- Chapter 1 Introduction to Project Management p. 1
- Opening Case p. 1
- Introduction p. 2
- What is a Project? p. 5
- Examples of Information Technology Projects p. 5
- Project Attributes p. 7
- The Triple Constraint p. 8
- What is Project Management? p. 10
- Project Stakeholders p. 11
- Project Management Knowledge Areas p. 12
- Project Management Tools and Techniques p. 13
- Project Success p. 15
- Program and Project Portfolio Management p. 18
- Programs p. 18
- Project Portfolio Management p. 19
- The Role of the Project Manager p. 23
- Project Manager Job Description p. 24
- Suggested Skills for Project Managers p. 24
- Importance of People and Leadership Skills p. 27
- Careers for Information Technology Project Managers p. 28
- The Project Management Profession p. 30
- History of Project Management p. 30
- The Project Management Institute p. 33
- Project Management Certification p. 33
- Ethics in Project Management p. 34
- Project Management Software p. 36
- Chapter 2 The Project Management and Information Technology Context p. 45
- Opening Case p. 45
- A Systems View of Project Management p. 47
- What Is a Systems Approach? p. 47
- The Three-Sphere Model for Systems Management p. 48
- Understanding Organizations p. 50
- The Four Frames of Organizations p. 50
- Organizational Structures p. 52
- Organizational Culture p. 55
- Stakeholder Management p. 56
- The Importance of Top Management Commitment p. 58
- The Need for Organizational Commitment to Information Technology p. 59
- The Need for Organizational Standards p. 60
- Project Phases and the Project Life Cycle p. 61
- Product Life Cycles p. 64
- The Importance of Project Phases and Management Reviews p. 66
- The Context of Information Technology Projects p. 68
- The Nature of Information Technology Projects p. 68
- Characteristics of Information Technology Project Team Members p. 69
- Diverse Technologies p. 70

- Chapter 3 The Project Management Process Groups: A Case Study p. 78
- Opening Case p. 78
- Project Management Process Groups p. 79
- Mapping the Process Groups to the Knowledge Areas p. 84
- Developing an Information Technology Project Management Methodology p. 86
- Case Study: JWD Consulting's Project Management Intranet Site Project p. 88
- Project Initiation p. 88
- Project Planning p. 95
- Project Executing p. 106
- Project Monitoring and Controlling p. 111
- Project Closing p. 114
- Chapter 4 Project Integration Management p. 126
- Opening Case p. 126
- What is Project Integration Management? p. 127
- Strategic Planning and Project Selection p. 131
- Identifying Potential Projects p. 131
- Aligning Information Technology with Business Strategy p. 132
- Methods for Selecting Projects p. 134
- Project Charters p. 145
- Preliminary Scope Statements p. 149
- Project Management Plans p. 150
- Project Management Plan Contents p. 150
- Using Guidelines to Create Project Management Plans p. 154
- Stakeholder Analysis and Top Management Support p. 155
- Project Execution p. 157
- Coordinating Planning and Execution p. 158
- Providing Strong Leadership and a Supportive Culture p. 158
- Capitalizing on Product, Business, and Application Area Knowledge p. 159
- Project Execution Tools and Techniques p. 160
- Monitoring and Controlling Project Work p. 161
- Integrated Change Control p. 163
- Change Control on Information Technology Projects p. 165
- Change Control System p. 165
- Closing Projects p. 168
- Using Software to Assist in Project Integration Management p. 168
- Chapter 5 Project Scope Management p. 179
- Opening Case p. 179
- What is Project Scope Management? p. 180
- Scope Planning and the Scope Management Plan p. 182
- Scope Definition and the Project Scope Statement p. 186
- Creating The Work Breakdown Structure p. 188
- Approaches to Developing Work Breakdown Structures p. 194
- The WBS Dictionary and Scope Baseline p. 199
- Advice for Creating a WBS and WBS Dictionary p. 200
- Scope Verification p. 201
- Scope Control p. 203

- Suggestions for Improving User Input p. 205
- Suggestions for Reducing Incomplete and Changing Requirements p. 206
- Using Software to Assist in Project Scope Management p. 208
- Chapter 6 Project Time Management p. 216
- Opening Case p. 216
- The Importance of Project Schedules p. 217
- Activity Definition p. 220
- Activity Sequencing p. 222
- Dependencies p. 223
- Network Diagrams p. 223
- Activity Resource Estimating p. 227
- Activity Duration Estimating p. 229
- Schedule Development p. 230
- Gantt Charts p. 231
- Critical Path Method p. 236
- Critical Chain Scheduling p. 243
- Program Evaluation and Review Technique (PERT) p. 246
- Schedule Control p. 247
- Reality Checks on Scheduling and the Need for Discipline p. 248
- Opening Case p. 263
- Using Software to Assist in Project Time Management p. 250
- Words of Caution on Using Project Management Software p. 251
- Chapter 7 Project Cost Management p. 263
- The Importance of Project Cost Management p. 264
- What Is Cost? p. 266
- What Is Project Cost Management? p. 266
- Basic Principles of Cost Management p. 267
- Cost Estimating p. 271
- Types of Cost Estimates p. 272
- Cost Estimation Tools and Techniques p. 274
- Cost Control p. 283
- Typical Problems with Information Technology Cost Estimates p. 276
- Sample Cost Estimate p. 277
- Cost Budgeting p. 282
- Earned Value Management p. 285
- Project Portfolio Management p. 291
- Using Project Management Software to Assist in Project Cost Management p. 293
- Chapter 8 Project Quality Management p. 303
- Opening Case p. 303
- The Importance of Project Quality Management p. 304
- What is Project Quality Management? p. 307
- Quality Planning p. 309
- Quality Assurance p. 312
- Quality Control p. 313
- Tools and Techniques for Quality Control p. 314
- Statistical Sampling p. 320

- Six Sigma p. 321
- Testing p. 328
- Modern Quality Management p. 330
- Deming and His Fourteen Points for Management p. 330
- Juran and the Importance of Top Management Commitment to Quality p. 331
- Crosby and Striving for Zero Defects p. 332
- Ishikawa's Guide to Quality Control p. 333
- Taguchi and Robust Design Methods p. 333
- Feigenbaum and Workers Responsibility for Quality p. 334
- Malcolm Baldrige National Quality Award p. 334
- ISO Standards p. 334
- Improving Information Technology Project Quality p. 335
- Leadership p. 336
- The Cost of Quality p. 336
- Organizational Influences, Workplace Factors, and Quality p. 338
- Expectations and Cultural Differences in Quality p. 339
- Maturity Models p. 340
- Using Software to Assist in Project Quality Management p. 344
- Chapter 9 Project Human Resource Management p. 354
- Opening Case p. 354
- The Importance of Human Resource Management p. 355
- The Global IT Workforce p. 356
- Implications for the Future of IT Human Resource Management p. 358
- What is Project Human Resource Management? p. 361
- Keys to Managing People p. 363
- Motivation Theories p. 363
- Thamhain and Wilemon's Influence and Power p. 367
- Covey and Improving Effectiveness p. 370
- Human Resource Planning p. 373
- Project Organizational Charts p. 373
- Responsibility Assignment Matrices p. 375
- Staffing Management Plans and Resource Histograms p. 377
- Acquiring the Project Team p. 379
- Resource Assignment p. 379
- Resource Loading p. 381
- Resource Leveling p. 383
- Developing the Project Team p. 385
- Training p. 386
- Team-Building Activities p. 387
- Reward and Recognition Systems p. 392
- Tools and Techniques for Managing Project Teams p. 393
- Managing the Project Team p. 392
- General Advice on Managing Teams p. 394
- Using Software to Assist in Human Resource Management p. 395
- Chapter 10 Project Communications Management p. 404
- Opening Case p. 404

- The Importance of Project Communications Management p. 405
- Communications Planning p. 408
- Information Distribution p. 410
- Using Technology to Enhance Information Distribution p. 411
- Formal and Informal Methods for Distributing Information p. 412
- Distributing Important Information in an Effective and Timely Manner p. 413
- Selecting the Appropriate Communications Medium p. 414
- Understanding Group and Individual Communication Needs p. 416
- Setting the Stage for Communicating Bad News p. 417
- Determining the Number of Communications Channels p. 417
- Performance Reporting p. 419
- Managing Stakeholders p. 420
- Suggestions for Improving Project Communications p. 423
- Using Communication Skills to Manage Conflict p. 423
- Developing Better Communication Skills p. 425
- Running Effective Meetings p. 426
- Using E-Mail, Instant Messaging, and Collaborative Tools Effectively p. 428
- Using Templates for Project Communications p. 431
- Using Software to Assist in Project Communications p. 436
- Chapter 11 Project Risk Management p. 446
- Opening Case p. 446
- The Importance of Project Risk Management p. 447
- Risk Management Planning p. 453
- Common Sources of Risk on Information Technology Projects p. 455
- Risk Identification p. 459
- Suggestions for Identifying Risks p. 459
- The Risk Register p. 461
- Qualitative Risk Analysis p. 464
- Using Probability/Impact Matrixes to Calculate Risk Factors p. 464
- Top Ten Risk Item Tracking p. 466
- Sensitivity Analysis p. 473
- Quantitative Risk Analysis p. 468
- Decision Trees and Expected Monetary Value p. 468
- Simulation p. 470
- Risk Response Planning p. 474
- Risk Monitoring and Control p. 478
- Using Software to Assist in Project Risk Management p. 478
- Chapter 12 Project Procurement Management p. 489
- Opening Case p. 489
- The Importance of Project Procurement Management p. 490
- Planning Purchases and Acquisitions p. 495
- Tools and Techniques for Planning Purchases and Acquisitions p. 497
- Procurement Management Plan p. 502
- Contract Statement of Work p. 503
- Planning Contracting p. 504
- Requesting Seller Responses p. 507

- Selecting Sellers p. 508
- Administering the Contract p. 510
- Closing the Contract p. 512
- Using Software to Assist in Project Procurement Management p. 513
- Appendix A Guide to Using Microsoft Project 2007 p. A.1
- Introduction p. A.2
- New Features of Project 2007 p. A.3
- Backward Compatibility p. A.4
- Before You Begin p. A.4
- Overview of Project 2007 p. A.5
- Starting Project 2007 and Using the Getting Started and Project Guide Features p. A.5
- Main Screen Elements p. A.9
- Project 2007 Views p. A.15
- Project 2007 Filters p. A.20
- Project Scope Management p. A.21
- Creating a New Project File p. A.22
- Developing a Work Breakdown Structure p. A.24
- Saving Project Files With or Without a Baseline p. A.28
- Project Time Management p. A.29
- Entering Task Durations p. A.29
- Establishing Task Dependencies p. A.35
- Changing Task Dependency Types and Adding Lead or Lag Time p. A.39
- Gannt Charts p. A.42
- Network Diagrams p. A.45
- Critical Path Analysis p. A.47
- Project Cost Management p. A.49
- Fixed and Variable Cost Estimates p. A.50
- Assigning Resources to Tasks p. A.53
- Baseline Plan, Actual Costs, and Actual Times p. A.60
- Earned Value Management p. A.66
- Project Human Resource Management p. A.68
- Resource Calendars p. A.68
- Resource Histograms p. A.71
- Resource Leveling p. A.75
- Project Communications Management p. A.78
- Common Reports and Views p. A.78
- Using Templates and Inserting Hyperlinks and Comments p. A.79
- Using the Copy Picture Feature p. A.84
- Discussion Questions p. A.85
- Exercises p. A.86
- Exercise A-1 Web Site Development p. A.86
- Exercise A-2 Software Training Program p. A.88
- Exercise A-3 Project Tracking Database p. A.90
- Exercise A-4 Real Project Application p. A.92
- Appendix B Advice for the Project Management Professional (PMP) Exam and Related Certifications p. B.1

- Introduction to Project Management Certification Programs p. B.1
- What is PMP Certification? p. B.1
- What Are the Requirements for Earning and Maintaining PMP Certification? p. B.3
- What Is the Structure and Content of the PMP Exam? p. B.6
- How Should You Prepare for the PMP Exam? p. B.7
- Ten Tips for Taking the PMP Exam p. B.9
- Sample PMP Exam Questions p. B.11
- What is Project+ Certification? p. B.15
- What Are the Requirements for Earning and Maintaining Project+ Certification? p. B.16
- Additional Information on the Project+ Exam p. B.17
- Sample Project+ Exam Questions p. B.18
- What Other Exams or Certifications Related to Project Management are Available? p. B.20
- Additional Case 1: Video Game Delivery Project p. C.1
- Final Advice on Certification and Project Management in General p. B.21
- Appendix C Additional Running Cases p. C.1
- Introduction p. C.1
- Part 1 Project Integration Management p. C.1
- Part 2 Project Scope Management p. C.3
- Part 3 Project Time Management p. C.4
- Part 4 Project Cost Management p. C.4
- Part 5 Project Quality Management p. C.6
- Part 6 Project Human Resource Management p. C.7
- Part 7 Project Communications Management p. C.8
- Part 8 Project Risk Management p. C.8
- Part 9 Project Procurement Management p. C.9
- Glossary p. 1
- Index p. 1