Absolute Beginner's Guide to Project Management

Second Edition

No prior project management experience necessary!

que®

Gregory M. Horine

Absolute Beginner's Guide to Project Management, Second Edition

Copyright © 2009 by Que Publishing

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. 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: 978-0-7897-3821-0
ISBN-10: 0-7897-3821-X

Library of Congress Cataloging-in-Publication Data:

Horine, Greg.
Absolute beginner's guide to project management / Greg Horine. — 2nd ed.
p. cm.
Includes index.
ISBN 978-0-7897-3821-9
1. Project management. I. Title.
HD69.P75H67 2009
658.4'04—dc22

2008052475

Printed in the United States of America

First Printing: January 2009

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.

PMBOK is a registered trademark of the Project Management Institute, Inc.

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.

Bulk Sales

Que Publishing offers excellent discounts on this book when ordered in quantity for bulk purchases or special sales. For more information, please contact

U.S. Corporate and Government Sales
1-800-382-3419
corpsales@pearsontechgroup.com

For sales outside of the U.S., please contact

International Sales
international@pearson.com

Associate Publisher
Greg Wiegand

Acquisitions Editor
Loretta Yates

Development Editor
Todd Brakke

Managing Editor
Kristy Hart

Project Editor
Lori Lyons

Copy Editor
Editorial Advantage

Senior Indexer
Cheryl Lenser

Proofreader
Jennifer Gallant

Technical Editor
Todd Meister

Publishing Coordinator
Cindy Teeters

Book Designer
Ann Jones

Compositor
Nonie Ratcliff

INTRODUCTION

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.

In an ideal world, every new project manager candidate would complete certified project management training programs and serve as an apprentice before starting his or her 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.

The *Absolute Beginner's Guide to Project Management, Second Edition,* is intended to provide this alternative with a helpful, fun, and informative style.

About This Book

Let's review the objectives and approach of this book.

Objectives

The objectives of this book include the following:

- To be an easy-to-use tutorial and reference resource for any person managing their first project(s).
- To teach the key concepts and fundamentals behind project management techniques. If these are understood, they can be applied 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."

Approach

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, we intend the following:

- A mentoring, coaching style.
- A fun, easy-to-read, practical style.
- Assumes that the reader does not have previous hands-on experience with project management.
- Teaches the material as if an instructor were physically present.
- Task-oriented, logically ordered, self-contained lessons (chapters) that can be read and comprehended in a short period of time (15–30 minutes).
- Emphasis on 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 we will 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

Who Should Read This Book?

The *Absolute Beginner's Guide to Project Management, Second 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
  - Functional managers
- Experienced project managers needing a refresher course
- Experienced project managers with limited formal project management education

How This Book Is Organized

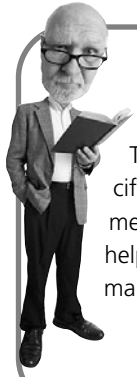
This book has been divided into five parts:

- 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 allow 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 on making better use of MS Project, managing specific real-life project situations, and on many hot project management topics to further accelerate the knowledge base and skill level of the new project manager.

Conventions Used in This Book

- At the beginning of each chapter, you'll find a quick overview of the major topics that will be 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 will also find several special sidebars used throughout this book:

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



tip

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

caution

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

In this chapter

- Learn what comprises a "successful" project
- Understand the common characteristics of "troubled" projects
- Review the common characteristics of successful projects
- Learn which tools are indispensable to most project managers

3

Essential Elements for Any Successful Project

In this chapter, we want to continue the accelerated learning approach we started in the previous chapter. Anytime you are learning a new skill set, especially one that is as broad as project management, one of the most effective ways to reduce your learning curve and focus your mental energies is to understand what "successful" people do in the field, and, equally important, understand what not to do.

With this philosophy in mind, we will take a step up in this chapter and look at projects as a whole and not just the project manager position. We will review the leading causes of "troubled" projects, and we'll discuss the common principles, techniques, and tools underlying most successful projects. With this foundation in place, you will better understand the purpose and the value of the fundamentals covered in the rest of this book, and as a result, be much better positioned for success on your project management assignments.

What Exactly Is a "Successful" Project?

You would think it would be relatively straightforward to describe the attributes of a successful project. Well, let's just say this endeavor has kept more than a few "spin doctors," "politicians," and "history revisionists" employed throughout organizations across our great land. Why is this the case? There are several reasons for this.

- There is a lack of universal harmony of what comprises project success metrics. It seems that every project management educational source and organizational process maturity standard has a slightly different definition of project success.
- For many projects, the acceptance and success criteria are never established or agreed to by all key stakeholders.
- In many cases, an organization may define a project as successful even when some of the textbook criteria for project success (such as schedule, cost, and client expectations) are not completely met. This is often the case if the project achieved strategic business or organizational objectives.
- In other cases, a "cancelled" project may be a "successful" project if there was a plan for one or more "go/no-go" decision points.

From a utopian, academic standpoint, the "ultimate" successful project would be defined as a project that:

- **Delivered as promised**—Project produced all the stated deliverables.
- **Completed on-time**—Project completed within the approved schedule.
- **Completed within budget**—Project completed under the approved budget.
- **Delivered quality**—Project deliverables met all functional, performance, and quality specifications.
- **Achieved original purpose**—The project achieved its original goals, objectives, and purpose.
- **Met all stakeholder expectations**—The complete expectations of each key stakeholder were met, including all client acceptance criteria, and each key stakeholder accepts the project results without reservation.

tip

An excellent technique is to identify, document, review, and approve any criteria that will be used to measure the success of the project during the project definition and planning processes.

- **Maintains "win-win" relationships**—The needs of the project are met with a "people focus" and do not require sacrificing the needs of individual team members or vendors. Participants on successful projects should be enthusiastic when the project is complete and eager to repeat a similar experience.

Learning from Troubled Projects

Before we review the common traits of many successful projects, there's a lot to be learned from "less than successful" projects. From my experience, the reasons for project troubles can be generally classified in two groups: organizational-level issues and project-level issues.

One of the key differences in the two groups is the level of control that the project manager has over these factors. For project-level issues, the project manager has tremendous influence on these matters. In most cases, the project manager can either avoid the issue or take action to resolve it if it does occur. For organizational-level issues, the project manager cannot generally fix the problem, but the project manager can certainly have influence on them by asking the right questions, anticipating the associated risks and issues, focusing extra efforts to compensate for the issue, and developing contingency plans to minimize the impact on the project.

Also, please note that these issues are not exclusive. In most cases, there is overlap, and if you have one of these factors present in a project, you will generally have others. Table 3.1 summarizes these issues, gives specific examples of each, and notes what type of issue it is (organizational, project, or both).

Table 3.1 Common Reasons for Troubled Projects

Reason	Example(s)	Type	Key Learning Point
Project not aligned	Project not aligned with business unit or organizational goals; Project not aligned with other projects	Org.	Verify alignment before project kicks off
Lack of management support	Insufficient funding; Insufficient resources; Issues not resolved; Senior mgmt performance criteria not aligned with project success criteria	Org.	Understand project impact of organizational structure; Ensure proper senior mgmt involvement in project organization; Advocate PMO and Steering Committee structures

Table 3.1 (continued)

Reason	Example(s)	Type	Key Learning Point
Lack of stakeholder "buy-in"	Purpose and goals not clear; "Trust" relationship not established; Inadequate communications; Mismatched expectations; All stakeholders not involved	Both	Gain acceptance of project purpose, goals, and success criteria up front; Ensure all stakeholders are identified and consulted; Constantly communicate and validate understanding
Inadequate project sponsor	Inactive, unengaged sponsor; Lack of leadership; Ethical issues; Not handling organizational issues; Not supportive of project management process	Org.	Educate the sponsor on their roles and responsibilities; Gain formal authorization of project and the project manager position; Understand sponsor's motives and incentives
Too many project sponsors	Conflicting project goals; Lack of ownership; Political battles	Org.	Relates to the need for proper project alignment and clear roles and responsibilities
Lack of clarity on roles and responsibilities	Inefficient work efforts; Missed deadlines; Lower team morale; Delayed issue resolution	Both	Use *Responsibility Matrix* to clarify all roles and responsibilities; Review roles and responsibilities with each individual; Validate expectations in advance
Poor communication	Inconsistent, incomplete, or nonexistent status information on key project metrics; Inadequate tracking and monitoring of project progress; Not listening to stakeholder concerns or feedback; Not using proper mediums for certain project communications; Messages are not clear or occur too frequently	Project	Develop a project Communications Plan that is acceptable to all stakeholders; Establish tracking and monitoring mechanisms during planning; Constantly seek questions and feedback; Understand each stake holder's perspective; Clearly set context of each message
Price wars	Due to budget reduction measures or market pressures, management agrees to perform project at or below estimated costs	Org.	Develop complete, detailed project budgets; Communicate associated risks; Improve negotiating skills

Table 3.1 (continued)

Reason	Example(s)	Type	Key Learning Point
Resource conflicts	Lack of dedicated team members; Key resources not available when scheduled	Org.	Develop project Resource Plan; Gain commitments from Resource Managers; Encourage centralized organizational structure for resource planning/deployment
Inadequate project manager	Lack of leadership; Inexperienced or untrained project manager; Ineffective project manager	Both	Organizational commitment to PM education; Use of PM mentorship programs
Under-estimate change impact	Not understanding the complete effects on both and people existing processes that the "change" introduced by the project will have; Not properly preparing or planning for the "change"	Org.	Use project sponsor and business process owners to champion the new process; Involve additional stakeholders to understand their needs and to solicit their support; Plan for the necessary communications and training (change management plan); Plan for the "disruptive" deployment period; Utilize pilot approaches to minimize impact
Inadequate planning	Management does not require or allow time for proper planning; Incomplete scope or deliverables list; Incomplete "work" identification; Lack of detailed schedule; Inadequate risk identification; Assumptions not documented; Lack of schedule and budget contingency	Both	Educate senior mgmt on the value of proper planning; Use standard methodology for project planning; Gain formal acceptance of Project Plan before proceeding; Develop realistic project schedule and budget, as well as tools and processes to keep updated; Identify and document project risks and mitigation strategies

Table 3.1 (continued)

Reason	Example(s)	Type	Key Learning Point
Lack of change control management	Scope of work increases without proper schedule, budget, or resource adjustments; Changes occur to deliverables, schedule, or budget without proper notification and approval	Project	Utilize formal change control procedures to properly assess and communicate any change to the scope, schedule, budget, and targeted project deliverable
Lack of completion criteria	Missed stakeholder expectations; Increased costs or missed deadlines due to re-work; Lack of smooth transition from one phase to another	Both	Ensure success criteria is established during planning phase; Define user acceptance criteria for project deliverables; Define exit criteria for project phases
Inadequate progress tracking	Inability to measure project status and probability for success; Inability to review project at key points to make go/no-go decisions	Both	Establish and execute periodic status meetings and reporting (weekly in most cases); Review project at scheduled intervals against established criteria to determine if project should progress into next phase
Unforeseen technical difficulties	Effort spent resolving technical issues drive missed schedules and increased costs; Unproven technology does not meet user expectations	Project	Structure project to deal with high risk technical challenges early in the project; Prove the technology before making additional investment; Leverage technical expertise to support team capabilities

Learning from Successful Projects

After reviewing what makes a project successful and the common ills that befall many troubled projects, you likely have a good sense of the qualities and traits shared by most successful projects. While no two projects are ever the same, and every project has its own

caution

A good project manager can still end up managing a "troubled" project. Sometimes, your best project management work may be in minimizing the damage from a "troubled" project.

unique set of challenges, there is a common core of principles that successful projects share. By understanding these, a new project manager can better prioritize and better focus his/her project management efforts. These qualities are generally true about successful projects:

- Project is aligned with organizational goals.
- Project has effective management support.
- Project has effective leadership.
- All key stakeholders are in agreement on the purpose, goals, and objectives of the project.
- All key stakeholders share a common vision on the project results.
- All key stakeholders share *realistic* expectations for the project results.
- The project results meet the expectations of the key stakeholders.
- Stakeholder expectations are constantly managed and validated throughout the project.
- There is an investment made in proper planning.
- The project scope, approach, and deliverables are clearly defined and agreed upon during planning.
- Each stakeholder and team member's role(s) and responsibilities are clearly communicated and understood.
- A high priority is placed on accurate and complete work effort estimates.
- A realistic schedule is developed and agreed upon.
- The project team has a strong results-focus and customer-orientation.
- Project communications are consistent, effective, and focused on "understanding."
- Project progress is measured consistently from the current baseline.
- Project issues and subsequent action items are aggressively pursued.
- There is a strong sense of collaboration and teamwork.
- Expectations and changes surrounding scope, quality, schedule, and cost are closely managed.

- Project resources are skilled and available when needed.
- Project team proactively identifies risk and determines mitigation strategies to reduce project exposure.
- Project team anticipates and overcomes obstacles to ensure project meets objectives.

Essential Project Manager Toolkit

While there are many facets of project management and many lessons to be learned from both troubled projects and successful projects, there is an essential set of tangible tools that any project manager needs to have to best manage any project. Table 3.2 lists these essential tools and why they are important.

The important principles to remember regarding project management tools are as follows:

- Any planning document needs to be reviewed and agreed to by appropriate project stakeholders and team members.
- Separate documents are not always needed. Smaller projects might combine relevant information (especially "plan" documents) into a single "grouped" document.
- The essential tools represent the key information and thought processes that are needed to effectively manage the project.

Table 3.2 Essential Project Manager Tools

Tool	Description	Value	Notes
Project Charter	Authorizes project and the project manager	Provides official notice to the organization	May not always be a formal document; At a minimum, get an email notification
Project Definition Document	Defines project purpose, objectives, success criteria, and scope statement	Key for managing expectations, controlling scope, and completing other planning efforts	Core tool
Require-ments Document	Defines the specifications for product/output of the project	Key for managing expectations and controlling scope	Core tool

Table 3.2 (continued)

Tool	Description	Value	Notes
Project Schedule	Shows all work efforts, properly estimated, with logical dependencies, assigned to responsible resources scheduled against a calendar	Key for directing all project team work efforts; Key for managing expectations; Allows for impact and what-if simulations when things change	Core tool
Status Reports	Periodic reviews of actual performance versus expected performance	Provides essential information to stakeholders; Allows for timely identification of performance variances	See Chapter 10, "Controlling a Project," and Chapter 17, "Managing Project Communications," for more details
Milestone Chart	A summary of the detailed project schedule showing progress against key milestone	Allows stakeholders to see high level project progress on one page	Detailed schedule roll-ups can be difficult to read and interpret; Incorporate into Status Report
Project Organization Chart	Shows all project stakeholders and the working relationships among them	Allows team members to get a better understanding of project roles and organizational dynamics	On smaller projects, may be combined with project plan or project definition document
Responsibility Matrix	Defines all project roles and indicates what responsibilities each role has	Key for managing expectations; Establishes accountability	On smaller projects, may be combined with project plan or project definition document
Communication Plan	Defines the how, what, when, and who regarding the flow of project information to stakeholders	Key for managing expectations; Establishes buy-in	On smaller projects, may be combined with project plan or project definition document

Table 3.2 (continued)

Tool	Description	Value	Notes
Quality Management Plan	Defines the approaches and methods that will be utilized to manage the quality levels of project processes and results	Key for managing expectations regarding quality, performance, and regulatory compliance matters; Impacts work efforts and project schedule Establishes accountability	On smaller projects, may be combined with project plan or project definition document
Staffing Management Plan	Lists how project resources will be acquired, when they are needed, how much they are needed, and how long they will be needed	Key for building schedule; Key for properly managing resources	May also include role profiles, rates, training needs; On smaller projects, may be combined with project plan or project schedule
Risk Response Plan	Lists each identified risk and the planned response strategy for each	Communicates potential issues in advance; Proactive measures help reduce impact to project	On smaller projects, may be combined with project plan or project definition document
Project Plan	Formal, approved document that is used to manage project execution	Includes all other supplemental planning documents; Key output of project planning	On smaller projects, may be combined with project definition document
Deliverable Summary	Defines and lists all deliverables to be produced by the project	Key to managing expectations; Ensures proper visibility, tracking, and reporting of targeted deliverables	May be combined with status reports

Table 3.2 (continued)

Tool	Description	Value	Notes
Project Log	Captures essential information for each project risk, issue, action item, and change request	Ensures proper visibility, tracking, and reporting of items impacting the project	Core tool
Change Request Form	Captures essential information for any requested change that impacts scope, schedule, or budget	Allows change item to be properly assessed and communicated before action is taken	Core tool
Project Notebook	Used by project manager to maintain official record of important project documents and deliverables	Part of managing project information	Electronic and/or hardcopy versions

The Absolute Minimum

At this point, you should have a solid understanding of the following:

- What defines a successful project and why it is not always easy to measure
- The common reasons why projects get in trouble and what you can do to avoid them
- The key principles that serve as the foundation for most successful projects
- The essential project management tools and why they are important

The map in Figure 3.1 summarizes the main points we reviewed in this chapter.

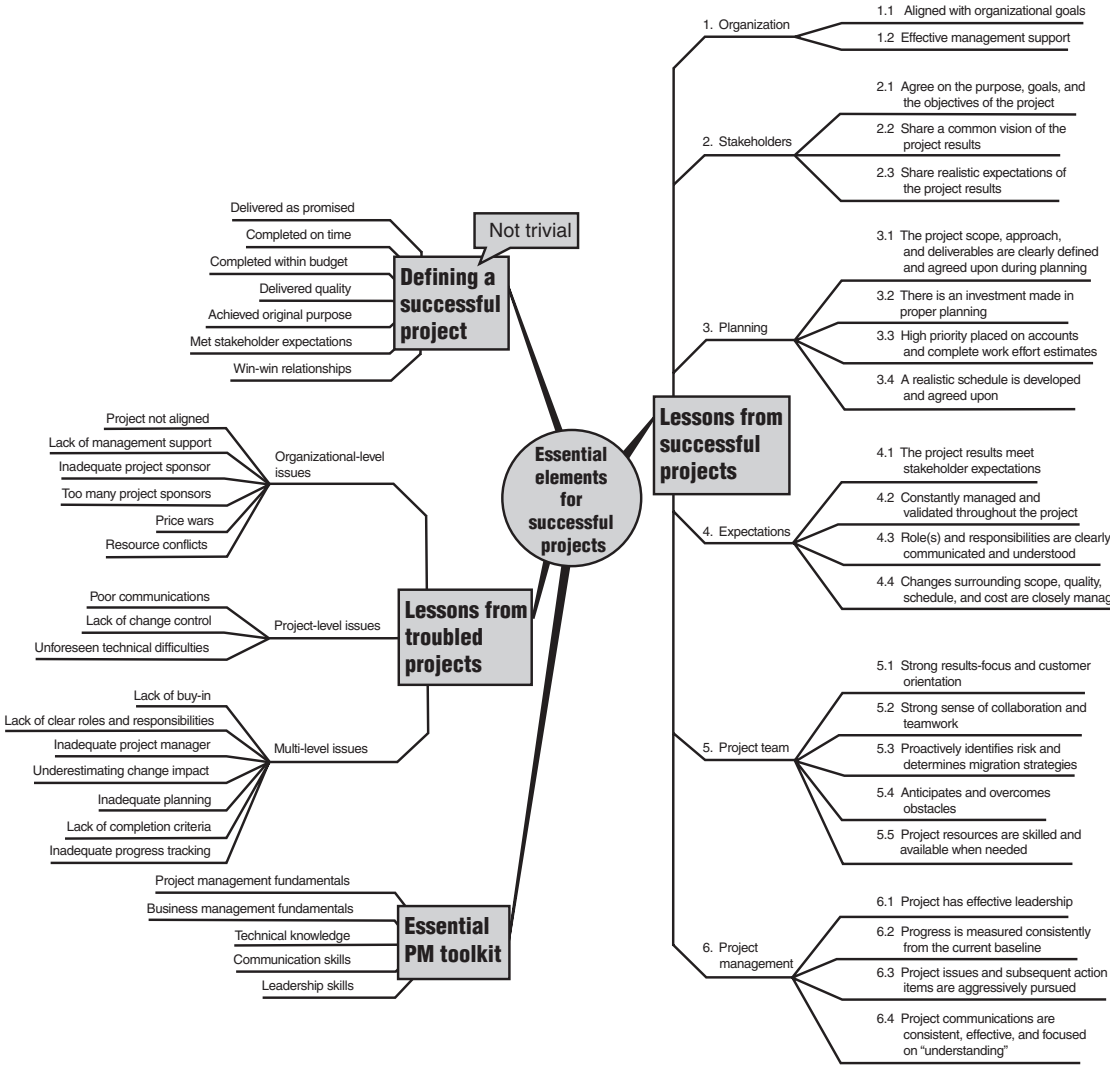


FIGURE 3.1

Essential elements for any successful project overview.

Index

Numerics

15% Completion Rule (project control), 130

30/60/90 day detail plans in quality schedules, 331

50% probability estimate in CCPM, 354

"90% done" phenomenon, 140

90% probability estimate in CCPM, 354

A

absorption method (project closure), 298

AC (Actual Costs) in EVM (Earned Value Management), 137

accents, listening skills (difference management), 274

acceptance
- project definition checklist, 51
- project management process groups, 10
- project schedule goals, 101
- project success tips, 30

acceptance criteria
- buyer tips and techniques (vendor management), 283
- contract components, 287
- project planning, 60
- quality management practices, 206
- unplanned scope change causes, 150
- vendor management, 285

acceptance signoffs (change prevention actions), 154

accepting risk, 185

access control (managing deliverables), 163

accomplishments
- performance reporting, 134
- project closure, 296

accountability
- increased (recovery activities), 141
- lack of (project closure challenges), 297

accounts, closing (project closure), 295

accuracy (work estimation), 92

action (project control principles), 127-128

active listening skill sets, 24

Actual Costs (AC) in EVM (Earned Value Management), 137

actual dates, 306

administrative process principles (issue management systems), 172

agendas (meeting practices), 235

agile development (quality management), 204

agile project management, 346-348

agreement
- change control challenges, 156
- lack of understanding, project manager mistakes, 27
- project success tips, 35

alertness (change control), 150

aligners, 213

alignment
- issue management systems, 172
- lack of, 31
- project success tips, 35

allocation of resources by PMOs, 351

alternative approaches (project definition), 47

analogous estimating (work estimation), 90

analysis (project manager roles), 22

appreciation and gratitude
communications management, 228
interpersonal skills, 236

approach (project definition checklist), 51

approval page (document sections), managing deliverables, 164

approvals
change control challenges, 156
change control principles, 151
change request forms, 153
managing deliverables, 161-163
protection management, 163
work estimation practices, 92

archived files, leveraging (managing deliverables), 166

assessing risk, 186

assigned to data points (issue management), 175

assigning resources, 316
rebuilding assignments, 325
to summary tasks, 317, 323
viewing assigned resources, 324

assignment (difference management), 270

assumptions
budget development, 116
change prevention actions, 155
definition of, 193
difference management, 273
project definition elements, 47

attention (communications management), 229

audio conferencing (communications management), 233

auditors (project control), 132

audits
configuration management plans, 168
project control, 131
QA audits, 193
quality management principles, 201-202

authority
of PMO (Project Management Office), 348
project and operation comparisons, 9

authorization identification (contract components), 287

autolinking, disabling, 314

availability of resources, adjusting in calendars, 307

averages (work estimation), 91

avoiding risk, 185

awareness campaigns (communications management), 224

B

BAC (Budget at Completion) in EVM (Earned Value Management), 138

backfilling positions for handling turnover risk, 335

backup plans
project deliverables, 165
team performance principles, 263

balancing reality and perception, 241

bar charts
performance reporting, 134
project schedule presentations, 109

baseline dates, 306
saving, 324

baseline management (scheduling software benefits), 105

baselines
change control benefits, 149
managing deliverables, 161, 164
performance reporting, 134
project control, 131, 140
resetting, 312-313
change control, 152
recovery activities, 141
variance responses, project control, 136
reviews, 131

beliefs and values (communication challenges), 227

best practices
creating new projects, 313-316
issue management systems, 176-177
work estimation, 92-94

Bill of Materials (BOM), 78

bottom-up estimating (work estimation), 90

breach of contract (contract termination), 298

Budget at Completion (BAC) in EVM (Earned Value Management), 138

budget development, 113. *See also* budgets
- assumptions, documenting, 116
- buffers, 116
- cash flow management tool, 115
- challenges of, 120-121
- comprehension principle, 115
- cost estimate models, 119
- costs of change, 119
- disposal costs, 118
- earned value management, 114
- equipment sources, 116
- expectation measurements, 115
- expenses versus capital, 117
- finalization, 120
- initial development, 119
- investment justification, 115
- iterative process principle, 115
- labor costs sources, 116
- licensing and fees, 118
- lifecycle principle, 115
- materials, 118
- operational costs, 118
- overhead costs, 118
- performance measurement importance, 114
- reasons for, 114-115
- spreadsheet approach, 119
- time-phased principle, 115
- training sources, 118
- travel sources, 118
- validation importance, 114
- work estimation accuracy, 92

budgets. *See also* budget development; costs
- change control principles, 152
- lack of, 32
- project planning, 64
- project success tips, 30
- schedules, 100-101

buffer consumption rates in CCPM, 355

buffers, budget development importance, 116

build/release process (managing deliverables), 166

bullet points (status reporting), 234

business drivers (unplanned scope change causes), 150

business management skills, skill sets, 23

buy-ins
- change control, 152, 156
- difference management principles, 268
- issue management systems, 177
- lack of, 32
- lack of understanding, project manager mistakes, 27
- vendor management, 281

buyer tips and techniques (vendor management), 283
- acceptance criteria, 283
- certifications, 285
- cost and time estimates, validating, 284
- incentives, 283
- new vendors, trying out, 284
- partnerships, 284
- quality assurance, 284
- quality enhancements, 284
- resource and process dependencies, 283
- risk reduction, 283-284
- vendor teams, integrating, 284
- WBS (work breakdown structure), 283

Buzan, Tony, 358

C

calculations (scheduling software benefits), 105

calendars. *See also* schedules
- adjusting resource availability, 307
- multiple calendars in Microsoft Project, 305
- nonstandard calendars, updating timescales for, 323
- realistic project schedules, 107
- types of, 306
- working time, setting, 315

callouts in reports, 322

calm natured techniques (success tips), 26

cancellations
- project closure, 298
- variance responses, project control, 136

capital, expenses versus (budget development), 117

CAPM (Certified Associate Project Management Professional) certification, 359

career goals (team performance principles), 258

career paths (project management as personal value points), 13

cash flow (budget development importance), 115

category data points (issue management), 174

CCB (Change Control Board), 154

CCPM (Critical Chain Project Management), 353-356

celebrations (project closure), 296

central contacts
communications management, 230
issue management, 174

central repository (managing deliverables), 163, 168

certifications
value of, 358-359
vendor management, 285

Certified Associate Project Management Professional (CAPM) certification, 359

chain of command (difference management), 270

challenges (budget development), 120-121

change control
alertness, 150
baselines, resetting, 152
buy-ins, 152
challenges, 156-157
Change Control Board, 154
change control systems, 149
change prevention actions
acceptance signoffs, 154
assumptions and constraints, tracking, 155
clear project objectives, 154
post-implementation, 155
right project approach, 155
solid requirements definition, 154
stakeholder engagement, 155
traceability, 154
WBS (work breakdown structure), 155
change request forms, 152-153
change types, 147
changes, planning for, 149
configuration and organizational management comparisons, 148
contract alignment, 152
contract components, 287
defined, 146-147
identification numbers, 153
lack of, 33-34
lack of understanding, project manager mistakes, 27
managing deliverables, 160-161
multiple process paths, 152
over-communication, 150
overview, 145-146
principles, 151
proactive project management, 57
project control, 128-129, 139
project definition, 47
project planning, 58, 65, 67
scope changes, minimizing, 149-150
scope creep, 146
spreadsheets, 153
stakeholders, educating, 149
tracking logs, 153
unplanned scope change causes, 150-151
vendor management, 281

Change Control Board (CCB), 154

change impact (communications planning), 228

change information (change request forms), 153

change management (project management trends), 17

change prevention actions
acceptance signoffs, 154
assumptions and constraints, tracking, 155
clear project objectives, 154
post-implementation, 155
right project approach, 155
solid requirements definition, 154
stakeholder engagement, 155

traceability, 154
WBS (work breakdown structure), 155

change requests
change control, 152-153
communications management, 224
performance reporting, 134

charters (project success tools), 36

charts
bar, 134
Gantt, 109
milestones, 37
organization, 37
PERT, 91
project schedule presentations, 109

checklists
project definition
acceptance checklist, 51
approach checklist, 51
documentation checklist, 51
general checklist, 49
risk checklist, 51
scope checklist, 50
stakeholder checklist, 50-51
project definition, 49
project planning, 68-69
quality management principles, 201
quality management tools, 201
in testing process, 342

checkpoints (project control), 132

clarification
communications management, 229
WBS, 74-75

clarity traits (team performance), 256

clarity, communication (recovery activities), 141

clear (five Cs of communication), 228

clear project objectives (change prevention actions), 154

clear project process (issue management systems), 174

client acceptance (project closure), 294

client interaction preparation (team performance principles), 261

client organization (vendor management), 280

closing project management process groups, 10

closing projects, 298
absorption method, 298
cancellations, 298
challenges, 296-297
collapse method, 298
completion method, 298
contract termination, 298
deterioration method, 298
displacement method, 298
lack of closure, 294
official closure signals, 294
personal interaction analogy, 293
Project End checklists, 294
accomplishment, acknowledging, 296
accounts, closing, 295
celebration events, 296
central information repository, updating, 295
client acceptance, 294
contract obligations, closing, 295
deliverables, transitioning, 295
lessons learned, capturing, 295
payments, finalizing, 295
performance evaluations, 296
referrals/references, 296
resource schedule updates, 295
resumes, updating, 295-296
success criteria, 294

closure (meeting practices), 235

CM indicator (deliverable tracker recommendations), 165

coaches, 213

coaching techniques (project manager roles), 22-23

coding schemes (WBS guidelines), 81

collaboration
in agile project management, 347
project management challenges, 15
project success tips, 35

collaboration tools (issue management logging systems), 176

collapse method (project closure), 298

collocation (team performance principles), 260

color-coding (status reporting), 234

columns, hiding, 319

commitment
- from resource managers (difference management), 271
- team performance, 256
- vendor management, 282

common mistakes by project managers, 27

communication
- active listening, 24
- change control principles, 152
- clarity (recovery activities), 141
- contract components, 287
- difference management
  - *cross-functional projects, 272*
  - *principles of, 268-270*
  - *virtual projects, 276*
- lack of, 32
  - *work estimation reasons, 89*
- lack of understanding, project manager mistakes, 27
- managing, 223
  - *appreciation and gratitude, 228*
  - *audio conferencing, 233*
  - *central contact assignment, 230*
  - *challenges of, 226-227*
  - *communication options, 231-233*
  - *conflict resolution, 225*
  - *documentation, 228*
  - *email, 225, 233*
  - *expectations, 225*
  - *face-to-face meetings, 225, 232*
  - *five Cs of communication, 228-229*
  - *follow-ups, 228*
  - *information flow, 231*
  - *instant messaging, 233*
  - *interpersonal skills, 235-236*
  - *meeting practices, 234-235*
  - *meetings, 225*
  - *message content considerations, 231*
  - *naiveness, 229*
  - *natural communication strengths, 230*
  - *organizational change management areas, 224*
  - *planning, 227-228*
  - *prioritization, 228*
  - *proactive approach, 229*
  - *project schedule considerations, 228*
  - *push and pull methods, 231*
  - *reasons for, 225-226*
  - *relationship building techniques, 229*
  - *responsibility, 229*
  - *stakeholder analysis, 230*
  - *standard communication areas, 224*
  - *status reporting, 234*
  - *team management, 225*
  - *technology use, 232*
  - *telephone contact, 225, 232*
  - *urgent communications, 231*
  - *video-conferencing, 232*
  - *voice mail, 225, 232*
  - *Web conferencing, with audio, 233*
- obstacles, project management challenges, 14
- over-communicating (change control), 150
- planning (project success tools), 37
- of PMO, 350
- proactive project management, 57
- project management knowledge areas, 11
- in project management "lite" culture, 328
- project planning, 66-67
- project success tips, 35
- quality management practices, 206
- skill sets, 24
- team orientation plans, 262
- vendor management, 281, 286
- in vendor selection process, 339
- WBS guidelines, 80

compelling (five Cs of communication), 229

compensating for weaknesses, 218

competing demands
for hard milestone dates, 332
project management challenges, 14-15

completed on time (project success tips), 30

completeness
project schedule goals, 100-101
WBS guidelines, 81

completion (project closure), 298

completion criteria
lack of, 34
project control, 131, 140
quality management principles, 202
in testing process, 342

completion date (deliverable tracker recommendations), 165

compliance
managing deliverables, 162
project managers, demands for, 16

comprehension processes (budget development importance), 115

computer simulation (quality management), 204

computer-based training, 360

concise (five Cs of communication), 228

confidence
vendor management, 286
WBS objectives, 79

configuration management
managing deliverables, 160, 166-168
organizational change management, compared, 148
project control, 128
project planning, 65, 67

confirmation (communications management), 236

conflict resolution techniques (team performance principles), 260

conflicts (communications management), 225

consensus (work estimation methods), 92

consistency, 229
in communication, 229
project control, 130, 140
status reporting, 234

constraints
on dates, 305
definition of, 193
project definition elements, 47
tracking (change prevention actions), 155
viewing violations, 314

construction phase (effort distribution), 90

contacts (issue management systems), 176

context
communication, difference management, 269
project definition elements, 46
understanding (project manager success tips), 26

contingency
buffers for hard milestone dates, 331
lack of, work estimation reasons, 89
lack of understanding, project manager mistakes, 27

contract development time in vendor selection process, 340

contractors (WBS guidelines), 81

contracts
acceptance criteria, 287
authorization identification, 287
change control, 152
challenges, 156
procedures, 287
communications components, 287
communications planning, 228
contract administrator and project manager conflicts, 282
contract state knowledge, 281
CPFF (cost plus percent of fee), 288
CPPC (cost plus percent of cost), 288
CR (cost reimbursable), 287-289
failure to perform liability, 287
financial arrangements, 287

FP (fixed price), 287-289
issue resolution, 287
legality conditions, 287
milestone dates, 287
non-disclosure agreements, 287
obligations, project closure, 295
ownership and property right components, 287
penalty components, 287
performance measurement components, 287
scope statements, 287
security agreement components, 287
T&M (time and materials), 287-289
terminating, 298
timetable dates, 287
vendor management development, 281
what to include, 282

contractual WBS (CWBS), 78

control
project management as organization value points, 12
project management key concepts, 9
project management process groups, 10
WBS objectives, 78

control systems (project planning), 65

controlling projects
15% Completion Rule, 130
action, 127-128
baselines, 131, 140
change control, 128-129, 139
checkpoints, 132
completion criteria, 131, 140
configuration management, 128
considerations, 126
consistency, 130, 140
detection, 127
early project stage management, 130
escalation thresholds, 133
EVM (Earned Value Management), 136-139
expectations, setting, 130
formal signoffs, 132
issue management, 128
management processes, 128
milestones, 132
organization culture, 130
overview, 125-126
PDA (Prevention, Detection, and Action), 127-128
performance reporting, 128, 133-135
planning, 130
prevention, 127
priorities, 129
process control, 129
procurement management, 128
progress measurement challenges, 140
project manager reluctance challenges, 139
project scale, 129
quality auditors, 132
quality management, 128
recovery activities, 141
requirements management, 128
traceability challenges, 140
traceability matrix, 132
reviews, 131
risk management, 128
small work packages, 131
status meetings, 131
team connection challenges, 140
time and cost accounting challenges, 139
unidentified work challenges, 140
V method approach, 132
variance responses, 135-136

Copy Picture feature, 311, 320

core project components in project management "lite" culture, 328

corporate culture, aligning PMO with, 350

corporate governance
difference management, 270-271
elements of, 353
in portfolio project management, 352
project management trends, 17

corrective actions
project management key concepts, 9
project manager roles, 23
variance responses, project control, 135

correctness (WBS guidelines), 81

cost analysis (issue management systems), 172

cost challenges (project control), 139

cost estimation
incorrect, work estimation reasons, 89
validating (vendor management), 284
WBS guidelines, 80
WBS objectives, 78

cost management (project management knowledge areas), 11

cost performance in EVM (Earned Value Management), 136

Cost Performance Index (CPI) in EVM (Earned Value Management), 137

cost plus percent of cost (CPPC) contracts, 288

cost plus percent of fee (CPFF) contracts, 288

cost reimbursable (CR) contracts, 287-289

Cost Variance (CV) in EVM (Earned Value Management), 137

costs. *See also* budgets
project definition elements, 48
project management as organization value points, 13
project management challenges, 14
project planning, 64
work estimation practices, 94

courteous (five Cs of communication), 229

Cover Your Assets (CYA), managing deliverables, 162

CPFF (cost plus percent of fee) contracts, 288

CPI (Cost Performance Index) in EVM (Earned Value Management), 137

CPPC (cost plus percent of cost) contracts, 288

CR (cost reimbursable) contracts, 287-289

crashing technique (shortening project schedules), 108

creativity (project management as organization value points), 12

credibility (change control benefits), 149

Critical Chain Project Management (CCPM), 353-356

critical issues (project planning), 65

critical paths
disabling multiple, 314
project schedules, 103
scheduling software benefits, 105
shortening project schedules, 108

Crosby, Philip, 198

cross-cultural projects (difference management)
accents, listening skills, 274
days off differences, 273
formality considerations, 274
misunderstandings, 273
potential impacts, 274
time zone considerations, 273

cross-functional projects (difference management), 271
alignment considerations, 271
assumptions, 273
commitments, retrieving from resource managers, 271
communications planning, 272
dysfunctional relations, 272
group contribution importance, 271
issue resolution, 272
kickoff meetings, 272
leadership designation, 271
misunderstandings, 273
poor performance, 270
requirements definition, 272-273
signatures, reluctant, 273
sponsorship and governance ensured, 270-271
unstated expectations, 273
workflow process focus, 272

cross-functional teams (project management trends), 17

cultural influences (communication challenges), 227

cultures
cross-cultural projects (difference management), 273-274
project management trends, 17

custom fields, 307
in reports, 319

setting up, 316
visual indicators in, 308-310
customer expectations (project success tips), 35
customer experience in testing process, 341
customer focus (quality management practices), 206
customer perspective (quality management principles), 200
customer satisfaction in agile project management, 346
customer service skills (success tips), 26
customer-focused project approaches (quality management), 203-204
customizing reports, 321
cutting edge demands (project management challenges), 14
CV (Cost Variance) in EVM (Earned Value Management), 137
CWBS (contractual WBS), 78
CYA (Cover Your Assets), managing deliverables, 162

D

data points (issue management systems), 174-177
data validation in testing process, 342
databases
issue management logging systems, 176
Microsoft Project as, 304
date approved (deliverable tracker recommendations), 165
date closed data points (issue management), 175
date issued data points (issue management), 174
date resolved data points (issue management), 175
date submitted data points (issue management), 174
date updated data points (issue management), 175
dates
baseline dates, saving, 324
constraints on, 305
planned versus actual versus baseline, 306
start dates, setting, 313
days off differences (difference management), 273
deadlines, missed, 32
decision points (project success tips), 30
decision-making (project management as organization value points), 13
default settings
Microsoft Project, 306
reviewing, 314-315
defect tracking process in testing process, 342-343
defects, definition of, 193
defining projects, 49
acceptance checklist, 51
alternative approaches, 47
approach checklist, 51
assumptions, 47
constraints, 47
context, 46
cost estimates, 48
dependencies, 46
documentation checklist, 51
financial reasons for, 45
general checklist, 49
goals and objectives, 46
history reasons for, 45
logistical reasons for, 44
organizational change issues, 47
out-of-scope specifications, 46
policies and standards, 48
political reasons for, 44
portfolio project management, 45
practical reasons for, 45
progressive elaboration, 47
purpose, 46
questions/considerations, 44
recommended project approach, 47
resource estimates, 48
risks, 47, 51
schedule estimates, 48
scope, 46, 50
stakeholders, 47, 50-51
success criteria, 46
supporting document references, 48
validation, 59
visual scope summary, 48
definition documents (project success tools), 36
definitive accuracy levels (work estimation), 92

deliverable summary (project success tools), 38

deliverables
communications management, 224
managing
access control implementation, 163
approval processes, 163
archived files, leveraging, 166
backup procedures, 165
baseline establishment, 164
best practices, 163-166
build/release process, 166
central repository, establishing, 163
challenges, 169
change control system, 160
configuration management, 160, 166-168
CYA (Cover Your Assets), 162
directory structures, 164
file-naming conventions, establishing, 164
gatekeepers, defining, 163
identity management, 162-163
protection management, 163
reasons for, 161-162
review processes, 163
revision processes, 163
standard document sections, 164
tracking recommendations, 164-165
tracking systems, 163
version numbering schemes, 164
in project management "lite" culture, 329
project planning, 58-60, 65
in quality schedules, 330
transitioning, project closure, 295
WBS development process, 80
WBS guidelines, 80-81

delivered as promised (project success tips), 30

delivery management (vendor management), 281

Deming, W. Edwards, 198

dependencies
definition of, 193
external dependencies, setting, 315
logical dependencies, capturing, 316
project definition elements, 46

deploy phase (effort distribution phase), 90

design reviews (project control), 131

detailed data points (issue management), 174

detailed schedules
in agile project management, 346
lack of (example scenario), 330-331

details (project planning), 58

detection (project control principles), 127

deterioration method (project closure), 298

development
project management key concepts, 9
schedules, project planning, 61-62
WBS, 79-80

diagrams (project schedule presentations), 110

differences, managing, 267-268
buy-in principles, 268
communication principles, 268-270
cross-cultural projects, 273-274
cross-functional projects, 270-273
expectations, verifying, 270
leadership principles, 269
management efforts, 270
proper planning principles, 268
risk management principles, 268
sponsorship principles, 268
virtual projects, 274-276
well-defined expectation principles, 268

dining (team unity rituals), 261

directory structure (managing deliverables), 164, 168

disabling
autolinking, 314
multiple critical paths, 314

discipline (issue management systems), 173

displacement (project closure), 298

disposal costs (budget development), 118

document sections (managing deliverables), 164

documentation
- change control challenges, 157
- change control principles, 152
- communication, difference management, 269
- communications management, 228
- gaps in vendor selection process, 340
- issue management systems, 172
- project definition checklist, 51
- project manager roles, 23
- of testing process, 341

documents
- definition documents, 36-37
- inserting projects with Copy Picture feature, 311
- plan, 36
- Project Definition. *See* defining projects
- requirements documents (project success tips), 36
- supporting document references, 48

drivers for hard milestone dates, 331

Duran, Dr. Joseph, 198

duration
- determining, 305
- entering, 316

dysfunctional relations (cross-functional projects), 272

E

EAC (Estimated At Completion)
- EVM (Earned Value Management), 138
- forecasts (performance reporting), 134

early project stage (project control), 130

Earned Value (EV) in EVM (Earned Value Management), 137

Earned Value Management (EVM)
- AC (Actual Costs), 137
- BAC (Budget at Completion), 138
- budget development importance, 114
- cost performance, 136
- CPI (Cost Performance Index Value), 137
- CV (Cost Variance), 137
- EAC (Estimate at Completion), 138
- earned values, 137
- ETC (Estimate to Complete), 138
- EV (Earned Value), 137
- fourth reporting period example, 139
- negative performance index, 138
- overview, 136
- PV (Planned Value), 137
- schedule performance, 136
- SPI (Schedule Performance Index), 137
- SV (Schedule Variance), 137
- work packages, planned values, 137

effort distribution estimating (work estimation), 90

effort estimation (project schedule inputs), 101, 103

elaboration phase (effort distribution estimating), 90

email (communications management), 225, 233

emotions
- communication challenges, 227
- interpersonal skills, communications management, 236

encouragement (project planning), 68

end results (WBS development process), 80

ending projects, 293
- absorption method, 298
- cancellations, 298
- challenges, 296-297
- collapse method, 298
- completion method, 298
- contract termination, 298
- deterioration method, 298
- displacement method, 298
- lack of closure, 294

official closure signals, 294
personal interaction analogy, 293
Project End checklists, 294
accomplishment, acknowledging, 296
accounts, closing, 295
celebration events, 296
central information repository, updating, 295
client acceptance, 294
contract obligations, closing, 295
deliverables, transitioning, 295
lessons learned, capturing, 295
payments, finalizing, 295
performance evaluations, 296
referrals/references, 296
resource schedule updates, 295
resumes, updating, 295-296
success criteria, 294

energy levels (team performance), 256, 259

environment noise (communication challenges), 227

equipment sources (budget development), 116

escalation procedures (issue management systems), 174

escalation thresholds (project control), 133

Estimated At Completion (EAC)
EVM (Earned Value Management), 138
forecasts (performance reporting), 134

estimated duration, entering, 316

Estimated To Complete (ETC)
EVM (Earned Value Management), 138
forecasts (performance reporting), 134

estimates in CCPM, 354

estimating work
accuracy levels, 92
analogous estimating, 90
best practices, 92-94
bottom-up estimating, 90
effort distribution estimating, 90
expert judgment method, 91
heuristic estimating, 90
historical data, 91
overview, 85-86
parametric estimating, 91
PERT charts, 91
phased estimating, 91
project management challenges, 15
project planning, 61
reasons for, 88-90
risk analysis, 88
risk factor methods, 92
schedule development process, 86
team consensus, 92
weighted averages, 91

ETC (Estimated To Complete)
EVM (Earned Value Management), 138
forecasts (performance reporting), 134

EV (Earned Value) in EVM (Earned Value Management), 137

evaluation
change control principles, 151
project closure, 296
vendor management, 281, 286

evaluation criteria in vendor selection process, 338

evaluation scoring in vendor selection process, 338-339

evaluation team in vendor selection process, 338

evidence (managing deliverables), 162

EVM (Earned Value Management)
AC (Actual Costs), 137
BAC (Budget at Completion), 138
budget development importance, 114
cost performance, 136
CPI (Cost Performance Index), 137
CV (Cost Variance), 137
EAC (Estimated at Completion), 138
earned values, 137
ETC (Estimated to Complete), 138
EV (Earned Value), 137
fourth reporting period example, 139
negative performance index, 138

overview, 136
PV (Planned Value), 137
schedule performance, 136
SPI (Schedule Performance Index), 137
SV (Schedule Variance), 137
work packages, planned values, 137

example scenarios
hard milestone dates, 331-333
lack of detailed scheduling ability, 330-331
project management "lite" culture, 328-330
resource management problems, 333-334
testing process, 340-343
turnover, handling, 334-335
vendor selection process, 335–340

execution
lack of understanding, project manager mistakes, 27
project management process groups, 10

executive reports (communications management), 224

expectations
communications management, 225
difference management (cross-functional projects), 273
lack of understanding, project manager mistakes, 27
measurements (budget development importance), 115
project control, 130
in project management "lite" culture, 328
project success tips, 35
quality management principles, 200
team performance principles, 263
vendor management, 281, 286
verifying (difference management principles), 270

expectations management
balancing reality and perception, 241
expectation components, 241-245
importance of, 240
kickoff meetings, 248-250
overview, 239
principles of, 245-246
project planning and control elements, 247-248
requirements management, 250-253
team performance principles, 257

expectations territory (project management challenges), 14

expenses versus capital (budget development), 117

experience (communications management), 236

experience levels (communications planning), 228

expert judgment (work estimation), 91

expertise (team performance principles), 260

external dependencies
setting, 315
task relationships (project schedules), 105

external sources (communications planning), 228

F

face-to-face meetings
communications management, 225, 232
difference management (virtual projects), 275

facilitating progress, 217

facilitation
communications management, 235
issue management systems, 173, 176
project manager roles, 22

facilitators, 213

failure to perform liability (contract components), 287

FAQs (Frequently Asked Questions), communications management, 224

fast analysis (budget development), 119

fast-tracking technique (shortening project schedules), 108

feedback (team performance principles), 263

feeder buffers in CCPM, 354

fields, custom, 307
in reports, 319
setting up, 316
visual indicators in, 308-310

15% Completion Rule (project control), 130

50% probability estimate in CCPM, 354

file naming conventions
deliverable tracker recommendations, 165
managing deliverables, 164, 168

filtering tasks, 312

finalization
budget development, 120
project schedules, 104

finances (project definition reasons), 45. *See also* budgets; costs

financial arrangements (contract components), 287

financial loss reduction (project management as organization value points), 13

financial reports (communications management), 224

finish dates, 306

five Cs of communication, 228-229

fixed price (FP) contracts, 287-289

flexibility
communications management, 229
difference management principles, 269
spreadsheets, budget development, 119

flow of information (communications management), 231

focus
project manager roles, 22
project manager success tips, 26
team performance principles, 257

follow-up
communications management, 228
project manager roles, 23

footers and headers (document sections)
managing deliverables, 164
setting up, 315, 319

forecasts (performance reporting), 134

formal signoffs
change control challenges, 156
project control, 132

formality considerations (difference management), 274

formality rules (vendor management), 281

formalization
project management process groups, 10
project schedule goals, 101

Format Painter, 310

formatting
Gantt Bar, 310
task display, 310
tasks for reports, 319

FP (fixed price) contracts, 287-289

frequency (performance reporting), 135

Frequently Asked Questions (FAQs), communications management, 224

functional areas (communications planning), 227

G

Gantt Bar
formatting, 310
hiding/viewing in reports, 320
timescale, adjusting, 310, 320

Gantt charts (project schedule presentations), 109

gap documentation in vendor selection process, 340

gatekeepers (managing deliverables), 163

general project definition checklist, 49

global communication trends, demands for project managers, 16

goals
difference management principles, 269
project definition elements, 46

gold-plating
change control challenges, 156
quality management challenges, 206

good budgets (quality management challenges), 205

good intentions (quality management challenges), 205

good resources, over-allocated (quality management challenges), 205

good schedules (quality management challenges), 205

governance
difference management, 270-271
elements of, 353
in portfolio project management, 352
project management trends, 17

government agencies, demand for project managers, 16

government reports (communications management), 224

granularity (WBS guidelines), 81

graphical form (WBS), 72, 74

graphical indicators, 308-310
adding to reports, 320

graphical schedule summaries (performance reporting), 134

gratitude (communications management), 236

Greenleaf, Robert, 218

group contribution importance (difference management), 271

grouping tasks, 312

growth of PMOs, 350

guilty tones (communications management), 236

H

hard milestone dates (example scenario), 331-333

header and footers (document sections)
managing deliverables, 164
setting up, 315, 319

healthy paranoia, 182

heuristic estimating (work estimation), 90

hiding
columns, 319
Gantt Bar in reports, 320

high-maintenance staffs (team performance principles), 264

high-risk projects (work estimation practices), 93-94

historical data
parametric work estimation, 91
work estimation practices, 91-94

history (project definition reasons), 45

holidays (realistic project schedules), 107

honest feedback (project planning), 68

human resources (project management knowledge areas), 11

humble (communications management), 235

I

identification
change request forms, 153
contract components, 287
issue management systems, 176
quality management principles, 199
WBS objectives, 78

identification data points (issue management), 174

identification numbers (change control), 153

identifying risks, 183

identity management (managing deliverables), 162-163

impact
change control challenges, 156-157
of risks, assessing, 184

impact assessment (change request forms), 153

impact data points (issue management), 174

implementation
post-implementation (change prevention actions), 155
project management key concepts, 9

improper work definition (work estimation reasons), 88-89

improving reports, 318-323

incentives (buyer tips and techniques), 283

industrial experience, skill sets, 23

industry standards (quality management), 197

information flow (communications management), 231

informational needs (communications planning), 228

initiation phase
effort distribution estimation, 90
project management process groups, 10
work estimation accuracy, 92

inserting projects with Copy Picture feature, 311

inspections (quality management principles), 201

instant messaging (communications management), 233

integration
project management knowledge areas, 11
WBS objectives, 79

integrity (change control benefits), 149

iterative processes (budget development importance), 115

interpersonal skills
communications management, 235-236
project manager mindset (issue management systems), 173
vendor management, 286

interruptions (communications management), 236

investments, justifying (budget development importance), 115

invoices (vendor management), 285

ISO standards (quality management), 197

issue logs (communications management), 224

issue management systems, 171
administrative process principles, 172
alignment, 172
best practices, 176-177
clear project processes, 174
cost effective approach, 172
documentation, 172
escalation procedures, 174
facilitation, 176
identification, 176
logging systems, 174
central control contacts, 174
collaboration tools, 176
data points, 174-175
databases, 176
disciplined practices, 178
multiple logs, 178
spreadsheets, 176
word processors, 175
proactive project management, 172-173
project control, 128
project manager mindset principles, 173
resolution, 177
reviews, 177
root cause analysis, 177
tracking systems, 172
training systems, 177
vendor management, 281

issue resolution
contract components, 287
difference management (cross-functional projects), 272
recovery activities, 141

issues, definition of, 193

iterations
multiple iterations in testing process, 341
in project management "lite" culture, 330

iterative development
in agile project management, 346
quality management, 204

J–K

judgment (work estimation), 91

judgment attitudes (communications management), 236

kickoff meetings, 248-250
communications management, 224
difference management, 272
team performance principles, 259-260

knowledge (skill sets), 24-25

knowledge areas (PMI), 11-12

L

label formats for timescales, changing, 323

labor costs (budget development), 116, 121

lack of accountability (project closure challenges), 297

lack of project closure, 294

lack of transition plans (project closure challenges), 297

leadership
difference management principles, 269-271
lack of understanding, project manager mistakes, 27
overview, 211-212
project areas requiring leadership, 214-215
project management as personal value point, 13
project management key concepts, 9
in project management "lite" culture, 329
project management trends, 17
project success tips, 35
qualities of successful project leaders, 212-214
servant leadership approach, 218-219
skill sets, 24
team orientation plans, 262
tips and techniques, 215-218

learning
from successful projects, 34-36
from troubled projects, 31–34

learning styles (communication challenges), 227

legal assistance (vendor management), 286

legal constraints (communications planning), 228

legal issues (managing deliverables), 162

length expectations (communications planning), 228

lessons learned (project closure), 295

leveling resources (scheduling software benefits), 105

leverage (project management as organization value points), 13

leverage exception-based approach (status reporting), 234

librarians (project manager roles), 23

licensing and fees (budget development), 118

lifecycles (budget development importance), 115

limited overtime (shortening project schedules), 108

linear organization, visual thinking versus, 357

listening skills
active listening, 24
communications management, 229, 235

location considerations (communications planning), 227

logging systems (issue management), 174
central control contacts, 174
collaboration tools, 176
data points, 174-175
databases, 176
disciplined practices, 178
multiple logs, 178
spreadsheets, 176
word processors, 175

logical dependencies, capturing, 316

logistics, project definition reasons, 44

logs
change control, 153
project success tools, 39
risk logs, 186

lost productivity, reasons for managing deliverables, 161

M

maintenance (project planning considerations), 59

management (WBS objectives), 78

management commitment considerations (vendor management), 282

management decisions (work estimation reasons), 89-90

management processes (project control), 128

management style principles (team performance), 257

managers
common mistakes of, 27
demands for, 15-16
inadequate, 33
mindset principles, 173
multiple, 32
responsibilities of, 201
risk management roles, 23
roles of, 22-23
coach, 22-23
facilitator, 22
librarian, 23
organizers, 22
persuader, 22
planners, 22
point-of-contact, 22
problem-solver, 22
resource manager, 22
salesman, 23
skill categories
business management skills, 23
communication, 24
industrial experience, 23
leadership, 24-25
office productivity suite, 23
self-assessments, 25
software skills, 23
technical knowledge, 24
success tips for, 25
calm natured techniques, 26
common mistakes, avoiding, 25
context understanding, 26
customer-service skills, 26
focus, 26
knowledge of skills, 25
mindset considerations, 25
ownership techniques, 25
passion, 26
political techniques, 25
positive attitude techniques, 25
realism techniques, 26
risk analysis, 26
team-oriented approach, 26

managing
change control
alertness, 150
baselines, resetting, 152
buy-ins, 152
challenges, 156-157
Change Control Board, 154
change control systems, 149
change prevention actions, 154-155
change request forms, 152-153
change types, 147
changes, planning for, 149
configuration and organizational management comparisons, 148
contract alignment, 152
defined, 146-147
identification numbers, 153
multiple process paths, 152
over-communication, 150
overview, 145-146
principles, 151
scope changes, minimizing, 149-150
scope creep, 146
spreadsheets, 153
stakeholders, educating, 149
tracking logs, 153
unplanned scope change causes, 150-151
communications, 223
appreciation and gratitude, 228
audio conferencing, 233
central contact assignment, 230
challenges of, 226-227
communication options, 231-233
conflict resolution, 225

documentation, 228
email, 225, 233
expectations, 225
face-to-face meetings, 225, 232
five Cs of communication, 228-229
follow-ups, 228
information flow, 231
instant messaging, 233
interpersonal skills, 235-236
meeting practices, 234-235
meetings, 225
message content considerations, 231
naiveness, 229
natural communication strengths, 230
organizational change management areas, 224
planning, 227-228
prioritization, 228
proactive approach, 229
project schedule considerations, 228
push and pull methods, 231
reasons for, 225-226
relationship building techniques, 229
responsibility, 229
stakeholder analysis, 230
standard communication areas, 224
status reporting, 234
team management, 225
technology use, 232
telephone contact, 225, 232
urgent communications, 231
video-conferencing, 232
voice mail, 225, 232
Web conferencing, with audio, 233
deliverables
access control implementation, 163
approval processes, 163
archived files, leveraging, 166
backup procedures, 165
baseline establishment, 164
best practices, 163-166
build/release process, 166
central repository, establishing, 163
challenges, 169
change control system, 160
configuration management, 160, 166-168
CYA (Cover Your Assets), 162
directory structures, 164
file naming conventions, establishing, 164
gatekeepers, defining, 163
identity management, 162-163
protection management, 163
reasons for, 161-162
review processes, 163
revision processes, 163
standard document sections, 164
tracking recommendations, 164-165
tracking systems, 163
version numbering schemes, 164
differences, 267-268
buy-in principles, 268
communication principles, 268-270
cross-cultural projects, 273-274
cross-functional projects, 270-273
expectations, verifying, 270
leadership principles, 269
management efforts, 270
proper planning principles, 268
risk management principles, 268
sponsorship principles, 268
virtual projects, 274-276
well-defined expectation principles, 268
expectations
balancing reality and perception, 241
expectation components, 241-245
importance of, 240
kickoff meetings, 248-250
overview, 239
principles, 245-246
project planning and control elements, 247-248

requirements management, 250-253
team performance principles, 257
issues, 171
administrative process principles, 172
alignment, 172
best practices, 176-177
clear project processes, 174
cost-effective approach, 172
documentation, 172
escalation procedures, 174
facilitation, 176
identification, 176
logging systems, 174-178
proactive project management, 172-173
project manager mindset principles, 173
resolution, 177
reviews, 177
root cause analysis, 177
tracking systems, 172
training systems, 177
projects
agile approaches, 346-348
CCPM (Critical Chain Project Management), 353-356
certifications, value of, 358-359
challenges, 13-15
defined, 8
key concepts, 8-10
mind mapping software, 357-358
online resources, 18
organization value points, 12-13
personal value points, 13
PPM (Portfolio Project Management), 351-353
scenarios, 328-343
training for, 359-360
trends in, 16-17
web-based software for, 356-357
quality
acceptance criteria, 206
agile development, 204
audits, 201-202
challenges, 205-206
checklists, 201
communication, 206
completion criteria, 202
computer simulation, 204
customer focus, 206
customer-focused principles, 200
customer-focused project approaches, 203-204
expectations, setting, 200
GFD (Quality Function Deployment), 204
identification principles, 199
industry standards, 197
inspections, 201
iterative development, 204
mentor relationships, 204
overview, 198
planning principles, 200
PMI definition of, 198
pre-verification, 204
prevention, 206
process focus on, 199
product focus on, 199
project manager responsibilities, 201
prototyping approach, 204
Quality Management Plan, 203
rational unified processing, 204
requirements focus on, 199
requirements traceability matrix, 201
reviews, 201
risk management and, 198
scenario development, 204
scope focus, 206
skilled resources/high-performing teams, 206
small work packages, 202, 206
standards, 202
storyboarding approach, 204
success factors, 200
testing cycles, 201
V method, 202
value-added requirements, 199
verification focus on, 199
verification principles, 200
risks
accepting risk, 185
in agile project management, 347
assessing impact of risk, 184
avoiding risk, 185

common problems, 190-192
difference management principles, 268
goals, 181
identifying risk, 183
mitigating risk, 185
monitoring risk, 184-185
principles, 182-183
prioritizing risk, 184
probability of risk factors, 183
probability/impact matrix, 187
project management key concepts, 9
project management knowledge areas, 12
project management roles, 23
project management trends, 17
quality management and, 198
risk assessments, 186
risk control strategies, 192-193
risk logs, 186
risk management plans, 186
risk profiles, 183, 186
risk response options, 186
risk response plans, 187
risk-related terms, 193
sources of risk, 187-190
transference, 186
vendor management, 286
vendors, 279
buyer tips and techniques, 283-285
client organization, 280
contract administrator and project manager conflicts, 282
contract development, 281
contracts, 281-282, 286-289
delivery management, 281
evaluation and selection elements, 281
formality rules, 281
management commitment considerations, 282
management skills, 286
procurement specialists, 279-280
project management essentials, 280-281
relationship management, 281
roles and responsibilities, clarifying, 282
seller organization, 280
seller tips and techniques, 285-286
terms and processed, clarifying, 282
win-win relationship approach, 282

manual resource leveling, 316

marketability experiences (team performance principles), 258

materials (budget development), 118

meetings
communications management, 225, 235
agenda preparation, 235
closure, 235
face-to-face meetings, 225, 232
facilitation, 235
meeting minutes, posting, 235
note taking, 235
planning, 234
timing considerations, 235
video conferencing, 232
difference management, 272
kickoff meetings, 248-250
status meetings
project control, 131
recovery activities, 141
team performance principles, 259-260
virtual meetings, 275-276

mentoring, 204, 359

message content considerations (communications management), 231

metrics in testing process, 342

Microsoft Project, design fundamentals of, 304-306

milestones
charts
project schedule presentations, 109
project success tools, 37
contract components, 287

hard milestone dates (example scenario), 331-333
project control, 132
in quality schedules, 330-331
setting, 315

mind mapping software, 357-358

Mindjet, 357

MindManager, 357

mindset considerations (skill sets), 25

minutes, posting (meeting practices), 235

missed deadlines, 32

missing cost categories (budget development challenges), 121

mistakes by project managers, 27

misunderstandings (difference management), 273

mitigating risk, 185

modification type (deliverable tracker recommendations), 165

monitoring
project management key concepts, 9
in project management "lite" culture, 329
risk, 184-185

motivation (team performance principles), 258

multi-cultural teams (project management trends), 17

multiple calendars in Microsoft Project, 305

multiple critical paths, disabling, 314

multiple iterations
in project management "lite" culture, 330
in project planning, 56
in testing process, 341

multiple schedule versions, 323

multiple schedule views, 322

mutual agreements (contract termination), 298

mutual considerations (legal contracts), 287

N

naiveness (communications management), 229

name data points (issue management), 174

name/identity change (communications management), 224

negative performance index in EVM (Earned Value Management), 138

negativity (communications management), 236

negotiation
managing deliverables, 162
vendor management, 286
vendor selection process, 340

network diagrams (project schedule), 104, 110

new team members (team orientation plans), 262

newsletters (communications management), 224

"90% done" phenomenon, 140

90% probability estimate in CCPM, 354

non-disclosure agreements (contract components), 287

non-standard calendars, updating timescales for, 323

non-working days (realistic project schedules), 107

note taking (meeting practices), 235

notebooks (project success tools), 39

Notes field, 315

O

objective project approval process of PMOs, 350

objectives
lack of understanding, project manager mistakes, 27
project definition elements, 46

OBS (Organizational Breakdown Structure), 78

office productivity suite, skill sets, 23

one-on-one meetings (communications management), 224

ongoing project operations, 8

online resources
project management resources, 18
communication management, 224
openness in vendor selection process, 339
operational costs (budget development), 118
operations (projects), ongoing, 8
organization
charts
communications management, 224
project success tools, 37
project management key concepts, 9
project manager roles, 22-23
project success tips, 30
WBS guidelines, 80
WBS objectives, 79
organization updates (project planning), 62, 64
organization value points, 12-13
organizational and configuration change management comparisons, 148
Organizational Breakdown Structure (OBS), 78
organizational change issues (project definition), 47
organizational culture
communications planning, 228
project control, 130
organizational impacts (project management challenges), 15
organizational structure (communications planning), 227
orientation plans (team performance principles), 261-262
out-of-scope specifications (project definition elements), 46
outcomes (project and operation comparisons), 9
outline form (WBS), 72
outline view (tasks), 312
outsourcing
for resource management problems, 334
for turnover risk, 335
selection process for (example scenario), 335-340
over-allocating resources, 311
avoiding with resource leveling, 316-318
quality management challenges, 205
over-communication (change control), 150
overhead costs (budget development), 118
overtime, limited (shortening project schedules), 108
ownership
contract components, 287
deliverable tracker recommendations, 165
success tips, 25
WBS guidelines, 81

P

Page Setup feature, printing reports, 320
parametric estimating (work estimation), 91
Parkinson's Law, defined, 355
part-time resources
adjusting availability in calendars, 307
realistic project schedules, 107
partial schedules, 98-99
partnership relationships
vendor management, 284
vendor selection process, 340
passion (project manager success tips), 26
past experiences (communication challenges), 227
payment schedules (contracts), 287
payments, finalizing (project closure), 295
PBS (Project Breakdown Structure), 78
PDA (Prevention, Detection, and Action), project control principles, 127-128
penalties (contract components), 287

people. *See also* resource management; team management
performance development, 255
clarity traits, 256
client interaction preparation, 261
collocation, 260
commitment traits, 256
conflict resolution techniques, 260
expectation management principles, 257
expertise, leverage, 260
high-maintenance staffs, 264
high-performing teams, 256
kickoff meetings, 259-260
management style principles, 257
marketability experiences, 258
orientation plans, 261-262
planning principles, 257
poor performers, 263
primary strength traits, 258
procedures, setting up, 259
productivity principles, 257-258
professionalism, 256
progress reporting, 259
project repository setup, 261
recognition, 258-259
relationship building principles, 259
reputation considerations, 264
reward systems, 258-259
risk identification, 264
standards, setting, 260
synergistic traits, 256, 259
task assignment techniques, 261
team charter development, 260
team focus, 257
team selection principles, successful people, 257
team unity rituals, 261
trust levels, 256
undeveloped schedule considerations, 264
resources
adding automatically, 315
assigning, 316, 317, 323, 325
availability, adjusting in calendars, 307
buyer tips and techniques (vendor management), 283
communications planning, 227
incorrect, work estimation reasons, 89
lack of, 33
lack of understanding, project manager mistakes, 27
over-allocating, 311, 316-318
project definition elements, 48
project management, 14, 18
project manager roles, 22
project planning, 58-59, 68
project schedule impacts, 100
project schedule inputs, 101, 103
project success tools, 38
schedule updates (project closure), 295
scheduling software benefits, 105
viewing assignments, 324
WBS guidelines, 80
teams
communications management, 225
project and operation comparisons, 9
project management key concepts, 10
project schedules, quality-based reviews, 109
vendor teams, integrating, 284

perception, balancing with reality, 241

performance
budget development importance, 114
evaluations (project closure), 296
project control, 133-135
project management key concepts, 9
project planning considerations, 59

project schedule impacts, 100
WBS objectives, 78-79

performance development (teams), 255
clarity traits, 256
client interaction preparation, 261
collocation, 260
commitment traits, 256
conflict resolution techniques, 260
expectation management principles, 257
expertise, leverage, 260
high-maintenance staffs, 264
high-performing teams, 256
kickoff meetings, 259-260
management style principles, 257
marketability experiences, 258
orientation plans, 261-262
planning principles, 257
poor performers, 263
primary strength traits, 258
procedures, setting up, 259
productivity principles, 257-258
professionalism, 256
progress reporting, 259
project repository setup, 261
recognition, 258-259
relationship building principles, 259
reputation considerations, 264
reward systems, 258-259
risk identification, 264
standards, setting, 260
synergistic traits, 256, 259
task assignment techniques, 261
team charter development, 260
team focus, 257
team selection principles, successful people, 257
team unity rituals, 261
undeveloped schedule considerations, 264

performance measurement (contract components), 287

performance reporting (project control), 128

personal value points (project management benefits), 13

personality clashes (example scenario), 333-334

perspectives (communications management), 235

persuasion (project manager roles), 22

PERT charts (work estimation), 91

pessimistic project justifications of PMOs, 351

PgMP (Program Management Professional) certification, 358

phased deployment in agile project management, 346

phased estimating (work estimation), 91

phased implementation for hard milestone dates, 333

physical state (communication challenges), 227

pilot projects of PMOs, 350

plan phase (effort distribution estimation), 90

plan-do-review model in agile project management, 347

planned dates, 306

Planned Value (PV) in EVM (Earned Value Management), 137

planners, 212

planning
change control, 149
communication (project success tools), 37
communications management, 227-228
difference management principles, 268
improper, 33
lack of (deliverable management challenges), 169
meeting practices, 234
plan documents, 36
project control, 130
project management key concepts, 9
project management process groups, 10
project manager roles, 22
project success tips, 35
project success tools, 38
projects
acceptance criteria, 60
all-encompassing document, 57
budgets, 64
change control, 65, 67

checklists, 68-69
communications, 66-67
configuration management, 65, 67
control systems, 65
cost determination updates, 64
critical issues, 65
deliverables, 58-60, 65
detail planning, 58
fundamental questions, 58-59
multiple passes, 56
proactive project management, 57
procurement, 66-67
project organization updates, 62, 64
purpose principles, 56
quality management, 67
quality standards, 65
RASIC matrix, 61
reasons for, 55-56
resources, 60, 68
responsibility matrix, 67
risk analysis, 68
roles and responsibilities, 62
rolling wave planning, 56
schedule development, 61-62
schedules versus, 99
shared information, 60
stakeholder analysis, 57
success factor considerations, 57
supplemental project plan components, 66-68
team interaction, 57
team management, 66
validation, 59
variance management, 68
WBS and, 77
work estimation, 61
quality management, 200, 203
risk management plans, 186
risk response plans, 187
team performance principles, 257
testing process, 341
vendor management, 281

PMI (Project Management Institute), 10, 358
knowledge areas, 11-12
process groups, 10
project management defined, 10

PMI Risk Management Professional (PMI-RMP) certification, 358

PMI Scheduling Professional (PMI-SP) certification, 358

PMI special interest group conferences, 360

PMI-RMP (PMI Risk Management Professional) certification, 358

PMI-SP (PMI Scheduling Professional) certification, 358

PMO (Project Management Office), 348-351
scope of, 348-349
traits of successful PMOs, 349-351

PMP (Project Management Professional) certification, 16, 358

point men, 213, 230

point-of-contact (project manager roles), 22

policies (project definition), 48

political influence in portfolio project management, 352

political techniques (success tips), 25

politics, project definition reasons, 44

pooled buffers in CCPM, 355

poor performance
difference management, 270
team performance principles, 263

poor scope statement (unplanned scope change causes), 151

Portfolio Project Management (PPM), 45, 351-353

positive attitudes (success tips), 25

positive attributes (team performance principles), 258

post-implementation (change prevention actions), 155

posting minutes (meeting practices), 235

potential impacts (difference management), 274

PPM (Portfolio Project Management), 45, 351-353

practicality, project definition reasons, 45

pre-allocated budgets (budget development challenges), 121

pre-verification (quality management), 204

preliminary schedules, 103-106

presentations
communications management, 224
inserting projects with Copy Picture feature, 311
project schedules, 109-110

prevention
project control principles, 127
quality management practices, 206

Prevention, Detection, and Action (PDA), project control principles, 127-128

principles, reviewing (recovery activities), 141

printing reports, Page Setup feature, 320

priorities
communications management, 228
for hard milestone dates, 332
project closure challenges, 297
project control, 129
project success tips, 35
risks, 184
tasks, 317-318
in testing process, 341

priority data points (issue management), 174

proactive approach (communications management), 229

proactive project management
issue management systems, 172-173
project planning, 57

probability, determining, 183

probability/impact matrix, 187

problem-solvers, 22, 213

procedures
managing deliverables, 168
team performance, 259

process groups (PMI), 10

process improvement technique (shortening project schedules), 108

processes
buyer tips and techniques (vendor management), 283
clarifying (vendor management), 282
configuration management plans, 168
project control, 129
quality management, 199

procurement
project management knowledge areas, 12
project planning, 66-67

procurement contracts (communications planning), 228

procurement management (project control), 128

procurement specialists (vendor management), 279-280

procurement tasks (budget finalization), 120

procurement team, role in vendor selection process, 337

production environment in testing process, 342

productivity
difference management, 276
managing deliverables, 161
project manager roles, 22
team performance principles, 257-258

products (quality management), 199

professionalism (team performance), 256

profiles, risk, 183, 186

profit margins, lack of (budget development challenges), 121

program management, portfolio project management versus, 352

Program Management Professional (PgMP) certification, 358

progress
measurement (project control challenges), 140
recording, 324
reporting (team performance), 259

tracking, 34-35
WBS guidelines, 80

progress notes data points (issue management), 175

progressive elaboration (project definition), 47

project administration support of PMOs, 350

project approval process of PMOs, 350

Project Breakdown Structure (PBS), 78

project buffers in CCPM, 354

project calendars. *See also* schedules
adjusting resource availability, 307
multiple calendars in Microsoft Project, 305
nonstandard calendars, updating timescales for, 323
realistic project schedules, 107
types of, 306
working time, setting, 315

Project Definition documents. *See* defining projects

project groups (PMI), 10

Project Information dialog box, 313

project information location reasons (managing deliverables), 161

project leadership
difference management principles, 269-271
lack of understanding, project manager mistakes, 27
overview, 211-212
project areas requiring leadership, 214-215
project management as personal value point, 13
project management key concepts, 9
in project management "lite" culture, 329
project management trends, 17
project success tips, 35
qualities of successful project leaders, 212-214
servant leadership approach, 218-219
skill sets, 24
team orientation plans, 262
tips and techniques, 215-218

project management. *See also* projects
agile approaches, 346-348
CCPM (Critical Chain Project Management), 353-356
certifications, value of, 358-359
challenges, 13
collaboration, 15
communication obstacles, 14
competing demands, 14-15
cutting edge demands, 14
estimations, 15
multiple expectations, 14
organizational impacts, 15
uncharted territory, 14
defined, 8
key concepts, 8-10
mind mapping software, 357-358
online resources, 18
organization value points, 12-13
personal value points, 13
PPM (Portfolio Project Management), 351-353
scenarios
hard milestone dates, 331-333
lack of detailed scheduling ability, 330-331
project management "lite" culture, 328-330
resource management problems, 333-334
testing process, 340-343
turnover, handling, 334-335
vendor selection process, 335-340
training for, 359-360
trends in, 16-17
web-based software for, 356-357

project management "lite" culture (example scenario), 328-330

Project Management Institute (PMI), 10, 358
knowledge areas, 11-12
process groups, 10
project management defined, 10

Project Management Office (PMO), 348-351
scope of, 348-349
traits of successful PMOs, 349-351

Project Management Professional (PMP) certification, 16, 358

project manager reluctance challenges (project control), 139

project managers
common mistakes of, 27
demands for, 15-16
inadequate, 33
mindset principles, 173
multiple, 32
responsibilities of, 201
risk management roles, 23
roles of, 22-23
coach, 22-23
facilitator, 22
librarian, 23
organizers, 22
persuader, 22
planners, 22
point-of-contact, 22
problem-solver, 22
resource manager, 22
salesman, 23
skill categories
business management skills, 23
communication, 24
industrial experience, 23
leadership, 24-25
office productivity suite, 23
self-assessments, 25
software skills, 23
technical knowledge, 24
success tips for, 25
calm natured techniques 26
common mistakes, avoiding, 25
context understanding, 26
customer-service skills, 26
focus, 26
knowledge of skills, 25
mindset considerations, 25
ownership techniques, 25
passion, 26
political techniques, 25
positive attitude techniques, 25
realism techniques, 26
risk analysis, 26
team-oriented approach, 26
tools, 36-38

project phase name (deliverable tracker recommendations), 165

project phases in quality schedules, 330

project summary task, viewing, 313

Project, design fundamentals of, 304-306

projects. *See also* project management
budget development, 113
assumptions, documenting, 116
buffers, 116
cash flow management tool, 115
challenges of, 120-121
comprehension principle, 115
cost estimate models, 119
costs of change, 119
disposal costs, 118
earned value management (EVM), 114
equipment sources, 116
expectation measurements, 115
expenses versus capital, 117
finalization, 120
initial development, 119
investment justification, 115
iterative process principle, 115
labor cost sources, 116
licensing and fees, 118
lifecycle principle, 115
materials, 118
operational costs, 118
overhead costs, 118
performance measurement importance, 114
reasons for, 114-115
spreadsheet approach, 119
time-phased principle, 115
training sources, 118
travel sources, 118
validation importance, 114
communications, 67
controlling
15% Completion Rule, 130
action, 127-128
baselines, 131, 140
change control, 128-129, 139
checkpoints, 132

completion criteria, 131, 140
configuration management, 128
considerations, 126
consistency, 130, 140
detection, 127
early project stage management, 130
escalation thresholds, 133
EVM (Earned Value Management), 136-139
expectations, setting, 130
formal signoffs, 132
issue management, 128
management processes, 128
milestones, 132
organizational culture, 130
overview, 125-126
PDA (Prevention, Detection, and Action), 127-128
performance reporting, 128, 133-135
planning, 130
prevention, 127
priorities, 129
process control, 129
procurement management, 128
progress measurement challenges, 140
project manager reluctance challenges, 139
project scale, 129
quality auditors, 132
quality management, 128
recovery activities, 141
requirements management, 128
requirements traceability challenges, 140
requirements traceability matrix, 132
reviews, 131
risk management, 128
small work packages, 131
status meetings, 131
team connection challenges, 140
time and cost accounting challenges, 139
unidentified work challenges, 140
V method approach, 132
variance responses, 135-136
creating, best practices, 313-316
defining, 8, 49
acceptance checklist, 51
alternative approaches, 47
approach checklist, 51
assumptions, 47
constraints, 47
context, 46
cost estimates, 48
definition questions/considerations, 44
dependencies, 46
documentation checklist, 51
financial reasons for, 45
general checklist, 49
goals and objectives, 46
historical reasons for, 45
logistical reasons for, 44
organizational change issues, 47
out-of-scope specifications, 46
policies and standards, 48
political reasons for, 44
portfolio project management, 45
practical reasons for, 45
progressive elaboration, 47
purpose, 46
recommend project approach, 47
resource estimates, 48
risk checklist, 51
risks, 47
schedule estimates, 48
scope, 46
scope checklist, 50
stakeholders, 47, 50-51
success criteria, 46
supporting document references, 48
validation, 59
visual scope summary, 48
ending, 293, 298
absorption method, 298
cancellations, 298
challenges, 296-297
collapse method, 298
completion method, 298
contract termination, 298
deterioration method, 298
displacement method, 298
lack of closure, 294
official closure signals, 294
personal interaction analogy, 293

Project End checklists, 294-296
success criteria, 294
examples of, 8
inserting with Copy Picture feature, 311
leading in project management "lite" culture, 329
operations, ongoing, 8
planning
acceptance criteria, 60
all-encompassing document, 57
budgets, 64
change control, 65, 67
checklists, 68-69
communication plans, 66
configuration management, 65, 67
control systems, 65
cost determination, 64
critical issues, 65
deliverables, 58-60, 65
detail planning, 58
fundamental questions to, 58-59
multiple passes, 56
proactive project management, 57
procurement, 66-67
project organization updates, 62, 64
purpose principles, 56
quality management, 67
quality standards, 65
RASIC matrix, 61
reasons for, 55-56
resource needs, 60, 68
responsibility matrix, 67
risk analysis, 68
roles and responsibilities, 62
rolling wave planning, 56
schedule development, 61-62
schedules versus, 99
shared information, 60
stakeholder analysis, 57
success factor considerations, 57
supplemental project plan components, 66-68
team interaction, 57
team management, 66
validation, 59
WBS and, 77
work estimation, 61
risk management
accepting risk, 185
in agile project management, 347
assessing impact of risk, 184
avoiding risk, 185
common problems, 190-192
difference management principles, 268
goals, 181
identifying risk, 183
mitigating risk, 185
monitoring risk, 184-185
principles, 182-183
prioritizing risk, 184
probability of risk factors, 183
probability/impact matrix, 187
project management key concepts, 9
project management knowledge areas, 12
project management roles, 23
project management trends, 17
quality management and, 198
risk assessments, 186
risk control strategies, 192-193
risk logs, 186
risk management plans, 186
risk profiles, 183, 186
risk response options, 186
risk response plans, 187
risk-related terms, 193
sources of risk, 187-190
transference, 186
vendor management, 286
schedules
acceptance goals, 101
budget impacts, 100
completeness and quality goals, 100-101
crashing technique, 108
critical path, 103
effort estimation inputs, 101, 103
fast tracking technique, 108
finalization, 104
formalization goals, 101
impact, 98-100
limited overtime technique, 108
network diagrams, 104
partial, 98-99

performance impacts, 100
preliminary, 103, 105-106
presenting, 109-110
process improvement technique, 108
project planning versus, 99
quality-based reviews, 108-109
realistic expectations, 103, 106-107
realistic goals, 101
reasons for, 97-98
resource impacts, 100
resource inputs, 101, 103
risk analysis, 101, 104
scheduling software, 105
shortening, 107-109
task inputs, 103
task relationships, 101-105
team-based approach, 106
walk-throughs, 104, 108-109
WBS inputs, 101
what-if analysis, 100
sending, challenges, 297
success tips
acceptance criteria, 30
achieved purpose, 30
agreement, 35
alignment, 35
budgets, completed within, 30
collaboration, 35
communication, 35
completed on time, 30
customer expectation, 35
decision points, 30
delivered as promised, 30
expectations, realistic, 35
learning from successful projects, 34-36
learning from troubled projects, 31-34
leadership, 35
management tools, 36-39
organization, 30
planning, 35
priorities, 35
progress tracking, 35
quality, 30, 35
risk analysis, 36
schedules, 35
scope, 35
skill sets, 36
stakeholder acceptance, 30
stakeholder expectations, meeting, 35
support, 35
universal harmony, 30
win-win relationship approach, 31
variance management, 68
promotion from within for handling turnover risk, 335
protection management (managing deliverables), 163
prototyping (quality management), 204
public relation notices (communications management), 224
purpose
project and operation comparisons, 9
project definition elements, 46
project planning, 56
project success tips, 30
push and pull methods (communications management), 231
PV (Planned Value) in EVM (Earned Value Management), 137

Q

QA audits, 193
quality
auditors, 132
managing
acceptance criteria, 206
agile development, 204
audits, 201-202
challenges, 205-206
checklists, 201
communication, 206
completion criteria, 202
computer simulation, 204
customer focus, 206
customer-focused principles, 200
customer-focused project approaches, 203-204
expectations, setting, 200
identification principles, 199
industry standards, 197
inspections, 201
iterative development, 204
mentor relationships, 204
overview, 198
planning principles, 200
PMI definition of, 198
pre-verification, 204

prevention, 206
process focus on, 199
product focus on, 199
project management trends, 17
project manager responsibilities, 201
project planning, 67
prototyping approach, 204
QFD (Quality Function Deployment), 204
Quality Management Plan, 203
rational unified processing, 204
requirements focus on, 199
requirements traceability matrix, 201
reviews, 201
risk management and, 198
scenario development, 204
scope focus, 206
skilled resources/high-performing teams, 206
small work packages, 202, 206
standards, 202
storyboarding approach, 204
success factors, 200
testing cycles, 201
V method, 202
value-added requirements, 199
verification focus on, 199
verification principles, 200
project control, 128
project management challenges, 14
project management key concepts, 9
project management knowledge areas, 11
project planning considerations, 59
project schedule goals, 100-101
project success tips, 30, 35
project success tools, 38
quality assurance (vendor management), 284
quality enhancements (vendor management), 284
quality schedules, detailed schedules versus, 330-331
quality standards (project planning), 65
quality-based reviews (project schedules), 108-109
question asking
interpersonal skills, communications management, 236
project planning, 58-59

R

RASIC matrix (project planning), 61
rational unified processing (quality management), 204
RBS (Resource Breakdown Structure), 78
readiness checkpoints in testing process, 342
realism (success tips), 26
realistic expectations
project schedules, 101, 103, 106
resource allocation, 107
project success tips, 35
reality, balancing with perception, 241
rebuilding resource assignments, 325
recognition
project management as personal value points, 13
team performance principles, 258-259
recommended project approach (project definition elements), 47
reconciliation (budget finalization), 120
recording progress, 324
recovery activities
baselines, resetting, 141
clarity, communication, 141
discussed, 141
increased accountability and visibility, 141
issue resolution, 141
managing deliverables, 161
planning principles, reviewing, 141
status meetings, 141
references/referrals (project closure), 296
refinement (WBS guidelines), 81
regulatory issues (managing deliverables), 162

related terms (configuration and organizational management comparisons), 148

related terms data points (issue management), 175

relationships
in agile project management, 347
communications management, 229
interpersonal skills, communications management, 236
in project management "lite" culture, 328-329
team performance, 259
vendor management, 281

release process (managing deliverables), 166

reporting
configuration management plans (managing deliverables), 168
performance (project control), 128, 133-135
in portfolio project management, 352
status reporting, 37, 234

reports
customizing, 321
improving, 318-323
printing (Page Setup feature), 320

repository plans (managing deliverables), 168

repository setup (team performance principles), 261

reputations (team performance principles), 264

requestor information (change request forms), 153

requests (change control principles), 152

requirements
change prevention actions, solid requirements definition, 154
defining for cross-functional projects, 272-273
lack of understanding, project manager mistakes, 27
managing, 128, 250-253
quality management, 199
unplanned scope change causes, 151

requirements documents (project success tools), 36

requirements traceability matrix (RTM), 253
project control, 132, 140
quality management tools, 201

reserve time (work estimation practices), 94

resilience, 217

resolution
issue management systems, 177
lack of understanding, project manager mistakes, 27
recovery activities, 141

resource allocation
of PMOs, 351
realistic project schedules, 107
work estimation practices, 93

Resource Breakdown Structure (RBS), 78

resource buffers in CCPM, 354

resource calendars, 306

resource dependencies (vendor management), 285

resource estimation
WBS objectives, 78
work estimation reasons, 89

resource leveling, 316-318
realistic project schedules, 107
scheduling software benefits, 105

resource management. *See also* team management
in CCPM, 354
in portfolio project management, 352
problems (example scenario), 333-334
turnover, handling (example scenario), 334-335

resource needs (project planning), 60

resources
adding automatically, 315
assigning, 316
rebuilding assignments, 325

to summary tasks, 317, 323
availability, adjusting in calendars, 307
buyer tips and techniques (vendor management), 283
communications planning, 227
incorrect, work estimation reasons, 89
lack of, 33
lack of understanding, project manager mistakes, 27
over-allocating, 311
avoiding with resource leveling, 316-318
project definition elements, 48
project management, 14, 18
project manager roles, 22
project planning, 58-59, 68
project schedule impacts, 100
project schedule inputs, 101, 103
project success tools, 38
schedule updates (project closure), 295
scheduling software benefits, 105
viewing assignments, 324
WBS guidelines, 80

respect, earning, 216

response options (risk management), 185-186

responsibilities
communication, difference management, 270
communications management, 229
configuration management plans (managing deliverables), 168
difference management, 270
of PMO (Project Management Office), 348-349
project planning, 62
vendor management, 281-282

responsibility matrix
project planning, 67
project success tools, 37

responsiveness (difference management), 275

results-orientation in agile project management, 347

resumes, updating (project closure), 295-296

review processes
communications management, 224
default settings, 314-315
issue management systems, 177
managing deliverables, 163
project control, 131
project schedules, 108-109
quality management principles, 201
recovery activities, 141
vendor management, 285

revision history page (document sections), managing deliverables, 164

revision processes (managing deliverables), 163

reward systems
buyer tips and techniques, 283
team performance principles, 258-259

right project approach (change prevention actions), 155

risk analysis. *See also* risk management
communications planning, 228
lack of (quality management challenges), 206
performance reporting, 134
proactive project management, 57
project control, 128
project definition checklist, 51
project definition elements, 47
project manager success tips, 26
project planning, 68
project schedules, 101, 104
project success tools/tips, 36-38
WBS objectives, 79
work estimation, 88-89, 93

risk assessments, 186

risk factor methods (work estimation), 92

risk factors (variance responses), project control, 135

risk identification (team performance principles), 264

risk level, scaling vendor selection process to, 336-337

risk logs, 186, 224

risk management
- accepting risk, 185
- in agile project management, 347
- assessing impact of risk, 184
- avoiding risk, 185
- common problems, 190-192
- difference management principles, 268
- goals, 181
- identifying risk, 183
- mitigating risk, 185
- monitoring risk, 184-185
- principles, 182-183
- prioritizing risk, 184
- probability of risk factors, 183
- probability/impact matrix, 187
- project management key concepts, 9
- project management knowledge areas, 12
- project management roles, 23
- project management trends, 17
- quality management and, 198
- risk assessments, 186
- risk control strategies, 192-193
- risk logs, 186
- risk management plans, 186
- risk profiles, 183, 186
- risk response options, 186
- risk response plans, 187
- risk-related terms, 193
- sources of risk, 187-190
- transference, 186
- vendor management, 286

risk management plans, 186

risk profiles, 183, 186

risk reduction (vendor management), 283-284

risk response plans, 187

risks
- lack of understanding, project manager mistakes, 27
- project manager mindset (issue management systems), 173
- project planning considerations, 59

roadshows (communications management), 224

role responsibility matrix (communications management), 224

roles and responsibilities
- communication, difference management, 270
- configuration management plans (managing deliverables), 168
- project planning, 62
- vendor management, 281-282

rolling wave planning (project planning), 56

root cause analysis (issue management systems), 177

RTM (requirements traceability matrix), 253
- project control, 132, 140
- quality management tools, 201

rule-of-thumb estimating (heuristic estimation), 90

rush jobs (project closure challenges), 296

S

salesmen, 23, 213

saving baseline dates, 324

scale (project control), 129

scenario development (quality management), 204

scenarios
- hard milestone dates, 331-333
- lack of detailed scheduling ability, 330-331
- project management "lite" culture, 328-330
- resource management problems, 333-334
- testing process, 340-343
- turnover, handling, 334-335
- vendor selection process, 335-340

schedule changes, capturing impacts of, 324

schedule completion date (deliverable tracker recommendations), 165

schedule performance in EVM (Earned Value Management), 136

Schedule Performance Index (SPI) in EVM (Earned Value Management), 137

Schedule Variance (SV) in EVM (Earned Value Management), 137

schedules. *See also* calendars
acceptance goals, 101
baselines, setting, 312-313
budget impacts, 100
in CCPM, 354
change control principles, 152
communication, difference management, 270
communications management, 228
completeness and quality goals, 100-101
critical path, 103
dates
constraints on, 305
planned versus actual versus baseline, 306
detailed schedules
in agile project management, 346
lack of (example scenario), 330-331
developing (project planning), 61-62
effort estimation inputs, 101-103
finalization, 104
formalization goals, 101
impacts, 98-100
lack of understanding, project manager mistakes, 27
multiple versions of, 323
multiple views of, 322
network diagrams, 104
partial, 98-99
performance impacts, 100
preliminary, 103-106
presenting, 109-110
project closure, 295
project definition elements, 48
in project management "lite" culture, 329
project planning versus, 99
project success tools/tips, 35-37
quality-based reviews, 108-109
realistic expectations, 103, 106
calendar alignment, 107
resource allocation, 107
realistic goals, 101
reasons for, 97-98
resource impacts, 100
resource inputs, 101, 103
risk analysis, 101, 104
scheduling software, 105
shortening, 107-109
crashing technique, 108
fast tracking technique, 108
limited overtime technique, 108
process improvement technique, 108
task duration, determining, 305
task inputs, 103
task relationships, 101-105
team orientation plans, 261
team-based approach, 106
undeveloped (team performance techniques), 264
walk-throughs, 104, 108-109
WBS and, 77
guidelines, 80
inputs, 101
what-if analysis, 100
work estimation, 86

scope
change control, 149-151
lack of, 34
lack of understanding, project manager mistakes, 27
of PMO (Project Management Office), 348-349
project definition checklist, 50
project definition elements, 46-47
project management challenges, 14
project management key concepts, 9
project management knowledge areas, 11
project success tips, 35
quality management plans, 203
quality management practices, 206
visual summary (project definition elements), 48

scope creep, defined, 146

scope management for hard milestone dates, 332

scope statements (contract components), 287

scoring in vendor selection process, 338-339

scripts in testing process, 341

security agreements (contract components), 287

selection process for vendors (example scenario), 335-340

self-assessments (skill set categories), 25

self-control, 218, 236

seller organization (vendor management), 280

seller tips and techniques (vendor management), 285
- acceptance criteria, 285
- communication management, 286
- invoice control, 285
- resource dependencies, 285
- review processes, 285
- sign-offs, 285
- trust and confidence, 286

senior management support of PMO, 350

***The Servant as Leader* (Greenleaf), 218**

servant leadership approach, 218-219, 269

shared information (project planning), 60

shortening project schedules, 107-109
- crashing technique, 108
- fast tracking technique, 108
- limited overtime technique, 108
- process improvement technique, 108

sign-offs
- change control challenges, 156
- change prevention actions, 154
- managing deliverables, 161
- project control, 132
- protection management, 163
- vendor management, 285

signatures
- difference management (cross-functional projects), 273
- legal contracts, 287

simulations, 359

skill categories
- business management, 23
- communication skills, 24
- industrial experience, 23
- leadership, 24
- office productivity suite, 23
- project management as personal value points, 13
- project planning considerations, 58
- project success tips, 36
- self-assessments, 25
- software skills, 23
- technical knowledge skills, 24
- unsuccessful project considerations, 25

skilled resources (quality management practices), 206

small work packages
- project control, 131
- quality management, 202, 206

SMART goals, 49

SME (subject matter expert), work estimation, 91

software, scheduling, 105

software skills, 23

sources of project risk, 187-190

SPI (Schedule Performance Index) in EVM (Earned Value Management), 137

sponsorship
- difference management, 268-271
- lack of, 32
- vendor management, 281

spreadsheets
- budget development, 119
- change control, 153
- issue management logging systems, 176

staffing resources
- adding automatically, 315
- assigning, 316
  - *rebuilding assignments, 325*
  - *to summary tasks, 317, 323*
- availability, adjusting in calendars, 307
- buyer tips and techniques (vendor management), 283
- communications planning, 227
- incorrect, work estimation reasons, 89
- lack of, 33
- lack of understanding, project manager mistakes, 27
- over-allocating, 311
  - *avoiding with resource leveling, 316-318*

project definition elements, 48
project management, 14, 18
project manager roles, 22
project planning, 58-59, 68
project schedule impacts, 100
project schedule inputs, 101, 103
project success tools, 38
schedule updates (project closure), 295
scheduling software benefits, 105
viewing assignments, 324
WBS guidelines, 80

stakeholder acceptance (project management as organization value points), 13

stakeholder analysis
communications management, 230
communications planning, 227
project planning, 57-59
WBS guidelines, 79-81

stakeholder confidence (difference management principles), 269

stakeholder engagement (change prevention actions), 155

stakeholders
buy-in, lack of, 32
defined, 13
educating (change control), 149
expectations, managing
balancing reality and perception, 241
expectation components, 241-245
importance of, 240
kickoff meetings, 248-250
overview, 239
principles, 245-246
project planning and control elements, 247-248
project success tips, 35
requirements management, 250-253
needs, adapting to (performance reporting), 135
project definition checklist, 50-51
project definition elements, 47
quality-based reviews with, project schedules, 109

standard document sections (managing deliverables), 164

standardization in PMOs, 350

standards
project definition, 48
quality management, 197, 202
team performance principles, 260

start dates
planned versus actual versus baseline, 306
setting, 313

statistical data (parametric work estimation), 91

status data points (issue management), 174

status information (change request forms), 153

status meetings
project control, 131
recovery activities, 141

status name (deliverable tracker recommendations), 165

status reports
communications management, 224, 234
project success tools, 37

stoplight indicators (performance reporting), 134

storyboarding (quality management approach), 204

strength traits (team performance principles), 258

student syndrome, defined, 355

subject matter expert (SME), work estimation, 91

submission by data points (issue management), 174

success criteria
change control principles, 152
ending projects, 294
performance reporting, 134
project definition elements, 46
project planning, 57
quality management principles, 200
team performance principles, 263
vendor management, 281

success tips
project managers, 25
calm natured techniques, 26
common mistakes, avoiding, 25
context understanding, 26
customer service skills, 26
focus, 26
knowledge of skills, 25
mindset considerations, 25
ownership techniques, 25
passion, 26
political techniques, 25
positive attitude techniques, 25
realism techniques, 26
risk analysis, 26
team-oriented approach, 26
projects, 30
acceptance criteria, 30
achieved purpose, 30
agreement, 35
alignment, 35
budgets, completed within, 30
collaboration, 35
communication, 35
completed on time, 30
customer expectations, 35
decision points, 30
delivered as promised, 30
expectations, realistic, 35
leadership, 35
learning from successful projects, 34-36
learning from troubled projects, 31-34
management tools, 36-39
organization, 30
planning, 35
priorities, 35
progress tracking, 35
quality, 30, 35
risk analysis, 36
schedules, 35
scope, 35
skill sets, 36
stakeholder acceptance, 30
stakeholder expectations, meeting, 35
support, 35
universal harmony, 30
win-win relationship approach, 31

successful performance (contract termination), 298

summaries
interpersonal skills, communications management, 236
performance reporting, 134
project success tools, 38

summary tasks, assigning resources to, 317, 323

supplemental project plan components, 66-68

support
lack of, 31
project success tips, 35

supporting document references (project definition elements), 48

SV (Schedule Variance) in EVM (Earned Value Management), 137

synergistic traits (team performance), 256, 259

T

T&M (time and materials) contracts, 287-289

T&M (time and materials) with cap contracts, 288

target approval date (deliverable tracker recommendations), 165

target audience (communications management), 229

target due date data points (issue management), 175

target reports (status reporting), 234

targeted work product (deliverable tracker recommendations), 165

targets (configuration management plans), 168

task assignments (difference management), 270

task calendars, 306

task duration
determining, 305
entering, 316

task relationships (project schedule inputs), 101, 103-105

tasks
assigned resources, viewing, 324

assignment techniques (team performance principles), 261
constraint violations, viewing, 314
disabling autolinking, 314
display formatting, 310
filtering, 312
formatting for reports, 319
grouping, 312
Notes field, 315
outline view, 312
prioritizing, 317-318
project planning considerations, 58
project schedule inputs, 103
project schedules versus WBS, 77
project summary task, viewing, 313
recording progress, 324
summary tasks, assigning resources to, 323
viewing
level of detail, determining, 312
in reports, 319
WBS guidelines, 80-81

teachers, 218

team charter development (team performance principles), 260

team connection (project control challenges), 140

team consensus (work estimation methods), 92

team development (WBS guidelines), 80

team interaction (project planning), 57

team management. *See also* resource management
for hard milestone dates, 332
project planning, 66

team performance
quality management practices, 206
WBS objectives, 79

team rule establishment (difference management), 275

team-based schedule development approach (project schedules), 106

team-oriented approach (success tips), 26

teams
communications management, 225
performance
development, 255
clarity traits, 256
client interaction preparation, 261
collocation, 260
commitment traits, 256
conflict resolution techniques, 260
expectation management principles, 257
expertise, leverage, 260
high-maintenance staffs, 264
high-performing teams, 256
kickoff meetings, 259-260
management style principles, 257
marketability experiences, 258
orientation plans, 261-262
planning principles, 257
poor performers, 263
primary strength traits, 258
procedures, setting up, 259
productivity principles, 257-258
professionalism, 256
progress reporting, 259
project repository setup, 261
recognition, 258-259
relationship building principles, 259
reputation considerations, 264
reward systems, 258-259
risk identification, 264
standards, setting, 260
synergistic traits, 256, 259
task assignment techniques, 261
team charter development, 260
team focus, 257
team selection principles, successful people, 257
team unity rituals, 261
trust levels, 256
undeveloped schedule considerations, 264
project and operation comparisons, 9
project management key concepts, 10

project schedules, quality-based reviews, 109
vendor teams, integrating, 284

technical difficulties, unforeseen, 34

technical skill sets
knowledge skills, 24
project management as personal value points, 13

technology
communications management, 232
communications planning, 228
overhead costs (budget development), 118
shifts (unplanned scope change causes), 150

telephone contact (communications management), 225, 232

terminating contracts, 298

terminology development (difference management), 269

terms, clarifying (vendor management), 282

testing
multiple phases (quality management challenges), 205
prioritizing for hard milestone dates, 332
project control, 131
quality management principles, 201
example scenario, 340-343

thinking before responding (communications management), 235

30/60/90 day detail plans in quality schedules, 331

time and materials (T&M) contracts, 287-289

time and materials (T&M) with cap contracts, 288

time challenges (project control), 139

time estimations
validating (vendor management), 284
work estimation practices, 94

time ranges (work estimation practices), 93

time zones (difference management)
cross-cultural projects, 273
virtual projects, 276

time-phased principle (budget development importance), 115

timeboxing in agile project management, 347

timescales
adjusting, 310, 320
label formats, changing, 323
updating for nonstandard calendars, 323

timetable dates (contract components), 287

timing
meeting practices, 235
of vendor selection process, 339

timing management (project management knowledge areas), 11

title page (document sections), managing deliverables, 164

tolerance levels (escalation thresholds), 133

tonality (communications management), 236

tool difficulties (deliverable management challenges), 169

tools
configuration management plans, 168
project manager, 36-38
risk management tools, 186-187

traceability
change prevention actions, 154
quality management tools, 201

tracking
managing deliverables, 161
in project management "lite" culture, 329
requirements traceability matrix, 132

tracking systems
change control, 153
issue management systems, 172
managing deliverables, 163-165

training
budget development, 118
issue management systems, 177
for project management, 359-360
project planning considerations, 59

transference (risk management), 186

transition period for handling turnover risk, 335

transition plans, lack of (project closure challenges), 297

travel sources (budget development), 118

trends in project management, 16-17

triple constraint of project management, 15

troubled projects
learning from, 31-34
WBS guidelines, 82

trust
earning, 216
team performance, 256
vendor management, 286

turnover, handling (example scenario), 334-335

U

umbrella (project role), 213

unacknowledged risks, 191

uncharted territory (project management challenges), 14

undetected risks, 190

undeveloped schedule considerations (team performance principles), 264

unidentified work (project control challenges), 140

unity rituals (team performance principles), 261

universal harmony (project success tips), 30

unstated expectations (difference management), 273

unsuccessful project considerations, skill set categories, 25

updating timescales for non-standard calendars, 323

urgent messages (communications management), 231

V

V method
project control, 132
quality management principles, 202

validation
budget development importance, 114
interpersonal skills, communications management, 236
project planning, 59
in testing process, 342

value-added deliverables
of PMOs, 350
in project management "lite" culture, 329

value-added requirements (quality management), 199

values and beliefs (communication challenges), 227

variance management (project planning), 68

variance responses (project control)
baselines, resetting, 136
corrective actions, 135
project cancellation, 136
risk factors, logging, 135

vendor selection process
example scenario, 335-340
project management trends, 16

vendors, managing, 279
buyer tips and techniques, 283-285
client organization, 280
contract administrator and project manager conflicts, 282
contract development, 281
contracts, 281-282, 286-289
delivery management, 281
evaluation and selection elements, 281
formality rules, 281
management commitment considerations, 282
management skills, 286
procurement specialists, 279-280

project management essentials, 280-281
project management trends, 16
relationship management, 281
roles and responsibilities, clarifying, 282
seller organization, 280
seller tips and techniques, 285-286
terms and processes, clarifying, 282
win-win relationship approach, 282

verbal communications (vendor management), 286

verification
communications management, 229
pre-verification, 204
quality management, 199-200

version control (project planning considerations), 59

version numbering schemes
deliverable tracker recommendations, 165
managing deliverables, 164

video-conferencing (communications management), 232

viewing
assigned resources, 324
constraint violations, 314
Gantt Bar in reports, 320
over-allocated resources, 311
project summary task, 313
tasks
level of detail, determining, 312
in reports, 319
WBS field, 311

views, multiple views of schedules, 322

virtual projects (difference management), 274
communication methods, 276
face-to-face interaction, 275
productivity verification, 276
responsiveness, 275
team rule establishment, 275
time zone references, 276
virtual meetings, 275-276

virtual teams (project management trends), 17

virtual training, 360

visibility, increased (recovery activities), 141

visual aids (status reporting), 234

visual indicators, 308-310
adding to reports, 320

visual scope summary (project definition elements), 48

visual thinking, linear organization versus, 357

voice mail (communications management), 225, 232

W–Z

walk-throughs
project control, 131
project schedules, 104, 108-109

WBS (work breakdown structure)
BOM (Bill of Materials), 78
buyer tips and techniques (vendor management), 283
change prevention actions, 155
clarification, 74-75
CWBS (contractual WBS), 78
defined, 72
development process, 79
guidelines, 80-81
work decomposition process, 79-80
graphical form, 72, 74
objectives, 78-79
OBS (Organizational Breakdown Structure), 78
outline form, 72
PBS (Project Breakdown Structure), 78
project planning and, 77
project schedules, 77
inputs, 101
presentations, 110
versus WBS, 77
RBS (Resource Breakdown Structure), 78
when to stop, 82
work estimation, 75-76

WBS detail in quality schedules, 330

WBS field, viewing, 311

weak foundation (budget development challenges), 120

weaknesses, compensating for, 218

Web conferencing, with audio (communications management), 233

Web sites
project management resources, 18
communication management, 224

web-based project management software, 356-357

weekends (realistic project schedules), 107

weighted averages (work estimation), 91

what-if analysis (project schedule impacts), 100

win-win relationships
project success tips, 31
vendor management, 282

word processors (issue management logging systems), 175

work breakdown structure (WBS)
BOM (Bill of Materials), 78
buyer tips and techniques (vendor management), 283
change prevention actions, 155
clarification, 74-75
CWBS (contractual WBS), 78
defined, 72
development process, 79
guidelines, 80-81
work decomposition process, 79-80
graphical form, 72, 74
objectives, 78-79
OBS (Organizational Breakdown Structure), 78
outline form, 72
PBS (Project Breakdown Structure), 78
project planning and, 77
project schedules, 77
inputs, 101
presentations, 110
versus WBS, 77
RBS (Resource Breakdown Structure), 78
when to stop, 82
work estimation, 75-76

work effort, entering, 316

work environments (team orientation plans), 262

work estimation (WBS), 75-76
accuracy levels, 92
analogous estimating, 90
best practices, 92-94
bottom-up estimating, 90
effort distribution estimating, 90
expert judgment method, 91
heuristic estimating, 90
historical data, 91
overview, 85-86
parametric estimating, 91
PERT charts, 91
phased estimating, 91
project planning, 58, 61
reasons for, 88-90
risk analysis, 88
risk factor methods, 92
schedule development process, 86
team consensus, 92
weighted averages, 91

work hours (realistic project schedules), 107

work packages
in EVM (Earned Value Management), 137
quality management practices, 202, 206

work products in project management "lite" culture, 329

workflow processes
change control principles, 152
difference management, 272

working time, setting in project calendar, 315

written communications (vendor management), 286