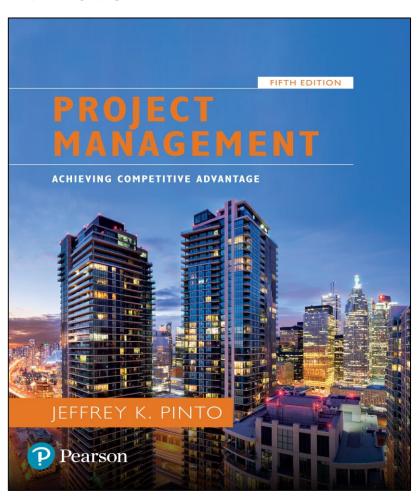
Project Management: Achieving Competitive Advantage

Fifth Edition



Chapter 1

Introduction: Why Project Management?



Learning Objectives (1 of 2)

- 1.1 Understand why project management is becoming such a powerful and popular practice in business.
- **1.2** Recognize the basic properties of projects, including their definition.
- **1.3** Understand why effective project management is such a challenge.
- **1.4** Understand and explain the project life cycle, its stages, and the activities that typically occur at each stage in the project.



Learning Objectives (2 of 2)

- 1.5 Understand the concept of project "success," including various definitions of success, as well as the alternative models of success.
- **1.6** Understand the purpose of project management maturity models and the process of benchmarking in organizations.
- **1.7** Recognize how mastery of the discipline of project management enhances critical employability skills for university graduates.



PMBoK Core Concepts

Project Management Body of Knowledge (PMBoK) covered in this chapter includes:

- 1. Definition of a Project (PMBoK 1.2)
- 2. Definition of Project Management (PMBoK 1.3)
- 3. Relationship to Other Management Disciplines (PMBoK 1.4)
- 4. Project Phases and the Project Life Cycle (PMBoK 2.1)



What Is a Project?

- Projects are complex, one-time processes.
- Projects are limited by budget, schedule, and resources.
- Projects are developed to resolve a clear goal or set of goals.
- Projects are customer-focused.

A project is a **temporary endeavor** undertaken to create a unique product, service, or result.

PMBoK 5th edition



General Project Characteristics (1 of 2)

- Projects are ad hoc endeavors with a clear life cycle.
- Projects are building blocks in the design and execution of organizational strategies.
- Projects are responsible for the newest and most improved products, services, and organizational processes.
- Projects provide a philosophy and strategy for the management of change.
- Project management entails crossing functional and organizational boundaries.



General Project Characteristics (2 of 2)

- Traditional management functions of planning, organizing, motivation, directing, and controlling apply to project management.
- Principal outcomes of a project are the satisfaction of customer requirements within the constraints of technical, cost, and schedule objectives.
- Projects are terminated upon successful completion of performance objectives.



Process and Project Management

Table 1.1 Differences Between Process and Project Management

Process	Project	
Repeat process or product	New process or product	
Several objectives	One objective	
Ongoing	One-shot-limited life	
People are homogenous	More heterogeneous	
Well-established systems	Integrated system efforts	
Greater certainty	Greater uncertainty	
Part of line organization	Outside of line organization	
Established practices	Violates established practice	
Supports status quo	Upsets status quo	



Project Success Rates

- Software and hardware projects fail at a 65% rate.
- Over half of all IT projects become runaways.
- Only 30% of technology-based projects and programs are a success.
- Ten major government contracts have over \$16 billion in cost overruns and are a combined 38 years behind schedule.
- One out of six IT projects has an average cost overrun of 200% and a schedule overrun of 70%.
- More than one-third of the \$110 billion in costs spent on the postwar reconstruction projects in Afghanistan, total \$110 billion was lost due to fraud, waste, and abuse.



Why Are Projects Important?

- 1. Shortened product life cycles
- 2. Narrow product launch windows
- 3. Increasingly complex and technical products
- 4. Emergence of global markets
- 5. An economic period marked by low inflation



Figure 1.4 Project Life Cycle Stages

Man-hours of work Conceptualization Planning Execution Termination



Project Life Cycles

A **project life cycle** refers to the stages in a project's development and are divided into four distinct phases:

- Conceptualization—development of the initial goal and technical specifications of the project. Key stakeholders are identified and signed on at this phase.
- Planning—all detailed specifications, schedules, schematics, and plans are developed.
- Execution—the actual "work" of the project is performed.
- Termination—project is transferred to the customer, resources reassigned, project is closed out.



Change During Project Life Cycle

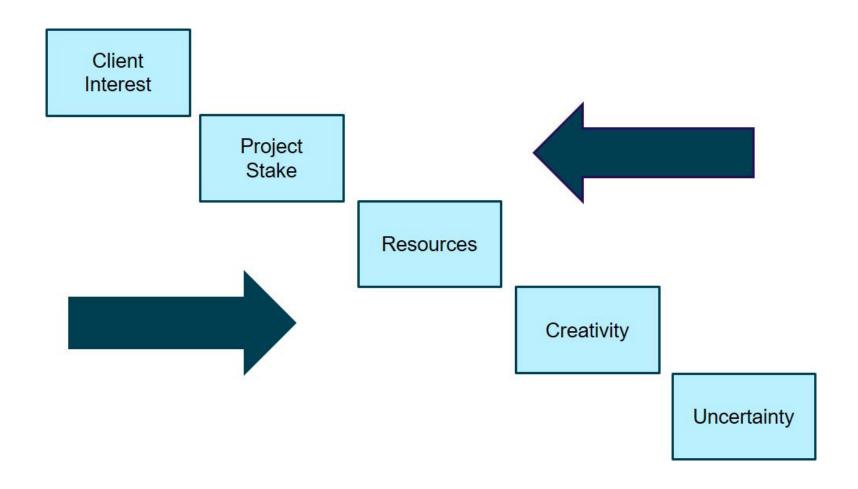
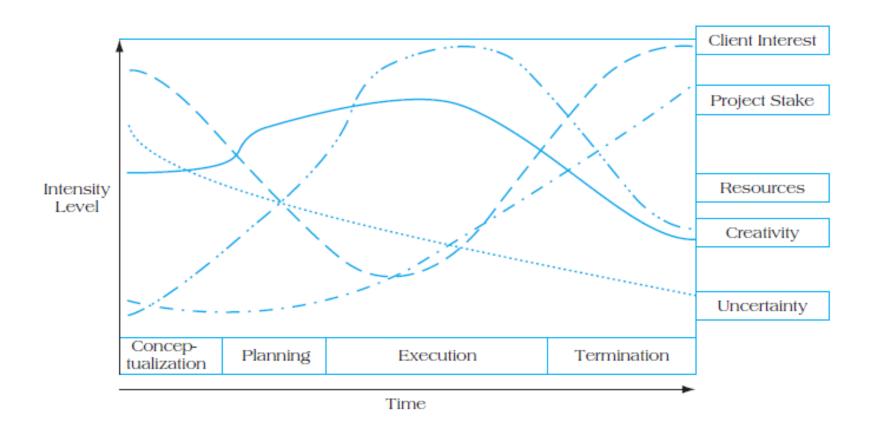




Figure 1.5 Project Life Cycles and Their Effects





Quadruple Constraint of Project Success

Figure 1.7 The New Quadruple Constraint

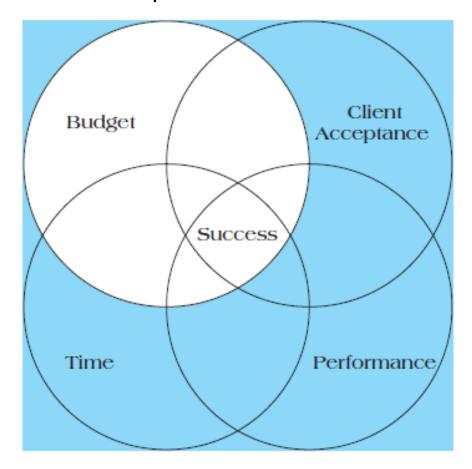




Figure 1.8 Four Dimensions of Project Success Importance

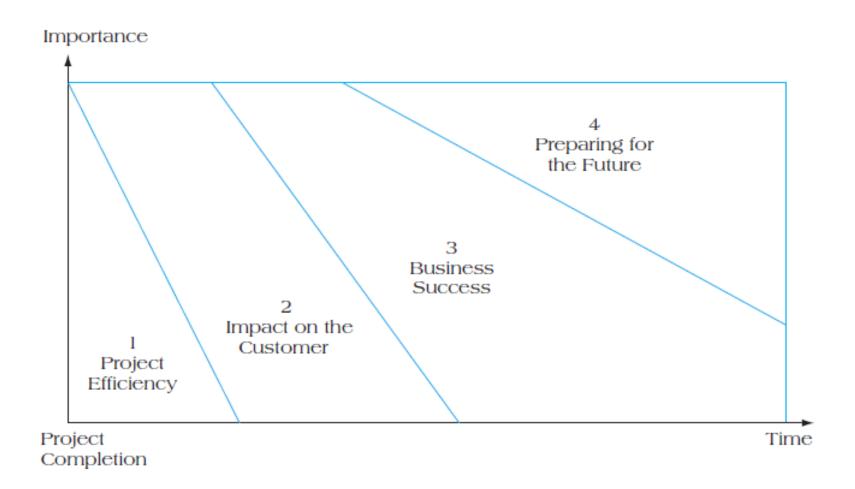




Table 1.2 Understanding Success Criteria

Iron Triangle	Information System	Benefits (Organization)	Benefits (Stakeholders)
Cost	Maintainability	Improved efficiency	Satisfied users
Quality	Reliability	Improved effectiveness	Social and environmental impact
Time	Validity	Increased profits	Personal development
	Information quality	Strategic goals	Professional learning, contractors' profits
	Use	Organization learning	Capital suppliers, content
		Reduced waste	Project team, economic impact to surrounding community



Six Criteria for IT Project Success

- System Quality
- Information Quality
- Use
- User Satisfaction
- Individual Impact
- Organizational Impact



Project Management Employability Skills

- 1. Communication
- 2. Critical Thinking
- 3. Collaboration
- 4. Knowledge Application and Analysis
- 5. Business Ethics and Social Responsibility
- Information Technology Application and Computing Skills
- Data Literacy



Project Manager Responsibilities

- 1. Selecting a team
- 2. Developing project objectives and a plan for execution
- 3. Performing risk management activities
- 4. Cost estimating and budgeting
- 5. Scheduling
- 6. Managing resources



Figure 1.13 Overview of the Project Management Institute's PMBoK Knowledge Areas

Project Management 4. Integration Management 5. Scope Management 6. Time Management 4.1 Develop Project Charter 6.1 Plan Schedule Management 5.1 Plan Scope Management 6.2 Define Activities 4.2 Develop Project Management Plan 5.2 Collect Regulrements 4.3 Direct & Manage Project Work 6.3 Sequence Activities 5.3 Define Scope 6.4 Estimate Activity Resources 4.4 Monitor & Control Project Work 5.4 Create WBS 6.5 Estimate Activity Durations 4.5 Perform Integrated Change 5.5 Validate Scope 6.6 Develop Schedule Control 5.6 Control Scope 6.7 Control Schedule 4.6 Close Project or Phase 9. Human Resource 7. Cost Management 8. Quality Management Management 7.1 Plan Cost Management 8.1 Plan Quality Management 9.1 Plan HR Management 8.2 Perform Quality Assurance 9.2 Acquire Project Team 7.2 Estimate Costs 7.3 Determine Budget 8.3 Control Quality 9.3 Develop Project Team 7.4 Control Costs 9.4 Manage Project Team 10. Communications 11. Risk Management 12. Procurement Management Management 10.1 Plan Communications 11.1 Plan Risk Management 12.1 Plan Procurement Management Management 11.2 Identify Risks 12.2 Conduct Procurements 10.2 Manage Communications 11.3 Perform Qualitative Risk 12.3 Control Procurements 10.3 Control Communications Analysis 12.4 Close Procurements 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses 11.6 Control Risks Stakeholder Management 13.1 Identify Stakeholders 13.2 Plan Stakeholder Management 13.3 Manage Stakeholder Engagement 13.4 Control Stakeholder Engagement



Summary (1 of 2)

- 1. Understand why project management is becoming such a powerful and popular practice in business.
- 2. Recognize the basic properties of projects, including their definition.
- Understand why effective project management is such a challenge.
- Understand and explain the project life cycle, its stages, and the activities that typically occur at each stage in the project.



Summary (2 of 2)

- Understand the concept of project "success," including various definitions of success, as well as the alternative models of success.
- Understand the purpose of project management maturity models and the process of benchmarking in organizations.
- 7. Recognize how mastery of the discipline of project management enhances critical employability skills for university graduates.

THANK YOU

