schedule, 79-82 defined, 78, 410 graphical, 76 guidelines for, 85–87 importance of, 83-84 knowing when to stop, 87-88 in Microsoft Project, 334-335 modified WBS, 120 outline, 76-78 overview of, 75-79 as source of risk, 205 summary of, 89 terminology used for, 81–82 types of, 82-83

weaknesses, compensating for, 233 web conferencing, 249-250 web-based project management, 396-398 websites. See online resources weighted average (PERT), 98 word processors, 190 work breakdown structure. See WBS (work breakdown structure) work decomposition process, 85 work estimation accuracy levels, 99 best practices, 100-101 challenges of, 17 common problems with, 95-97 methods of, 98-99 overview of, 91-92 risk management and, 94–95 role in overall planning process, 92-94 summary of, 103 techniques for, 97–98 work packages, 141, 218 work plans, 82 work products, 261-263 workflow process, 294

## X-Y-Z

XP (extreme programming), 385 XPS output (Project 2010), 354