2 : Project Management and IT Context

IT3206 – IT Project Management

Level II - Semester 4

A Systems View of 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 a project and understanding how it relates to the larger organization.

- Senior managers must make sure projects continue to support current business needs.

What is a systems approach?

- The term **systems approach** emerged in the 1950s to describe a holistic and analytical approach to solving complex problems.

Three parts include:

- **Systems philosophy**: View things as systems, which are interacting components that work within an environment to fulfill some purpose.

- **Systems analysis**: Problem-solving approach.

- **Systems management**: Address business, technological, and organizational issues before making changes to systems.
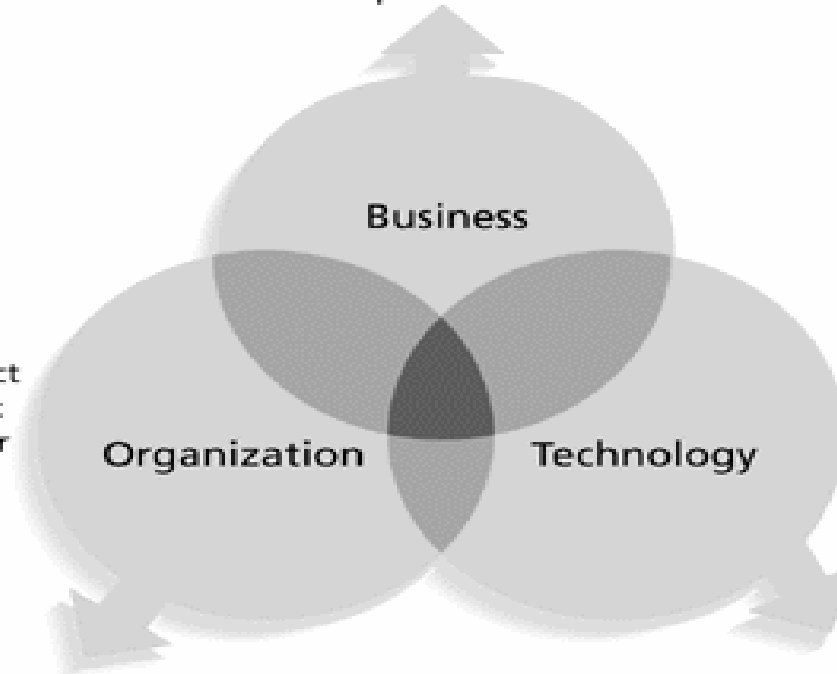
Media snapshot

- The Press Association Ltd., the largest news agency in the United Kingdom, hired a consulting firm to help turn things around after management noticed that its profit margins were sliding.

- The consultants suggested using a holistic view and a top-down strategy to make sure projects supported key business goals.

- They also suggested releasing short-term results to accrue benefits on an incremental basis and reviewing projects on a regular basis to ensure strategic alignment.*

*Jackson, Lynne, "Forge Ahead," PM Network (April 2004), p.48.

The three-sphere model for systems management

•What will the laptop project cost the college?

•What will it cost students?

•What will support costs be?

•What will the impact be on enrollments?

Business

•Will the laptop project affect *all* students, just traditional students, or only certain majors?

•How will the project affect students who already have PCs or laptops?

•Who will train students, faculty, and staff?

•Who will administer and support training?

Organization   **Technology**

•Should the laptops use Macintosh, Windows, or both types of operating systems?

•What applications software will be loaded?

•What will the hardware specifications be?

•How will the hardware impact LAN and Internet access?

Focusing on Stakeholder Needs

- Project managers must take time to identify, understand, and manage relationships with all project stakeholders.

- Using the four frames of organizations can help you meet stakeholder needs and expectations.

- Senior executives and top management are very important stakeholders.

The Importance of Top Management Commitment

- Several studies cite top management commitment as one of the key factors associated with project success.

- Top management can help project managers:

- Secure adequate resources.
  - Get approval for unique project needs in a timely manner.
  - Receive cooperation from people throughout the organization.
  - Learn how to be better leaders.

The Need for Organizational Commitment to Information Technology

- If the organization has a negative attitude toward IT, it will be difficult for an IT project to succeed.

- Having a Chief Information Officer (CIO) at a high level in the organization helps IT projects.

- Assigning non-IT people to IT projects also encourages more commitment.

The Need for Organizational Standards

- Standards and guidelines help project managers be more effective.

- Senior management can encourage:
  - The use of standard forms and software for project management.
  - The development and use of guidelines for writing project plans or providing status information.
  - The creation of a project management office or center of excellence.
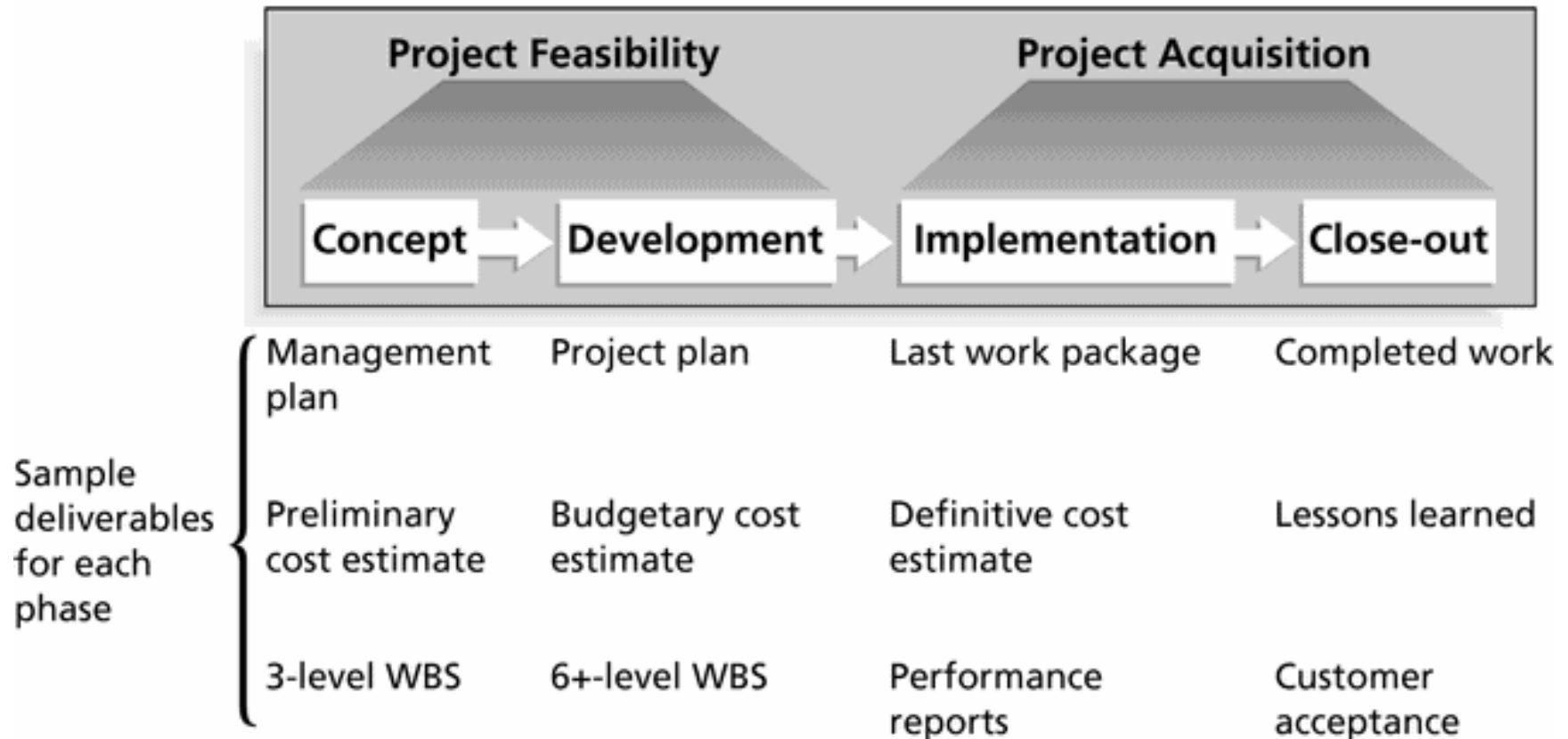
Project Life Cycles

- A **project life cycle** is a collection of project phases that defines:
    - What work will be performed in each phase.
    - What deliverables will be produced and when.
    - Who is involved in each phase.
    - How management will control and approve work produced in each phase.

- A **deliverable** is a product or service produced or provided as part of a project.

More on Project Phases

- In the early phases of a project life cycle:
  - Resource needs are usually lowest.
  - The level of uncertainty (risk) is highest.
  - Project stakeholders have the greatest opportunity to influence the project.
- In the middle phases of a project life cycle:
  - The certainty of completing a project increases.
  - More resources are needed.
- In the final phase of a project life cycle:
  - The focus is on ensuring that project requirements were met.
  - The sponsor approves completion of the project.

Phases of the Traditional Project Life Cycle

The Importance of Project Phases and Management Reviews

- A project should successfully pass through each of the project phases in order to continue on to the next.

- Management reviews, also called phase exits or kill points, should occur after each phase to evaluate the project's progress, likely success, and continued compatibility with organizational goals.

The Context of Information Technology Projects

- IT projects can be very diverse in terms of size, complexity, products produced, application area, and resource requirements.

- IT project team members often have diverse backgrounds and skill sets.

- IT projects use diverse technologies that change rapidly. Even within one technology area, people must be highly specialized.

Summary

- Project managers need to take a systems approach when working on projects.

- Projects should successfully pass through each phase of the project life cycle.

- Project managers need to consider several factors due to the unique context of information technology projects.