

Systems Analysis and Design

Chapter Two: Identification,
Selection, and Planning phase

1. Identifying and Selecting Projects

- The first activity of the systems planning and selection phase of the SDLC is project identification and selection.
- Project identification and selection consists of:
 - Identifying potential development projects
 - classifying and ranking projects
 - selecting projects for development

Identifying potential development projects

- This process can be performed by:
 - A key member of top management
 - A steering committee
 - User departments
 - The development group or a senior IS manager

Classifying and ranking IS development projects

- Assessing the merit of potential projects is the second major activity in the project identification and selection phase.
- The criteria used to evaluate projects usually varies by organization
- Possible evaluation criteria when classifying and ranking projects are:
 - Value chain analysis
 - Strategic alignment
 - Potential benefits
 - Resource availability
 - Project size/duration
 - Technical risk/difficulty

Selecting IS development projects

- The selection of projects is the final activity in the project identification and selection phase.
- Numerous factors are considered when selecting a project including:
 - Perceived needs of the organization
 - Existing systems and ongoing projects
 - Resource availability
 - Evaluation criteria
 - Current business conditions

2. Initiating and Planning Systems Development Projects

- Project initiation focuses on activities that will help organize a team to conduct project planning. Among the activities performed are:
 - Establishing the project initiation team
 - Establishing a relationship with the customer
 - Establishing the project initiation plan
 - Establishing management procedures

- Project planning focuses on defining clear, discrete tasks and the work needed to complete each task
- Among the activities performed are:
 - Describing the project scope, alternatives, and feasibility
 - Dividing the project into manageable tasks
 - Estimating resources and creating a resource plan
 - Developing a preliminary schedule
 - Developing a communication plan
 - Developing a project scope statement
 - Setting a baseline project plan

- The major outcomes and deliverables from project initiation and planning are the baseline project plan and the project scope statement
- The **baseline project plan (BPP)** contains all information collected and analyzed during the project initiation and planning activity
- The **project scope statement (PSS)** clearly describes what the project will deliver and outlines generally at a high level all work required to complete the project.

Assessing Project Feasibility

- Assessing project feasibility is an important task that can be a large undertaking because it requires you to evaluate a wide range of factors such as:
 - Economic
 - Operational
 - Technical
 - Schedule
 - Legal and Contractual
 - Political

Assessing Economic Feasibility

- The purpose of **economic feasibility** study is to identify the financial **benefits** and **costs** associated with the development project
- Benefits can be:
 - Tangible benefits (measurable in terms of money)
 - Intangible benefits (not measurable)
- Costs can be:
 - Tangible
 - Intangible
 - one-time cost (associated with dev't and system start-up)
 - recurring cost (associated with the ongoing use of the system)

Assessing Other Feasibility Concerns

- **Operational feasibility:** The process of assessing the degree to which a proposed system solves business problems or takes advantage of business opportunities.
- **Technical feasibility:** The process of assessing the development organization's ability to construct a proposed system.

- **Schedule feasibility:** The process of assessing the degree to which the potential time frame and completion dates for all major activities within a project meet organizational deadlines and constraints for effecting change.
- **Legal and contractual Feasibility:** The process of assessing potential legal and contractual ramifications due to the construction of a system.

- **Political feasibility:** The process of evaluating how key stakeholders within the organization view the proposed system.