

Chapter 21: Project Management

B2001 @ Peter Lo 2007

1

Tasks in Project Management

- Managing an IT project encompasses many tasks:
 - ◆ Identification of Tasks
 - ◆ Estimation
 - ◆ Allocation of Resources
 - ◆ Scheduling
 - ◆ Monitoring

B2001 @ Peter Lo 2007

2

Tasks in Project Management – Identification of Tasks

- All the tasks and deliverables must be identified at a relatively high level of detail.
- It is not enough to simply identify the phases of the life cycle.

B2001 @ Peter Lo 2007

3

Tasks in Project Management – Estimation

- Each of the above tasks must be estimated for effort and elapsed time.
- The total of the effort estimations is the required budget.

B2001 @ Peter Lo 2007

4

Tasks in Project Management – Allocation of Resources

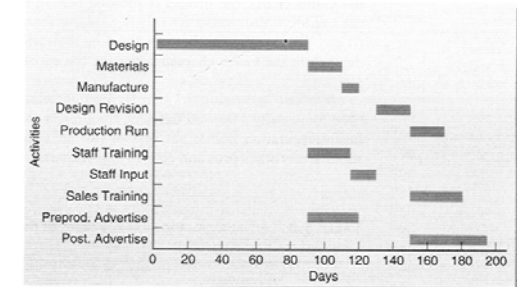
- A project team will comprise personnel with different skills and experience.
- The right person must be allocated the right task.

B2001 @ Peter Lo 2007

5

Tasks in Project Management – Scheduling

- Scheduling involves setting up a project timetable which shows when the various activities must take place.
- Gantt charts are commonly used to show such activities.



B2001 @ Peter Lo 2007

6

Tasks in Project Management – Monitoring

- Work actually done and targets achieved must be compared against the project plan.
- This will determine if the project is on schedule or if it is slipping behind.



B2001 @ Peter Lo 2007

7

Problems in Systems Projects

- Systems development and implementation projects are seldom smooth sailing.
- As with projects in other industries or disciplines, project sponsors, leaders and team members often encounter difficulties in their projects.
- What are some of the problems or challenges?
 - ◆ Project Delays
 - ◆ Cost Overruns
 - ◆ Not Meeting Requirements
 - ◆ Logistic Problems
 - ◆ Personnel Problems

B2001 @ Peter Lo 2007

8

Problems in Systems Projects – Project Delays

- This is a common problem and is due to either an over-optimistic estimation of work (or perhaps where estimation was not even done), or lack of anticipation of problems.

Problems in Systems Projects – Cost Overruns

- Projects often seem to cost more than expected
- This is particularly so in in-house development projects.
- There are a variety of reasons for this.
- Some of them are that there may not be a proper change control procedure, and that many hidden costs are not factored into the original cost calculations.

Problems in Systems Projects – Not Meeting Requirements

- In many cases, when the finished system product is shown to the user, the latter says: “That’s not what I asked for”.

Challenges in Systems Projects

- The most obvious aim of any systems project is to ensure that the functional requirements are met.
- If the system does not even support the business, then it is of little use.
- What are some of the challenges?
 - ◆ Meeting quality requirements
 - ◆ Strategic use of Information Technology
 - ◆ Integrating the various stages of the project
 - ◆ Global project management, which encompasses the use of different technologies or platforms

Challenges in Systems Projects – Meeting Quality Requirements

- It is sometimes difficult to write quality requirements but important to do so.
- If we don't know how to state our vision of a high quality product, how can we communicate this to the systems developers?
- Similarly, systems developers face the challenge of improving the systems that they develop in the area of quality and performance.
- With increasing choices available to users, developers must work hard to differentiate their product from others.

Challenges in Systems Projects – Strategic Use of Information Technology

- Organizations must learn to use Information Technology in unique and strategic ways.
- Instead of just automating labor-intensive work, IT should be used to change the way business is done and thereby win competitive advantage.

Importance of User Participation

- As many employees as possible should be involved at the planning stage of a new information system.
- During implementation, all employees, and particularly those who are directly involved, should be kept fully informed.
- Every individual will want to know how their particular job would be affected.
- The champion (usually the manager who initiated the project) should enthusiastically support it and give strong and clear leadership during the planning and implementation stages.

Organizational Factors

- Systems development does not occur in isolation. It takes place in an organizational setting.
- What are some of the organizational factors which affect system development?
 - ◆ Type of Business
 - ◆ Corporate Culture
 - ◆ Organizational Structure
 - ◆ The Staff or Departments Affected

Organizational Factors – Type of Business

- Different industries have their own characteristics and style of working which may have varying types of impact on systems development projects.
 - ◆ For example, work in a hospital environment tends to be very different from that in advertisement.

Organizational Factors – Corporate Culture

- Within a particular firm, there may be a strong corporate culture which also influences systems projects.
 - ◆ For example, some firms work very much by consensus. In this environment, decision-making within the project may tend to be somewhat slow.

Organizational Factors – Organizational Structure

- Organizations which have many hierarchical layers will be more bureaucratic and slower to change.
 - ◆ For example, the vision of the CEO may be filtered or diluted before it reaches the development project team.

Organizational Factors – The Staff or Departments Affected

- The personalities which are involved in or affected by a systems project must be taken into consideration.
- Some will be very supportive while others will adopt a hands-off approach.

Environmental Factors

- Systems development is also affected by the organization's external environment.
- Events and trends in business and technology will have an impact on the systems projects.
- What are some of the environmental factors which affect systems development?
 - ◆ Increasing Competition
 - ◆ Rapid Technological Developments

Environmental Factors – Increasing Competition

- Global communications and trade has increased tremendously.
- Many companies have branches in many parts of the world and demand that their suppliers be able to service them on a worldwide basis.
- This means that information systems are correspondingly much more complex.

Environmental Factors – Rapid Technological Developments

- Technology is changing very rapidly and products are becoming obsolete at a faster rate.
- The expectation that a system would last for 5 or 10 years no longer holds since improvements in technologies may offer opportunities for enhancements.