

## 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.

### Floor Candy

Floor Candy is a small firm that manufactures high-quality rugs and carpets. Using special software, the company can translate a customer sketch into an attractive custom design. Three years ago, the IT staff developed a Web-based order system. The system has performed well, and most maintenance has involved correcting minor errors. Now the company would like to add more features, including menu-driven design tools, and a more customer-friendly interface.

#### Tasks

1. What types of maintenance has the IT staff performed? What types of maintenance will they perform if new features are added?
2. If new features are added, what methodology should the IT staff use to add the functions and enhancements?
3. What IT security measures should the firm adopt? Prepare a security checklist, and be sure to consider all six security levels.
4. Even though the new system is only three years old, the marketplace changes constantly. In three more years, should Floor Candy consider replacing the new system? What factors and information should guide that decision?

### 2 Paperback Press

Paperback Press specializes in reprinting classic literature. Three years ago, the company implemented a new system to track inventory and signal when books need to be reprinted. The new system was well received by users, and inventory problems have decreased significantly. Since the inventory system became operational, however, users have requested increased functionality and changes in screen forms and reports. You have been called in as a consultant to help the company make some decisions about system maintenance.

#### Tasks

1. Should Paperback Press have a specific process to manage future changes and enhancements? What should it be?
2. If new features are added, what methodology should the IT staff use to add functions and enhancements?
3. Suppose that you had to assign specific IT staff members to maintain the inventory control system. How would you accomplish the task? Describe your strategy in a brief memo.
4. What should Paperback Press watch for to detect possible obsolescence in the future? Develop a checklist with specific examples that management could use.

### 3 Budget Travel

Budget Travel provides business travel arrangements through 12 metropolitan offices. A key selling point is the firm's client management database, which includes preferences such as airline seating choices, favorite rental cars, and hotel options. Budget Travel purchased the client management software as an off-the-shelf vendor package and modified the program to meet the company's needs. The package has been operational for one year and has performed well. Budget Travel now wants to expand its operation by adding six more locations. Management has asked you to help the company plan what will be needed in IT support for the business expansion.

#### Tasks

1. What capacity planning issues should the company consider?
2. What performance and workload measurement issues should the company consider at this time?
3. Should the company establish a system baseline before the integration of the six new sites? Explain your answer.
4. As an IT consultant, you should learn as much as you can about the client's business, including the impact of the Internet on the travel agency business. Research this issue online, and decide what strengths, weaknesses, opportunities, and threats exist for Budget Travel.

### 4 Sherwood Associates

Sherwood Associates is an IT consulting firm that develops new systems and maintains older systems for its clients. Sherwood recently was hired to address security concerns regarding an existing system that was developed by another firm. The client is concerned about the security of customer information. They recently terminated several employees for poor performance, and they are worried that confidential data might have been compromised. Also, after an extensive audit, several laptops seem to be missing.

#### Tasks

1. What IT security measures should the firm adopt? Prepare a security checklist, and be sure to consider all six security levels.
2. What physical security measures can be implemented to safeguard equipment?
3. How would you suggest that mobile devices be secured?
4. How can the firm keep its data secure?

## 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: Best of the Best! (BoB)

Best of the Best! uses the name BoB in its advertising. As the firm's slogan points out, the quality is the same, no matter how you look at it. BoB imports and sells gourmet coffees, cheeses, and specialty foods from around the world. BoB operates 12 retail stores in large malls, and also sells to online customers.

#### Background

About a month ago, BoB implemented a new point-of-sale (POS) system at all locations. Using a client/server design, the workstations in the firm's 12 retail stores are networked to a server at the main office. Sales reps in the stores use the system to record sales transactions, manage customer accounts, and to print various daily, weekly, and monthly reports.

When the new sales system was installed, the IT development team conducted extensive training for the sales staff, and set up a support desk. The IT team also prepared a user manual and distributed copies to all sales and office staff.

Store managers have reported that sales-people do not like the new system and find it very confusing. When an IT support person visited the stores to investigate the problem, she discovered that the new people were having problems with the interface, and could not understand the user manual. They said that it was unclear, very hard to read, and did not use familiar terms. When she asked for examples of confusing instructions, the sales staff showed her the following examples:

- Obtaining the authorization of the store manager on Form RBK-23 is required before the system can activate a customer charge account.
- Care should be exercised to ensure that the BACKSPACE key is not pressed when the key on the numeric keypad with a left-facing arrow is the appropriate choice to accomplish nondestructive backspacing.
- To prevent report generation interruption, the existence of sufficient paper stock should be verified before any option that requires printing is selected. If not, the option must be reselected.
- The F2 key should be pressed in the event that a display of valid merchandise codes is required. That same key terminates the display.

#### Tasks

1. What should BoB have done to avoid this situation?
2. Should the sales support staff ask the IT department to rewrite the user manual as a maintenance project, or should they request more training for sales staff? Can you offer any other suggestions?
3. Rewrite the user manual instructions so they are clear and understandable, and use the guidelines in Communications Tools found in Part A of the Systems Analyst's Toolkit. What steps would you take to test the new version?
4. In the process of rewriting the user manual instructions, you discover that some of the instructions were not changed to reflect system maintenance and upgrade activities. A request form on the firm's intranet, for example, has replaced Form RBK-23. BoB also has phased out printed reports in favor of online reports, with a menu-driven interface. Rewrite the user manual instructions to reflect the changes.

### 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

System changeover and data conversion were successful for the new Personal Trainer system. The post-implementation evaluation indicated that users were pleased with the system. The evaluation also confirmed that the system was operating properly. Several users commented, however, that system response seemed slow. Susan Park, the project consultant, wants to meet with you to discuss operation, maintenance, and security issues affecting the new system.

#### Tasks

1. What might be causing the slow response time? Prepare a brief memo explaining system performance and workload measurement, using nontechnical language that Personal Trainer users can understand easily.
2. What could be causing the network slowdowns at Personal Trainer? If a problem does exist, which performance and workload measures would you monitor to pinpoint the problem?
3. At the end of the systems analysis phase, you studied the economic feasibility of the system and estimated the future costs and benefits. Now that the system is operational, should those costs and benefits be monitored? Why or why not?
4. You decide to prepare a security checklist for Personal Trainer. Prepare a list of security issues that the firm should evaluate and monitor. Be sure to organize the items into categories that match the six security levels.

### 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 implemented the new system at New Century Wellness Group successfully, and the staff has used the system for nearly four months. Overall, New Century is pleased with the improvements in efficiency, office productivity, and patient satisfaction.

Some problems have surfaced, however. The office staff members call you almost daily to request assistance and suggest changes in certain reports and forms. You try to be helpful, but now you are busy with other clients. Actually, your contract with New Century required you to provide support only during the first three months of operation, but you want to encourage them to begin working on Phase Two of the computer upgrade project. Anita Davenport, New Century’s office manager, reported that the system seems to slow down at certain times during the day, making it difficult for the staff to keep up with its workload. Also, you are increasingly concerned about system security. A recent article in the local newspaper described an incident where a disgruntled former employee was planning to break into a computer system and destroy or alter data.

#### Tasks

1. What might be causing the slow response time? Prepare a brief memo explaining system performance and workload measurement, using nontechnical language that New Century users can understand easily.

*(continued)*

2. New Century's partners asked you to provide ongoing maintenance for the new system. In order to avoid any misunderstanding, you want to provide a brief description of the various types of maintenance. Prepare a brief memo that does this, and include at least two realistic examples of each type of maintenance.
3. Although the system has been operational for a short time, users already have submitted several requests for enhancements and noncritical changes. Should New Century use a maintenance release methodology to handle the requests? Why or why not?
4. What are the main security issues that New Century should address? Prepare a memo that lists the primary concerns and offers a specific recommendation for dealing with each issue.

## 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 that you are evaluating various CASE tools, and you want to learn more about built-in security and performance enhancement issues.

### Tasks

1. Using the Help feature, determine what security features are available in Visible Analyst®, or another CASE tool. Describe what you found in a brief memo, and include screen shots if possible.
2. Can Visible Analyst®, or another CASE tool, enhance system performance by speeding up access to stored data? If so, how would that be accomplished?