CIS-1150

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**Chapter 12 Information System Development**

**Chapter Summary**

This chapter discussed the phases in the system development cycle at first. So, what is System Development? An information system (IS) is hardware, software, data, people, and procedures that work together to produce quality information. System development is a set of activities used to build an information system. System development activities often are grouped into larger categories called phases. This collection of phases sometimes is called the system development life cycle (SDLC). Many SDLCs contain five phases:

Phase 1. Planning:

* Review project requests
* Prioritize project requests
* Allocate resources
* Identify project development team

Phase 2. Analysis:

* Conduct preliminary investigation
* Perform detailed analysis activities:

Study current system

Determine user requirements

Recommend solution

Phase 3. Design

* Acquire hardware and software, if necessary
* Develop details of system

Phase 4. Implementation

* Develop programs, if necessary
* Install and test new system
* Train users
* Convert to new system

Phase 5. Support

* Conduct post-implementation system review
* Identify errors and enhancements
* Monitor system performance

The guidelines for system development are: (1) group activities into phases; (2) involve the users, which includes anyone for whom a system is being built; and (3) define standards, which are sets of rules and procedures an organization expects employees to accept and follow.

The chapter also addressed activities that occur during the entire system development cycle such as project management, feasibility assessment, data and information gathering, and documentation. Project management is the process of planning, scheduling, and then controlling the activities during system development. The goal of project management is to deliver an acceptable system to the user in an agreed-upon time frame, while maintaining costs. For larger projects, project management activities often are separated between a project manager and a project leader. Some organizations use extreme project management. The project leader identifies the scope of the project, required activities, time estimates, cost estimates, the order of activities, and activities that can take place simultaneously. The project leader records this information in a project plan. Feasibility is a measure of how suitable the development of a system will be to the organization. A systems analyst typically uses four tests to evaluate feasibility of a project: operational feasibility, which measures how well the proposed system will work; schedule feasibility, which measures whether established project deadlines are reasonable; technical feasibility, which measures whether the organization has or can obtain the hardware, software, and people to deliver and then support the system; and economic feasibility, also called cost/benefit feasibility, which measures whether the lifetime benefits of the proposed system will be greater than its lifetime costs. Documentation is the collection and summarization of data and information and includes reports, diagrams, programs, or other deliverables. A project notebook contains all documentation for a single project. To gather data and information, systems analysts and other IT professionals review documentation, observe, survey, interview, participate in joint-application design (JAD) sessions, and research.