Introduction to Information Systems Essentials for the Internetworked E-Business Enterprise

Eleventh Edition





Irwin/McGraw-Hill

Chapter Objectives

- Use the systems development process outlined in this chapter, and the model of IS components from Chapter 1 as problem-solving frameworks to help you propose information systems solutions to simple business problems.
- Describe and give examples to illustrate how you might use each of the steps of the information system development cycle to develop and implement an ebusiness system.

Chapter Objectives

- Explain how prototyping improves the process of systems development for end users and IS specialists.
- Identify the activities involved in the implementation of new information systems.
- Describe several evaluation factors that should be considered in evaluating the acquisition of hardware, software, and IS services.
- Identify several change management solutions for end user resistance to the implementation of new e-business applications.

Systems Approach to Problem Solving



Eleventh Edition

5

Traditional Systems Development Life Cycle



Prototyping Process



Systems Investigation



Systems Analysis



Systems Design



End User Development



The Implementation Process



Evaluating Hardware and Software

Hardware Evaluation Factors

- Performance
- Cost
- Reliability
- Compatibility
- Technology
- Ergonomics
- Connectivity
- Scalability
- Software
- Support

Software Evaluation Factors

- Quality
- Efficiency
- Flexibility
- Security
- Connectivity
- Language
- Documentation
- Hardware
- Efficiency

Evaluating IS Services

IS Evaluation Factors

- Performance
- Systems Development
- Maintenance
- Conversion
- Training
- Backup
- Accessibility
- Business Position
- Hardware
- Software

Implementing New Systems

Implementation Activities

- Acquisition
- Software Development
- Training
- Testing
- Documentation
- Conversion

Installation Conversion Methods





Chapter Summary

- Business professionals and IS specialists use a systems approach to help them develop information system solutions to meet e-business needs.
- Prototyping is a major alternative methodology to the traditional information system development cycle. It includes the use of prototyping tools and methodologies, which promote an iterative, interactive process.

Chapter Summary (cont)

- The application development capabilities built into many end user software packages have made it easier for end users to develop their own e-business applications.
- The implementation process for IS projects involves acquisition, testing, documentation, training, installation, and conversion.
- Business professionals should know how to evaluate IT products for acquisition. IT vendor proposals should be based on specifications developed during the design phase.

Chapter Summary (cont)

Implementation activities include managing the introduction and implementation of changes in the business processes, organizational structures, job assignments, and work relationships resulting from e-business initiatives.