

Apply Your Knowledge

This section contains four mini-cases. Each case describes a situation, explains your role, and requires you to apply what you learned in the chapter.

Rachel's Day Off Swimwear

Rachel's Day Off Swimwear is a successful chain of high end swimsuit boutiques. In the last six months, the firm added several new lines and opened a dozen new stores. The downside is that the company has outgrown its accounting software. The original accounting system was a package from Peachtree Software, which ran on a stand-alone PC and later on a network. Now, the firm is ready to install a new accounting package that can support current and future operations. You have been asked to implement the new system, which is called *Sage 50*.

Tasks

1. Who should receive training on the new software, and what topics should the training cover?
2. Go online and investigate the *Sage 50* product to learn whether it can import and upload existing data.
3. What changeover strategy would you suggest for the new accounting system? Explain your answer.
4. When should a post-implementation evaluation be conducted? Explain your answer.

2 Flying Fish Trucking

Flying Fish specializes in shipping fresh seafood up and down the coast. To improve service, the company wants to develop an in-house application called S³ (Super Shipping System). When S³ is operational, shippers and consignees will be able to track their shipments in real time, from departure point to destination.

Tasks

1. What types of documentation are needed for this application?
2. During application development, the IT staff will develop a structure chart. What steps should they follow?
3. What suggestions do you have for help screens and online tutorials?
4. What types of testing should be performed? What types of test data should be used?

3 Sydney's Logistics

Sydney's Logistics is a growing business that specializes in providing business services that many small firms do not have the expertise, the space or the resources to handle on their own. These services include warehouse receiving and storage, intermodal systems, and ISO-certified packaging, among others. Sydney's recently redesigned its computer system to reduce costs and achieve faster, more accurate information about its operations. At this point, the new system is ready for implementation. Two systems analysts will plan a modular design, and several and several programmers will code the modules.

Tasks

1. What issues should the systems analysts and programmers discuss before they proceed?
2. As a systems analyst on this project, how would you describe your primary responsibilities, and how could you contribute to the quality of the finished product?
3. As a programmer, how would you describe your primary responsibilities, and how could you contribute to the quality of the finished product?
4. Will the use of structure charts be beneficial during this stage of development? Discuss the advantages of structure charts compared with flowcharts and pseudocode.

4 Victorian Creations

Victorian Creations specializes in the reproduction of furniture from the Victorian era. Recently the company updated its payroll software as an in-house development project. Users and IT staff members have completed comprehensive training sessions. The system has been operational for about six weeks, and no major problems have occurred. You are responsible for the post-implementation evaluation.

Tasks

1. What are some techniques you might use to obtain an accurate evaluation?
2. What are some specific questions you would include in a questionnaire? Who should receive the questionnaire?
3. Are there general guidelines that apply to the timing of a post-implementation evaluation? What are they?
4. Is this the best time to schedule a post-implementation evaluation? Why or why not? Are there other options? What are they?

Case Studies

Each chapter includes a Chapter Case, a Continuing Case, a Capstone Case, and an Online Case Simulation. You can learn more about the Online Case Simulation in the MIS CourseMate Features section.

Chapter Case: White Diamond Glass

White Diamond Glass produces handmade decorative glass in its upstate New York factory, and sells its wares to a global market. The company still is an industry leader, but sales have leveled off. Some managers believe that IT glitches are the problem.

Background

Last year, White Diamond rushed to implement a new Web-based system to boost sales. Unfortunately, the online system was not tested thoroughly and experienced start-up problems. For example, customers complained about order mix-ups and overcharges for deliveries. You are a new system analyst, and your supervisor asked you to investigate the problems.

Tasks

1. Based on what you know about e-commerce, how would you have tested a new Web-based system?
2. Should ISO standards have been considered? Explain your answer.
3. What should White Diamond do in the future to avoid similar problems when developing new systems?
4. Three months after the system changeover, you perform a post-implementation evaluation. Prepare three evaluation forms for the new information system: one for users, one for managers, and one for the IT operations staff.

Continuing Case: Personal Trainer, Inc.

Personal Trainer, Inc. owns and operates fitness centers in a dozen Midwestern cities. The centers have done well, and the company is planning an international expansion by opening a new “supercenter” in the Toronto area. Personal Trainer’s president, Cassia Umi, hired an IT consultant, Susan Park, to help develop an information system for the new facility. During the project, Susan will work closely with Gray Lewis, who will manage the new operation.

Background

Susan finished work on system architecture issues, and her system design specification was approved. Now she is ready to address system implementation tasks, including quality assurance, structure charts, testing, training, data conversion, system changeover, and post-implementation evaluation.

Tasks

1. Plan the testing required for the system. You should consider unit, integration, and system testing in your test plan and determine who should participate in the testing.
2. You have asked Gray Lewis to contribute to the user manual for the new system. He suggested that you include a section of frequently asked questions (FAQs), which you also could include in the online documentation. Prepare 10 FAQs and answers for use in the printed user manual and context-sensitive Help screens.

Continuing Case: Personal Trainer, Inc.

3. Suggest a changeover method for the new billing system and provide specific reasons to support your choice. If you recommend phased operation, specify the order in which you would implement the modules. If your recommendation is for pilot operation, specify the department or area you would select as the pilot site and justify your choice.
4. Should the associates perform a post-implementation evaluation? If an assessment is done, who should perform it? What options are available and which would you recommend?

Capstone Case: New Century Wellness Group

New Century Wellness Group offers a holistic approach to healthcare with an emphasis on preventive medicine as well as traditional medical care. In your role as an IT consultant, you will help New Century develop a new information system.

Background

You completed the systems design for the business support system at New Century Wellness Group. The network will include a server, 27 workstations, and five network printers. The partners at the clinic have approved the design specification, and you hired two programmers, Bill Miller and Celia Goldring, to assist you with the programming and testing of the new system. You now are ready to finish the software development and begin installation, testing, and evaluation of the new system. Before you begin, you should review the DFDs, object-oriented diagrams, ERDs, and table designs that you prepared during systems analysis and systems design.

Tasks

1. What application development methods will you use? Explain your answer. What development tools will help your team finish the business support system and how will you use them?
2. Prepare a structure chart that shows the main program functions for the New Century system.
3. Develop a testing plan for the new system that addresses unit, integration, and system testing. Design the test data, and explain the design.
4. Identify the specific groups who will need training on the new system. For each group, describe the type of training you recommend and list the topics to be covered.

CASE Tool Workshop

Systems analysts use CASE tools to help them plan, build, and maintain information systems. To learn more about CASE tools, turn to Part B of the Toolkit that follows Chapter 12. You can complete these tasks with the Visible Analyst® CASE tool, which is available with this textbook, or a similar tool.

Background

Suppose you work for an IT consulting firm. One of the firm's clients is interested in using a CASE tool for in-house systems development. A brief presentation for the client will be held next week, and you will handle the section on structure charts. To prepare, you will need to review what you know about structure charts, and practice some basic skills.

Tasks

1. Launch the Visible Analyst® CASE tool, or a similar tool, and then visit the Help section for structure charts. Look for a description of the symbol set, and the definitions for data couples, control couples, and modules. Write a brief summary of what you found, or create a short slide presentation with the results.
2. Study Figure 11-12 on page 457, which is a simple example of a control couple. Use the CASE tool to create a structure chart that resembles the figure.