

Microsoft®

Project 2010

Project Management

Real World Skills for Certification and Beyond



Exam 77-178

Robert Happy, PMP, MCT



SERIOUS SKILLS.

Table of Contents

Cover

Title Page

Praise

***Advance Praise for Microsoft Project 2010
Project Management***

Copyright

Publisher's Note

Dedication

Acknowledgments

About the Author

Table of Exercises

Introduction

How to Contact the Author

***Part I: Getting Started the Right
Way.***

Chapter 1: Project 2010 as an Enabling Tool for Project Managers

Why Do People Think Project Is Hard to Use?

When to Use Project

Strategic Importance of Project 2010

Improving Results with a Proven, Effective Approach

Summary

Key Terms

Chapter 2: Mapping the Project-Management Process Groups to Microsoft Project 2010

Mapping Project to Your Methodology Will Increase Effectiveness

An Overview of the PM Process Groups

Summary

Key Terms

Chapter 3: Overview of Enterprise Project Management

What Is EPM?

EPM as a Central Repository for Resources and Projects

Understanding Roles within EPM

Summary

Chapter 4: Getting Started and Setting Up the Microsoft Project Environment

Getting Started, and Moving Around Project Key Options and Settings You Need to Know About

Working with Calendars

Summary

Hands-On Exercises

Part II: Planning Essentials

Chapter 5: Creating and Entering the Work Breakdown Structure and Task Arrangement

What Is a WBS, and Why Is It Important?

Entering Your WBS: Phases, Tasks, and Milestones

Managing Your WBS

Summary

Hands-On Exercises

Chapter 6: Estimating and Entering Duration or Work

Estimating Duration vs. Estimating Work—What's the Difference?

Program Evaluation and Review Technique Summary

Hands-On Exercises

Chapter 7: Setting Dependencies and the Critical Path

Setting Dependencies

Using Constraints and Deadlines

Understanding and Viewing the Critical Path

Summary

Hands-On Exercises

Chapter 8: Assigning Resources and Costs

Setting Up Your Resource Pool

Assigning Resources and Costs

Analyzing Resource Usage and Resource Leveling

Summary

Hands-On Exercises

Chapter 9: Understanding the Calculation Engine for Automatic Scheduling

Six Factors that Drive the Calculation of Time (Dates and Duration) for Automatic Scheduling

Four Factors that Affect the Calculation of Cost

Switching from Manual Scheduling to Automatic Scheduling

Summary

Hands-On Exercises

Part III: Communicating and Reporting Essentials

Chapter 10: Understanding Views

Understanding Major View Components

Task Views

Resource Views

Summary

Hands-On Exercises

Chapter 11: Using Tables and Custom Fields

Creating Custom Fields

Using Tables and Creating Custom Tables

Summary

Hands-On Exercises

Chapter 12: Using Filters, Groups, and Sorts

Using Filters and Highlights

Using Groups

Using Sorts and Auto-filters

Summary

Hands-On Exercises

Chapter 13: Creating Custom Views, Formatting, and Reporting

Creating Custom Views

Formatting Text and Bar Styles

Sharing and Sending Project Information and Reports

Summary

Hands-On Exercises

Chapter 14: Creating Master Schedules with Inserted Projects

Creating Master Schedules

Critical Path Across Projects

Reporting and Analyzing Across Projects

Summary

Hands-On Exercises

Part IV: Tracking and Analyzing Essentials

Chapter 15: Setting and Maintaining Baselines

Understanding and Setting Baselines

Viewing Baselines

Maintaining Baselines

Summary

Hands-On Exercises

Chapter 16: Updating and Tracking Status

Understanding and Entering Percent Complete

Understanding and Entering Actuals

Summary

Hands-On Exercises

Chapter 17: Variance Analysis and Taking Corrective Action

Understanding Variance

Analyzing Variance and Taking Corrective Action

Earned-Value Analysis

Summary

Hands-On Exercises

Appendix A: Microsoft's Certification Program

How Do You Become Certified on Project 2010?

Tips for Taking a Microsoft Exam
Certification Objectives Map

Appendix B: About the Companion CD

What You'll Find on the CD
System Requirements

Using the CD
Troubleshooting

Index

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Back Insert

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Project 2010 Project Management:

Real World Skills for Certification and Beyond



Robert Happy, PMP, MCT



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Advance Praise for Microsoft Project 2010 Project Management

“Robert Happy has written a book that the novice and the expert both can benefit from reading. He explains how to use Microsoft Project throughout the life cycle of a project in a practical, straight forward manner that will help make any Project Manager more successful in using the tool.”

—Laura Pease, EPM Program Manager, Varian Medical Systems

“Thankfully I was referred to Robert Happy and the Project Management Practice after asking the question: isn’t there someone who can understand my projects and then teach me how to use this software to manage them? Please help me find a way to use this software in the “real” world! Robert’s approach effectively taught me how to break down a project into manageable steps and then link them together to effectively manage results. Robert was able to tie in the right level of project management process and concepts with the tools to make it work best for me. All of this and more is captured in this book which I am sure you will find as an invaluable resource to learning Project 2010.”

—Carol S. Myers, Vice President, Project Planning and Management, Takeda Global Research and Development Center

“Rob truly has a talent for training Project Managers. He knows how to bring together the theories of Project Management practices and the capabilities of project tools. I have used Robert to train several groups of Project Managers with varying levels of ability and he is always

able to position the training in a way that strengthens their skills. In this book he does a thorough job of filling the gap between Project Management process and the use of Microsoft Project as a tool. His use of real-world examples and the hands-on exercises in the book help to solidify the techniques and tips that he delivers in each chapter. I think this book will be a useful guide to anyone trying to improve their knowledge of Project 2010.”

—Annie Fitzgerald, MBA, MCTS, Project MPUG Board Member, Phoenix

The combination of Project Management theory, scheduling best practices, hands-on exercises, tips, and Real World Scenarios make this book an excellent scheduling primer, instructional guide, and reference for schedulers at all levels. Robert Happy is not only an excellent instructor and presenter, but he has done a phenomenal job of blending all these elements together into his new book, based on the new release of Microsoft Project 2010. Highly recommended reading, if you want to learn how to properly develop and maintain a schedule using Microsoft Project. The exercises thoroughly reinforce the knowledge presented; the Real World Scenarios provide excellent anecdotal evidence of the importance behind the best practices, presented throughout the book; and the material is logically organized making this an excellent reference text.

—Doc Dochtermann, PMP, PMI-SP, PMI Technology Member Advisory Group

Robert understands the blend and importance of linking process, people, tools, and purpose. Most organizational representatives have a biased perspective according to their role and expertise. Robert’s training and consulting have a way of bringing them together successfully and helping organizations, teams, and individuals successfully transform into a holistic Project Management

environment. Robert has now accomplished the same thing with this book. When Robert says that using Microsoft Project is easy, he is absolutely correct. What it takes, however, is an understanding of the process to plug into the tool. You follow the process, the tool does the work. Robert's book will bring it together, from purpose, vision, people, process, tools, and finally to results. I highly recommend this book to those who want to significantly improve an important competency.

—G. Lynne Snead, President, Insight Systems Consulting and Talent Evolution Systems

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Thank you for choosing *Microsoft Project 2010 Project Management: Real World Skills for Certification and Beyond*. This book is part of a family of premium-quality Sybex books, all of which are written by outstanding authors who combine practical experience with a gift for teaching.

Sybex was founded in 1976. More than 30 years later, we're still committed to producing consistently exceptional books. With each of our titles, we're working hard to set a new standard for the industry. From the paper we print on, to the authors we work with, our goal is to bring you the best books available.

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Best regards,

A handwritten signature in black ink, appearing to read 'Neil Edde', written in a cursive style.

Neil Edde
Vice President and Publisher
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To my loving wife, Charlotte, and three sons, Nicholas, Alexander, and Lucas. You make my life complete, gratifying, and out of the ordinary. And to my Mother, who would be proud.

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I would also like to acknowledge my business partners from our company, Project Management Practice, Inc., with whom I have been consulting and training in project management for many years. Keith Wilson, whom I have been working with for almost 20 years now: thank you for all you do—you're the king of execution, which is always key to our success. Sean Creaghan is the eternal optimist and relationship builder extraordinaire, who understands our business and keeps us glued together. David Blair takes patience and expertise to new levels. David has been there for me in many challenging client situations and always comes through with phenomenal solutions where no one else can. Charity Howder makes sure I stay on track and allows me to focus on what is important while ensuring the details are well looked after.

I want to thank Jeff Kellum from Wiley, who has been there for me since the beginning of this book to provide direction and balance to the writing process, and without whom this book would not have been written. Also, thanks to all the editors who have played such a significant role, particularly Dick Margulis and David Blair. I would also like to give a special thanks to David Blair for contributing to Chapter 3 of this book, providing the technical input to better describe Microsoft Project Server 2010 and the enterprise project-management solution.

Finally, I want to acknowledge all of the clients and organizations who have let me into their professional

lives to help with project management. For nearly 20 years, I have had the honor and privilege to work with hundreds of organizations and thousands of people with one mission in mind: to improve their lives with better project management. I am always thankful for the opportunities to share my experiences with new people and build lasting relationships as they continue to be rewarding, challenging, and always intriguing.

About the Author



For almost 20 years, Robert Happy has consulted with hundreds of organizations involving thousands of employees to establish effective project management practices. This includes both private and public-sector organizations spanning many industries, working with all levels of staff members from project teams to senior executives. Robert continues to consult with organizations with one mission in mind: optimizing the application of project management customized to meet each organization's unique requirements. Over the years, Robert has focused much of his time on working with a variety of organizations, such as 3M, Honda, Abbott Labs, US Marine Corps, Leapfrog, Royal Canadian Mounted Police, Bell Helicopter-Textron, Fifth Third Bank, Takeda Pharmaceuticals, United Way, Dow Pharmaceuticals, Amgen, Genentech, and many more. Examples of work included developing project management offices (PMOs), project management organizations, methodologies, processes, and custom PM systems to support a variety of application areas.

Robert is currently president and senior consultant for Project Management Practice, Inc. and an authorized senior-level consultant with Franklin Covey Corporation, where he previously held the position of director of project management. Prior to joining PMPI, he was

founder and president of Project Consulting Group, specializing in complete custom project-management solutions. Before that, Robert was executive vice president for Time Line Solutions Corporation, a Symantec subsidiary, specializing in automated project-management solutions, and was a founding partner for the Project Management Center, which is a consulting organization specializing in project management. Currently, Robert has responsibility to lead and build the consulting and technology programs within Project Management Practice, Inc.

Robert is the author of *Implementing an Effective Project Management Culture*, which was presented and published at the 2001 Project Management Institute's (PMI) international symposium and proceedings. He presented a case study with Abbott Labs at the prestigious international Drug Information Association symposium. Robert has also published a number of articles for Microsoft Corporation, which are posted on Office Online, and he is a contributor to *The Project Management Scorecard*.

Robert graduated with a Bachelor of Business Administration from the University of New Brunswick, was on the dean's list, and attended Carleton University for Graduate Studies in Management. Robert has been a member of PMI for over 15 years and is fluent with *A Guide to the Project Management Body of Knowledge (PMBOK)*. He is a Microsoft Certified Trainer (MCT) and Technology Specialist (MCTS). He is also part of an elite company, which is a Microsoft Gold Certified Partner organization. Robert continues to work with organizations around the world to implement successful project-management solutions by applying proven effective techniques.

Table of Exercises

Exercise 1 Setting Up—Initializing a New Project 87

Exercise 2 Change the Working Time—Working With Calendars 86

Exercise 3 Outlining (Creating the WBS) 112

Exercise 4 Estimating Duration 131

Exercise 5 Setting Dependencies 163

Exercise 6 Identifying the Critical Path 164

Exercise 7 Identifying the Critical Path, Continued 165

Exercise 8 Assigning Resources 201

Exercise 9 Identifying Key Drivers for Time and Cost Calculations in the Project for Auto Scheduling 223

Exercise 10 Applying Different Views 253

Exercise 11 Creating a Custom Field 280

Exercise 12 Creating a Custom Table 281

Exercise 13 Applying Filters, Groups, and Highlights 302

Exercise 14 Applying Sorts and Auto-Filters 302

Exercise 15 Creating a Custom Filter 303

Exercise 16 Creating a Custom View 328

Exercise 17 Using the Organizer 328

Exercise 18 Creating a Master File, and View the Critical Path 349

Exercise 19 Setting the Baseline in Tracking Gantt View 367

Exercise 20 Resetting the Baseline 367

Exercise 21 Entering Percent Complete and Actuals 390

Exercise 22 Analyzing Project Schedule 410

Introduction

This is a practical book for all users of Microsoft Project who need to plan, track, and communicate effectively for any type of project. Whether you're a more casual project manager or a professional project manager, this book delivers a sensible approach to using Project 2010 based on best practices around project management. It embodies proven effective learning techniques gleaned from years of consulting and teaching experience.

Whether you need to build simple plans or more complex plans with Project, this book shows you how to use powerful tools and techniques to better manage your projects. I've been training and consulting with Microsoft Project since the release of earlier versions nearly 20 years ago and as such have perfected the optimal approach to transfer knowledge efficiently so you can get the most out of the software.

Working with Project isn't like using other Microsoft Office products—such as Word, Excel, or PowerPoint—in that it requires you to have some core knowledge and understanding of project management in conjunction with the application. This book ties the primary project-management concepts to the appropriate functions in Microsoft Project, resulting in your increased productivity and effectiveness. This is neither a beginner, an intermediate, nor an advanced course but rather a comprehensive program with the core building blocks to support your projects from planning, monitoring, and controlling through closing. So, no matter what level of expertise you have with Microsoft Project, this book will help you optimize your use of the tool.

Although this book is a practical, hands-on guide, it's also designed to prepare you for the Microsoft

Certifications 77-178 Exam—Microsoft Project 2010, Managing Projects. Candidates for this exam should have experience effectively scheduling, communicating, and tracking projects using the desktop version of Project 2010 Standard and Professional (excluding Project Server features). The exam will be a live-app or performance-based exam designed to measure your skill based on outcome and not necessarily on how you perform the tasks. The attached CD provides video based demonstrations and examples of key objective domains for the exam.

Who Should Read This Book

This book is written for people who need to optimize their use of Microsoft Project 2010 in a practical and sensible way. Whether you consider yourself a professional project manager or a casual user, this book will help you understand what is important to you when using Project 2010 and how to use the relevant tools and functions to meet your exact needs.

Your title may or may not be Project Manager, but many of us today are responsible for managing project activities in conjunction with our day-to-day routine tasks. This book is a practical guide for project managers who want to get the most out of using Project 2010 to manage project workloads in the most efficient and effective manner possible.

This book is also designed for candidates who want to get certified and take the 77-178 exam—Microsoft Project 2010, Managing Projects. Candidates for this exam use Project Standard 2010 and Project Professional 2010 desktop features to manage (plan and track) a project schedule and communicate the project to various stakeholders, and they must demonstrate that they understand relevant project-management concepts.

What You'll Learn

As you progress through this book, you'll learn how to use Project 2010 to help you succeed in managing projects. You'll first understand how Project 2010 fits into project management and where it will and won't help as a tool.

The first part of this book provides guidance on getting started the right way. This includes understanding the strategic relevance of using a tool like Project and how it fits into each stage of the project-management process. You'll also learn the differences between Project Standard 2010 and Project Professional 2010 while learning about how Project Server 2010 and Enterprise Project Management (EPM) fits into the overall scheme of things. I also cover important aspects of the tool that you need to know to get started building your schedule, such as starting a new project, using calendars, defining the project start date, and key option settings.

As you move to the second part of the book, you'll learn about important planning essentials. This section is based on a proven four-step planning process that includes building your work breakdown structure; estimating duration; setting dependencies; and assigning resources, work, and costs. You'll also learn about user-controlled scheduling and automatic scheduling and when and how to apply each scheduling technique. I cover important concepts such as understanding the critical path, using constraints, and deadlines. By the end of this part, you'll understand Project's calculation engine and the key drivers that affect the calculation of time and costs.

After you've learned how to build your plan effectively, you need to communicate it to many different types of stakeholders. The third part of the book teaches you about communicating and collaborating essentials. You'll learn how to use and customize the different views, tables, fields, filters, groups, and formats to develop more

meaningful reports and presentations. You'll also learn how to collaborate with other applications, such as SharePoint, and easily move project data into applications like Excel, PowerPoint, Word, and email. In addition, this part deals with creating and maintaining master schedules or consolidated schedules using inserted subprojects. This includes creating integrated schedules with cross-project (external) links and shared resources.

In the last part of the book, you'll learn the essentials of tracking and analyzing. After a project is created and the schedule has been communicated to stakeholders for buy-in and signoff, you don't just put away the plan and forget about it. In this section, you'll learn how to use Project 2010 to keep your project on track; manage the impact of change; understand variances; make better decisions about the tradeoffs between scope, time, and resources; and take the most appropriate corrective action. You'll also learn about the basics of earned value management and how Project supports this technique.

Throughout the book, you'll find real-world case studies and exercises that walk you through the processes of building a plan from scratch, communicating it effectively, and tracking and analyzing it to help keep you on track. You'll also find notes scattered throughout the book to help you understand more detailed concepts. In addition, real-world scenarios provide you with insights into the daily life of a project manager using Project 2010.

This book was also written to address the core functional domain areas that will be covered in the MCTS 77-178 Project 2010, Managing Projects exam. This live-application, performance-based exam maps to this book, and understanding the topics covered in this book will effectively prepare you to write and pass the exam. Because the exam is a live-app exam, the book's CD includes an overview of what will be covered in the exam,

with real-time recordings to help you simulate the functional domains that you may be tested on. The exam isn't meant to be a catch-all for every feature in Project 2010, so neither is this book. It was designed using the same approach as the exam, applying the 80/20 rule: it covers the important features and functions that you use 80% of the time to effectively manage your project schedules with Project 2010 and not the obscure or rarely used features used only 20% of the time by a smaller group of users.

What You Need

The exercises in this book assume that you're running Microsoft Project 2010 for the desktop. You don't need nor does this book cover Project Server 2010. As discussed in Chapter 3, "Overview of Enterprise Project Management," Project 2010 comes in two varieties: Standard and Professional. This book covers the primary features of Standard plus the additional features of Professional, which include the following:

- Team Planner
- SharePoint synchronization
- Inactive Task feature

These features may be covered on the exam. So, even if you have the standard version, if you plan to take the exam, please review these features in this book; doing so should suffice. There will be no questions regarding the collaboration functionality between Project Professional and Project Server; again, Project Server isn't needed for this book or the exam.

If you don't have a copy of Project 2010, you can download a trial version from the following site:

www.microsoft.com/project

If you want more eLearning to supplement this book and help you prepare further, you can go to the following site:

www.pm-practice.com

What Is Covered in This Book

The following list provides an overview of the topics covered in each chapter.

Part I: Getting Started the Right Way

Chapter 1: Project 2010 as an Enabling Tool for Project Managers: In this chapter, you'll learn about Project 2010's role in the life of a project manager: where it will and won't enable you to be more effective and its overall strategic and tactical relevance in project management.

Chapter 2: Mapping the Project-Management Process Groups to Microsoft Project 2010: Understand how Project fits into A Guide to the Project Management Body of Knowledge (PMBOK), Fourth Edition, and its associated project-management stages: initiating, planning, monitoring and controlling, executing, and closing. You'll learn where and when Project provides support in each stage of the project-management process and a project's life cycle.

Chapter 3: Overview of Enterprise Project Management: Understand the key components of the EPM solution that Microsoft offers in conjunction with Project and when it's most appropriate to make the investment in a Project Server 2010 solution. You'll also learn the differences between Project Standard 2010 and Project Professional 2010.

Chapter 4: Getting Started and Setting Up the Microsoft Project Environment: Before building your schedule, you need to learn about how to initiate a