Chapter 2: The Project Management and Information Technology Context

Information Technology Project Management, Seventh Edition



Note: See the text itself for full citations.

Learning Objectives

- Describe the systems view of project management and how it applies to information technology (IT) projects
- Understand organizations, including the four frames, organizational structures, and organizational culture
- Explain why stakeholder management and top management commitment are critical for a project's success

Learning Objectives

- Understand the concept of a project phase and the project life cycle, and distinguish between project development and product development
- Discuss the unique attributes and diverse nature of IT projects
- Describe recent trends affecting IT project management, including globalization, outsourcing, virtual teams, and agile project management

Projects Cannot Be Run In Isolation

- Projects must operate in a broad organizational environment
- Project managers need to use systems thinking:
 - taking a holistic view of carrying out projects within the context of the organization
- Senior managers must make sure projects continue to support current business needs

A Systems View of Project Management

- A systems approach emerged in the 1950s to describe a more analytical approach to management and problem solving
- Three parts include:
 - Systems philosophy: an overall model for thinking about things as systems
 - Systems analysis: problem-solving approach
 - Systems management: address business, technological, and organizational issues before making changes to systems

Figure 2-1. Three Sphere Model for Systems Management

- · What will the tablet project cost the college?
- What will it cost students?
- What will support costs be?
- What will the impact be on enrollments?
- Will the tablet project affect all students, just traditional students, or only certain majors?
- How will the project affect students who already have tablets or laptops?
- Who will develop special applications or books for the tablets?
- Who will train students, faculty, and staff?



- Should the tablets be based on Apple, Microsoft, Android, or another system?
- What applications will be required?
- What will the hardware specifications be?
- How will the tablets affect various networks and speed?
- Will more power cords be required in the classroom?

Figure 2-2. Perspectives on Organizations

Structural frame: Roles and responsibilities, coordination, and control. Organizational charts help describe this frame.

Political frame: Coalitions composed of varied individuals and interest groups. Conflict and power are key issues.

Human resources frame:

Providing harmony between needs of the organization and needs of people.

Symbolic frame: Symbols and meanings related to events. Culture, language, traditions, and image are all parts of this frame.

What Went Wrong?

- In a paper titled "A Study in Project Failure," two
 researchers examined the success and failure of 214 IT
 projects over an eight-year period in several European
 countries.
- The researchers found that only one in eight (12.5 percent) were considered successful in terms of meeting scope, time, and cost goals.
- The authors said that the culture within many organizations is often to blame
- Among other things, people often do not discuss important leadership, stakeholder, and risk management issues

Organizational Structures

- 3 basic organization structures
 - Functional: functional managers report to the CEO
 - Project: program managers report to the CEO
 - Matrix: middle ground between functional and project structures; personnel often report to two or more bosses; structure can be weak, balanced, or strong matrix

Figure 2-3. Functional, Project, and Matrix Organizational Structures

