Course Title: Diploma in Business Process

Management

Module 11: System Development

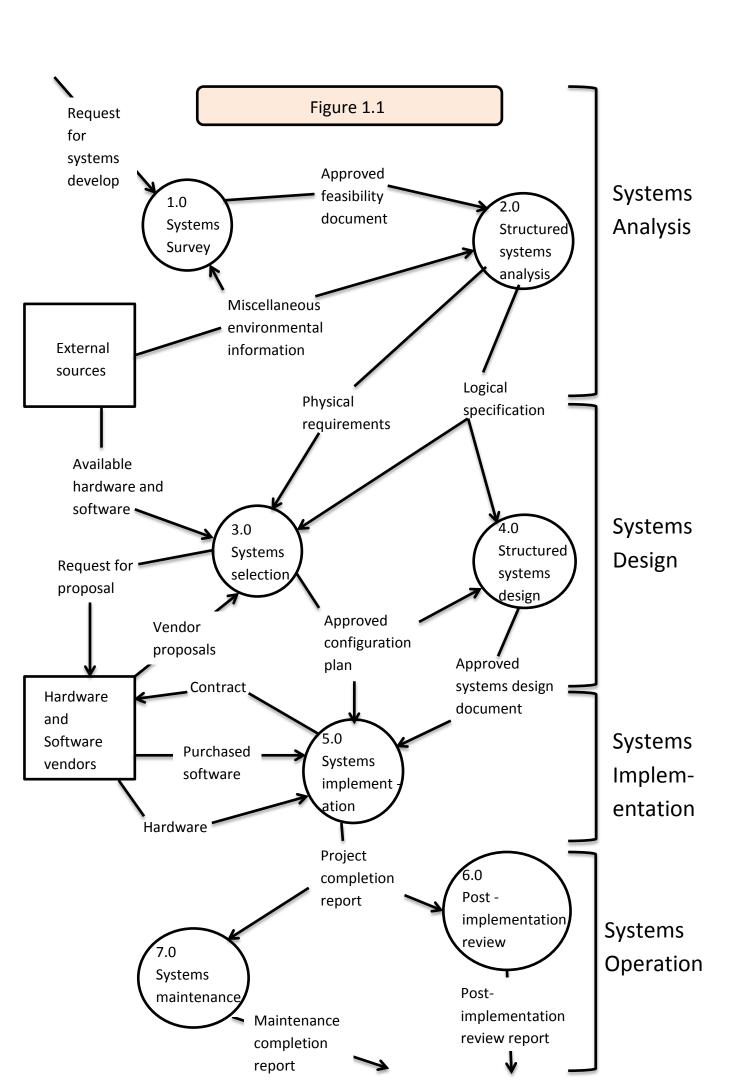


Table 1.1

Involvement in Systems Development			
Category	How Involved in Development		
Systems	As an employee of the organization - possessing some systems specialty, such as		
Specialist	systems analyst - the manager undertakes many of the activities in a systems		
	development project.		
Consultant	Hired from outside the organization, the consultant manger may undertake		
	many of the activities in a systems development project.		
System User	As an employee of the organization, a manager can become involved in systems		
	development as the user of the system and as the requester of the system		
	changes. The manager might also join the development team.		
Assurance	Internal and information technology (IT) auditors, independent auditors, and		
Provider	consultants may be asked to review development projects to ensure that		
	systems are developed efficiently and effectively and that the systems being		
	developed will be reliable, have sufficient internal controls, and be auditable.		

Table 1.3:

Information Systems Development Phases, Purposes and Tasks			
Phases:	Purposes:	Tasks:	
Analysis (bubbles 1 and 2)	Define project goals and scope.	Study the problem and the	
	Develop specifications for the	users' revised system's	
	new or requirements.	functions. Propose alternative	
		problem solutions.	
Design (bubbles 3 and 4)	Develop an appropriate system	Describe desired features in	
	manifestation.	detail. Choose software and	
		hardware. Write computer	
		program specifications.	
		Devise implementation plans,	
		system tests, and training.	
Implementation (bubble 5)	Prepare to begin using the new	Write, test, and debug the	
	system.	computer programs.	
Operation (bubbles 6 and 7)	Use the new system.	Convert to new or revised	
		system. Conduct post-	
		implementation review.	
		Perform systems maintenance.	

Table 1.4:

Reasons Why Organizations Fail to Achieve Systems Development Objectives

- Lack of senior management support for and involvement in Information Systems
 development: Developers and users of Information Systems watch senior management to
 determine which systems development projects are important and act accordingly by
 shifting their efforts away from any project not receiving management attention. In addition,
 management should assure that adequate resources, as well as budgetary control over use
 of those resources, are dedicated to the project.
- **Shifting user needs:** User requirements for information technology change constantly. As these changes accelerate, there are more requests for systems development and more development projects. When these changes occur during a development process, the development team may be faced with the challenge of developing systems whose very purposes have changed since the development process began.
- **Development of strategic planning systems.** Because strategic decision making is unstructured, the requirements, specifications, and objectives for such development projects are difficult to define; and determining "successful" development becomes elusive.
- **New technologies:** When an organization tries to apply advanced information technology, it generally finds that attaining systems development objectives is more difficult because personnel are not as familiar with the technology.
- Lack of standard project management and systems development methodologies: Some
 organizations do not formalize their project management and systems development
 methodologies, thereby making it very difficult to consistently complete projects on time or
 within budget.
- Resistance to change: Some people have a natural tendency to resist change, and
 Information Systems development projects signal changes often radical in the workplace.
 Business process reengineering is often the catalyst for the systems development project.
 When personnel perceive that the project will result in personnel cutbacks, threatened
 personnel may dig in their heels, and the development project is doomed.