



Systems Analysis and design - 2

Slide Adapted from:

Jeffrey A. Hoffer , Joey F. George, Joseph S. Valacich
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Chapter 13 System Implementation



Learning Objectives

- ✓ Describe the process of coding, testing, and converting an organizational information system and outline the deliverables and outcomes of the process.
- ✓ Prepare a test plan for an information system.
- ✓ Apply four installation strategies: direct, parallel, single-location, and phased installation.
- ✓ List the deliverables for documenting the system and for training and supporting users.
- ✓ Compare the many modes available for organizational information system training, including self-training and electronic performance support systems.



Learning Objectives (Cont.)

- ✓ Discuss the issues of providing support for end-users.
- ✓ Explain why system implementation sometimes fails.
- ✓ Describe the threats to system security and remedies that can be applied.
- ✓ Show how traditional implementation issues apply to electronic commerce applications.

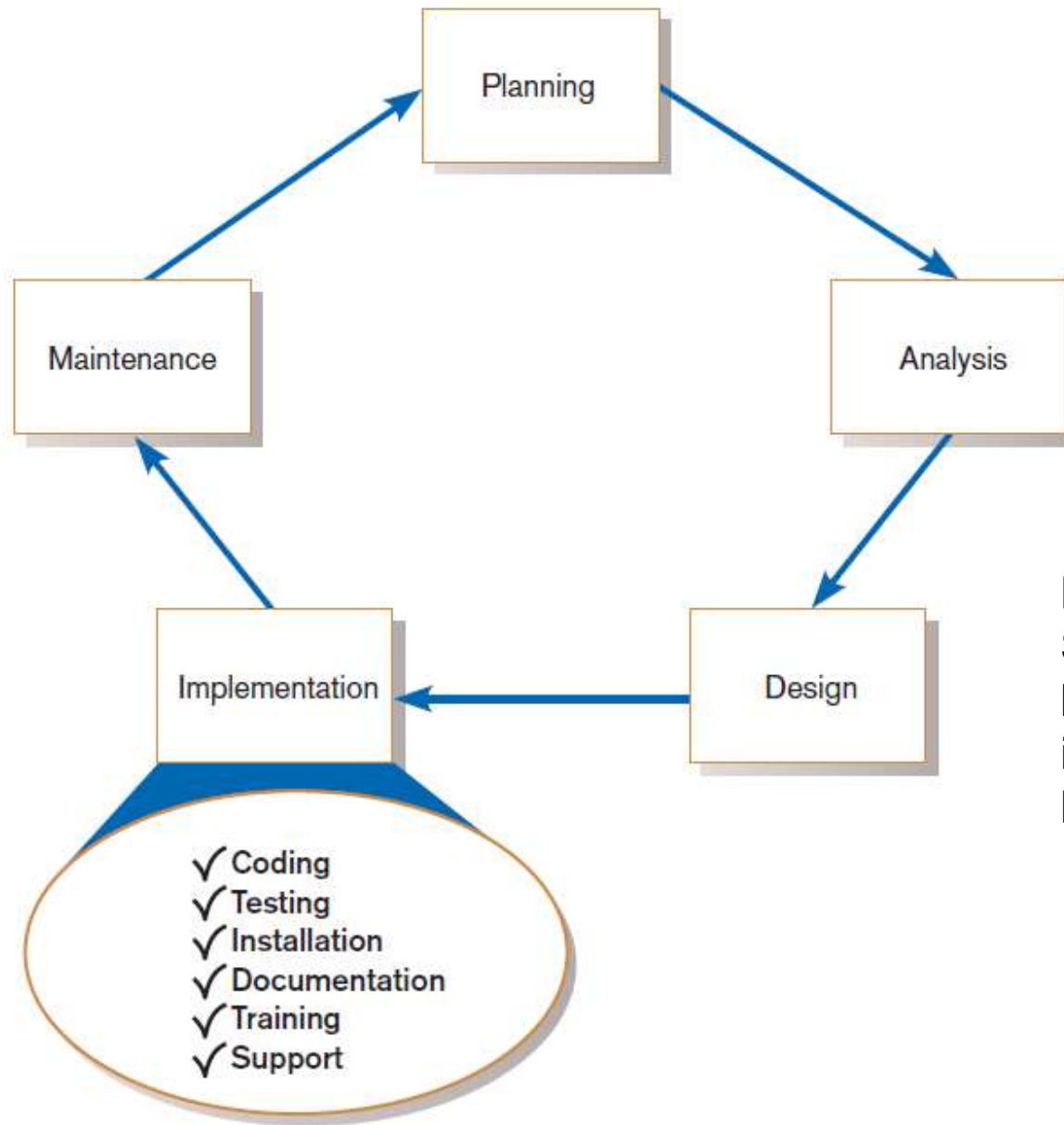


FIGURE 13-1
Systems development
life cycle with the
implementation phase
highlighted



System Implementation

- Six major activities:
 - Coding
 - Testing
 - Installation
 - Documentation
 - Training
 - Support



System Implementation (Cont.)

- Purpose:
 - To convert final physical system specifications into working and reliable software
 - To document work that has been done
 - To provide help for current and future users



The Process of Coding, Testing, and Installation

- *Coding*

- Physical design specifications are turned into working computer code.

- *Testing*

- Tests are performed using various strategies.
- Testing is performed in parallel with coding.

- *Installation*

- The current system is replaced by a new system.



TABLE 13-2 Deliverables for Documenting the System, Training, and Supporting Users

- | | |
|-------------------------|---|
| 1. Documentation | 3. User Training Modules |
| a. System documentation | a. Training materials |
| b. User documentation | b. Computer-based training aids |
| 2. User Training Plan | 4. User Support Plan |
| a. Classes | a. Help desk |
| b. Tutorials | b. Online help |
| | c. Bulletin boards and other support mechanisms |



Software Application Testing

- A master test plan is developed during the analysis phase.
- During the design phase, unit, system and integration test plans are developed.
- The actual testing is done during implementation.
- Written test plans provide improved communication among all parties involved in testing.



Summary

- In this chapter you learned how to:
 - ✓ Describe the process of coding, testing, and converting an organizational information system and outline the deliverables and outcomes of the process.
 - ✓ Prepare a test plan for an information system.
 - ✓ Apply four installation strategies: direct, parallel, single-location, and phased installation.
 - ✓ List the deliverables for documenting the system and for training and supporting users.



Summary (Cont.)

- ✓ Compare the many modes available for organizational information system training, including self-training and electronic performance support systems.
- ✓ Discuss the issues of providing support for end-users.
- ✓ Explain why system implementation sometimes fails.
- ✓ Describe the threats to system security and remedies that can be applied.
- ✓ Show how traditional implementation issues apply to electronic commerce applications.