## **BRIEF CONTENTS**

Preface	xix
Chapter 1	
Introduction to Project Management	1
Chapter 2	
The Project Management and Information Technology Context	43
Chapter 3	
The Project Management Process Groups: A Case Study	81
-	01
Chapter 4	
Project Integration Management	139
Chapter 5	
Project Scope Management	187
Chapter 6	
Project Time Management	225
Troject Time management	225
Chapter 7	
Project Cost Management	271
Chapter 8	
Project Quality Management	311
Chapter 9	
Project Human Resource Management	359
Chapter 10	
Project Communications Management	405
Chapter 11	
Project Risk Management	420
i roject risk management	439

Chapter 12	
Project Procurement Management	479
Chapter 13	
Project Stakeholder Management	509
Appendix A	
Guide to Using Microsoft Project 2010	A.1
Appendix B	
(Available on CengageBrain.com)	6
Appendix C	P
(Available on CengageBrain.com)	
Glossary	G.1
Index	I.1

**Brief Contents** 

## TABLE OF CONTENTS

Preface	xix
Chapter 1 Introduction to Project Management	1
Introduction	2
What Is a Project?	4
Examples of IT Projects	4
Project Attributes	6
Project Constraints	7
What Is Project Management?	9
Project Stakeholders	10
Project Management Knowledge Areas	11
Project Management Tools and Techniques	12
Project Success	14
Program and Project Portfolio Management	16
Programs	17
Project Portfolio Management	17
The Role of the Project Manager	21
Project Manager Job Description	21
Suggested Skills for Project Managers	22
Importance of People Skills and Leadership Skills	24
Careers for IT Project Managers	25
The Project Management Profession	26
History of Project Management	26
The Project Management Institute	30
Project Management Certification	30
Ethics in Project Management	32
Project Management Software	33
Chapter Summary	36
Quick Quiz	37
Quick Quiz Answers	38
Discussion Questions Exercises	38
Key Terms	39 40
End Notes	41
Did Notes	41
Chapter 2 The Project Management and Information Technology Context	43
A Systems View of Project Management	45
What Is a Systems Approach?	45
The Three-Sphere Model for Systems Management	46

Understanding Organizations	41
The Four Frames of Organizations	47
Organizational Structures	49
Organizational Culture	51
Stakeholder Management	52
The Importance of Top Management Commitment	54
The Need for Organizational Commitment to Information Technology	55
The Need for Organizational Standards	56
Project Phases and the Project Life Cycle	56
Product Life Cycles	59
The Importance of Project Phases and Management Reviews	62
The Context of Information Technology Projects	/64
The Nature of IT Projects	64
Characteristics of IT Project Team Members	64
Diverse Technologies	65
Recent Trends Affecting Information Technology Project Management	65
Globalization	65
Outsourcing	66
Virtual Teams	67
Agile Project Management	69
The Manifesto for Agile Software Development	70
Scrum	70
Agile, the PMBOK® Guide, and a New Certification	71
Chapter Summary	73
Quick Quiz	74
Quick Quiz Answers	75
Discussion Questions	75
Exercises	76
Key Terms	77
End Notes	78
Chapter 3 The Project Management Process Groups: A Case Study	81
Project Management Process Groups	82
Mapping the Process Groups to the Knowledge Areas	87
Developing an IT Project Management Methodology	88
Case Study 1: JWD Consulting's Project Management Intranet Site Project	0.1
(Predictive Approach)	91
Project Pre-Initiation and Initiation	91
Pre-Initiation Tasks	92
Initiating	96
Project Planning	100
Project Execution	109
Project Monitoring and Controlling	114
Project Closing	117
Case Study 2: JWD Consulting's Project Management Intranet Site Project	100
(Agile Approach)	120
Scrum Roles, Artifacts, and Ceremonies	121
Project Pre-Initiation and Initiation	123
Planning	124

Executing	127
Monitoring and Controlling	127
Closing	129
Templates by Process Group	129
Chapter Summary	133
Quick Quiz	133
Quick Quiz Answers	135
Discussion Questions	135
Exercises	136
Key Terms	137
End Notes	138
Chapter 4 Project Integration Management	139
What Is Project Integration Management?	140
Strategic Planning and Project Selection	143
Strategic Planning	143
Identifying Potential Projects	145
Aligning IT with Business Strategy	146
Methods for Selecting Projects	148
Focusing on Broad Organizational Needs	148
Categorizing IT Projects	148
Performing Net Present Value Analysis, Return on Investment, and Payback	
Analysis	149
Net Present Value Analysis	149
Return on Investment	152
Payback Analysis	153
Using a Weighted Scoring Model	154
Implementing a Balanced Scorecard	154
Developing a Project Charter	
Developing a Project Management Plan	1 <b>57</b> 161
Project Management Plan Contents	161
Using Guidelines to Create Project Management Plans	
Directing and Managing Project Work	164 166
Coordinating Planning and Execution	166
Providing Strong Leadership and a Supportive Culture	
	167
Capitalizing on Product, Business, and Application Area Knowledge	167
Project Execution Tools and Techniques  Monitoring and Controlling Project Work	168
Performing Integrated Change Control	169
Change Control on IT Projects	171
Change Control on 11 Projects  Change Control System	172
Closing Projects or Phases	173
Using Software to Assist in Project Integration Management	175
Chapter Summary	175
Quick Quiz	178 178
Quick Quiz Answers	180
Discussion Questions	180

Table of Contents

245

247

248

248

251

252

253

255

256

258

259

261

261

261

265

265

265

268

271

272

274

274

275

279

280

280

282

283

284

289

291

291

297

299

301

301

303

303

304

305

305

306

308

311

312

314

316

318

xiii

Controlling Quality	319	Covey and Improving Effectiveness	37
Tools and Techniques for Quality Control	320	Developing the Human Resource Plan	37
Statistical Sampling	327	Project Organizational Charts	37
Six Sigma	328	Responsibility Assignment Matrices	376
How Is Six Sigma Quality Control Unique?	329	Staffing Management Plans and Resource Histograms	37
Six Sigma and Project Selection and Management	330	Acquiring the Project Team	37
Six Sigma and Statistics	331	Resource Assignment	37
Testing	333	Resource Loading	38
Modern Quality Management	335	Resource Leveling	38
Deming and His 14 Points for Management	336	Developing the Project Team	38
Juran and the Importance of Top Management Commitment to Quality	336	Training	38
Crosby and Striving for Zero Defects	(337	Team-Building Activities	38
Ishikawa's Guide to Quality Control	338	The Myers-Briggs Type Indicator	38
Taguchi and Robust Design Methods	338	The Social Styles Profile	38
Feigenbaum and Workers' Responsibility for Quality	338	DISC Profile	38
Malcolm Baldrige National Quality Award	338	Reward and Recognition Systems	39
ISO Standards	339	Managing the Project Team	39
Improving IT Project Quality	340	Tools and Techniques for Managing Project Teams	39
Leadership	340	General Advice on Managing Teams	39
	341	Using Software to Assist in Human Resource Management	39
The Cost of Quality Organizational Influences, Workplace Factors, and Quality	343	Chapter Summary	39
	343	Quick Quiz	39
Expectations and Cultural Differences in Quality	344	Quick Quiz Answers	399
Maturity Models		Discussion Questions	399
Software Quality Function Deployment Model	344	Exercises	399
Capability Maturity Model Integration	344	Running Case	400
Project Management Maturity Models	345	Key Terms	40
Using Software to Assist in Project Quality Management	347 348	End Notes	402
Chapter Summary	348		
Quick Quiz Quick Quiz Answers	350	Chapter 10 Project Communications Management	40.
Discussion Questions	350	The Importance of Project Communications Management	40
Exercises	351	Keys to Good Communications	40
Running Case	352	Focusing on Group and Individual Communication Needs	40
Tasks	352	Formal and Informal Methods for Communicating	41
Key Terms	352	Distributing Important Information in an Effective and Timely Manner	41
End Notes	355	Setting the Stage for Communicating Bad News	41
		Determining the Number of Communication Channels	41
Chapter 9 Project Human Resource Management	359	Planning Communications Management	41
The Importance of Human Resource Management	360	Managing Communications	41
The Global IT Workforce	360	Using Technology to Enhance Information Creation and Distribution	41
Implications for the Future of IT Human Resource Management	361	Selecting the Appropriate Communication Methods and Media	41
What Is Project Human Resource Management?	363	Reporting Performance	420
Keys to Managing People	365	Controlling Communications	420
Motivation Theories	365	Suggestions for Improving Project Communications	42
Maslow's Hierarchy of Needs	365	Developing Better Communication Skills	42
Herzberg's Motivation-Hygiene Theory	366	Running Effective Meetings	42
McClelland's Acquired-Needs Theory	367	Using E-Mail, Instant Messaging, Texting, and Collaborative Tools Effectively	42
McGregor's Theory X and Theory Y	368	Using Templates for Project Communications	42
Thamhain and Wilemon's Influence and Power	368	Using Software to Assist in Project Communications	430

Table of Contents

XV

Classes Carrier	433
Chapter Summary	433
Quick Quiz	435
Quick Quiz Answers	435
Discussion Questions	435
Exercises	436
Running Case	
Key Terms	437
End Notes	437
Chapter 11 Project Risk Management	439
The Importance of Project Risk Management	440
Planning Risk Management	447
Common Sources of Risk on IT Projects	448
Identifying Risks	452
Suggestions for Identifying Risks	453
<del>-</del>	455
The Risk Register	457
Performing Qualitative Risk Analysis	
Using Probability/Impact Matrixes to Calculate Risk Factors	457
Top Ten Risk Item Tracking	459
Performing Quantitative Risk Analysis	461
Decision Trees and Expected Monetary Value	461
Simulation	463
Sensitivity Analysis	465
Planning Risk Responses	467
Controlling Risks	469
Using Software to Assist in Project Risk Management	469
Chapter Summary	471
Quick Quiz	472
Quick Quiz Answers	474
Discussion Questions	474
Exercises	474
Running Case	475
Key Terms	476
End Notes	478
CI ( 10 P / P )	470
Chapter 12 Project Procurement Management	479
The Importance of Project Procurement Management	480
Planning Procurement Management	483
Types of Contracts	485
Tools and Techniques for Planning Procurement Management	489
Make-or-Buy Analysis	489
Expert Judgment	490
Market Research	490
Procurement Management Plan	491
Statement of Work	491
Procurement Documents	493
Source Selection Criteria	494
Conducting Procurements	495
Controlling Procurements	497
Closing Procurements	499

Using Software to Assist in Project Procurement Management	499
Chapter Summary	502
Quick Quiz	503
Quick Quiz Answers	504
Discussion Questions Exercises	504
Running Case	505 505
Key Terms	506
End Notes	507
Chapter 13 Project Stakeholder Management	509
The Importance of Project Stakeholder Management	510
Identifying Stakeholders	512
Planning Stakeholder Management	516
Managing Stakeholder Engagement	516
Controlling Stakeholder Engagement	519
Using Software to Assist in Project Stakeholder Management	522
Chapter Summary	524
Quick Quiz	524
Quick Quiz Answers	526
Discussion Questions	526
Exercises Running Case	526
Key Terms	527 527
End Notes	527
Appendix A Guide to Using Microsoft Project 2010	A.1
Introduction	A.2
New Features of Project 2010	A.3
Before You Begin	A.4
Overview of Project 2010	A.5
Starting Project 2010 and Using the Help Feature	A.5
Main Screen Elements	A.7
Project 2010 Views	A.11
Project 2010 Filters	A.15
Project Scope Management	A.17
Creating a New Project File	A.17
Developing a Work Breakdown Structure	A.20
Creating Summary Tasks	A.22
Numbering Tasks	A.23
Saving Project Files with or without a Baseline	A.24
Project Time Management	A.24
Manual and Automatic Scheduling	A.24
Entering Task Durations	A.25
Establishing Task Dependencies	A.30
Changing Task Dependency Types and Adding Lead or Lag Time	A.33
Gantt Charts	A.36
Network Diagrams	A.38
Critical Path Analysis	A.40

Table of Contents

## xviii

## Table of Contents

Project Cost Management		A.42
Fixed and Variable Cost Estimates		A.43
Entering Fixed Costs in the Cost Table		A.43
Entering Human Resource Costs		A.43
Adjusting Resource Costs		A.44
Assigning Resources to Tasks		A.45
Assigning Resources Using the Entry Table		A.45
Assigning Resources Using the Resource Tab		A.46
Assigning Resources Using the Split Window		A.47
Viewing Project Cost Information		A.49
Baseline Plan, Actual Costs, and Actual Times		A.51
Establishing a Baseline Plan		A.51
Entering Actual Costs and Times		A.52
Earned Value Management		A.57
Project Human Resource Management		A.60
Resource Calendars		A.60
Resource Histograms		A.61
Resource Leveling		A.63
Using the New Team Planner Feature		A.65
Project Communications Management		A.66
Common Reports and Views		A.66
Using Templates and Inserting Hyperlinks and Comments		A.68
Discussion Questions		A.72
Exercises		A.72
Exercise A-1: Homework Assignments		A.72
HW1: Project 2010, Part 1 (100 points, 25 points for each item)		A.72
HW2: Project 2010, Part 2 (100 points, 25 points for each item)		A.73
Exercise A-2: Web Site Development		A.73
Exercise A-3: Software Training Program		A.75
Exercise A-4: Project Tracking Database		A.76
Exercise A-5: Real Project Application		A.79
Appendix B		
(Available on CengageBrain.com)		
Appendix C		
(Available on CengageBrain.com)		
Glossary	2	G.1
Index		I.1