

BAHAN TUGAS PRESENTASI

Dosen :

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Case Problems



1. Pine Valley Furniture

Alex Schuster began Pine Valley Furniture (PVF) as a hobby. Initially, Alex would build custom furniture in his garage for friends and family. As word spread about his quality craftsmanship, he began taking orders. The hobby has since evolved into a medium-sized business, employing more than fifty workers.

Over the years, increased demand has forced Alex to relocate several times, increase his sales force, expand his product line, and renovate Pine Valley Furniture's information systems. As the company began to grow, Alex organized the company into functional areas—manufacturing, sales, orders, accounting, and purchasing. Originally, manual information systems were used; however, as the business began to expand rapidly, a mini-computer was installed to automate applications.

In the beginning, a process-oriented approach was utilized. Each separate application had its own data files. The applications automated the manual systems on which they were modeled. In an effort to improve its information systems, PVF recently renovated its information systems, resulting in a company-wide database and applications that work with this database. Pine Valley Furniture's computer-based applications are primarily in the accounting and financial areas. All applications have been built in-house, and when necessary, new

information systems staff is hired to support Pine Valley Furniture's expanding information systems.

- a. How did PVF go about developing its information systems? Why do you think the company chose this option? What other options were available?
- b. One option available to PVF was an enterprise-wide system. What features does an enterprise-wide system, such as SAP, provide? What is the primary advantage of an enterprise-wide system?
- c. PVF will be hiring two systems analysts next month. Your task is to develop a job advertisement for these positions. Locate several Web sites or newspapers that have job advertisements for systems analysts. What skills are required?
- d. What types of information systems are currently utilized at PVF? Provide an example of each.

- 2. Hoosier Burger
- As college students in the 1970s, Bob and Thelma Mellankamp often dreamed of starting their own business. While on their way to an economics class, Bob and Thelma drove by Myrtle's Family Restaurant and noticed a "for sale" sign in the window Bob and Thelma quickly made arrangements to purchase the business, and Hoosier Burger Restaurant was born. The restaurant is moderately sized, consisting of a kitchen, dining room, counter, storage area, and office. Currently, all paperwork is done by hand. Thelma and Bob have discussed the benefits of purchasing a computer system; however, Bob wants to investigate alternatives and hire a consultant to help them.
- Perishable food items, such as beef patties, buns, and vegetables are delivered daily to the restaurant. Other items, such as napkins, straws, and cups, are ordered and delivered as needed. Bob Mellankamp receives deliveries at the restaurant's back door and then updates a stock log form. The stock log form helps Bob track inventory items. The stock log form is updated when deliveries are received and also nightly after daily sales have been tallied. Customers place their orders at the counter and are called when their orders are ready. The orders are written on an order ticket, totaled on the cash register, and then passed to the kitchen where the orders are prepared. The cash register is not capable of capturing point-of-sale information. Once an order is prepared and delivered, the
 - order ticket is placed in the order ticket box. Bob reviews these order tickets nightly and
 - makes adjustments to inventory. In the past several months, Bob has noticed several
 - problems with Hoosier Burger's current information systems, especially with the inventory
 - control, customer ordering, and management reporting systems. Because the inventory control and
 - customer ordering systems are paper based, errors occur frequently. These errors often affect delivery
 - orders received from suppliers as well as customer orders. Bob has often wanted to have electronic access to forecasting information, inventory usage, and basic sales information. This access is impossible because of the paper-based system.
- a. Apply the SDLC approach to Hoosier Burger.
- b. Using the Hoosier Burger scenario, identify an example of each system characteristic.
- c. Decompose Hoosier Burger into its major subsystems.
- d. Briefly summarize the approaches to systems development discussed in this chapter. Which approach do you feel should be used by Hoosier Burger?

- 3. Natural Best Health Food Stores
- Natural Best Health Food Stores is a chain of health food stores serving Oklahoma, Arkansas, and Texas. Garrett Davis opened his first Natural Best Health Food Store in 1975 and has since opened fifteen stores in three states. Initially, he sold only herbal supplements, gourmet coffees and teas, and household products. In 1990, he expanded his product line to include personal care, pet care, and grocery items. In the past several months, many of Mr. Davis's customers have requested the ability to purchase prepackaged meals, such as chicken, turkey, fish, and vegetarian, and have these prepackaged meals automatically delivered to their homes weekly, biweekly, or monthly. Mr. Davis feels that this option is viable because Natural Best has an automatic delivery system in place for its existing product lines. With the current system, a customer can subscribe to the Natural Best Delivery Service (NBDS) and have personal care, pet care, gourmet products, and grocery items delivered on a weekly, biweekly, or monthly basis. The entire subscription process takes approximately five minutes. The salesclerk obtains the customer's name, mailing address, credit card number, desired delivery items and quantity, delivery frequency, and phone number. After the customer's subscription has been processed, delivery usually begins within a week. As customer orders are placed, inventory is automatically updated. The NBDS system is a client/server system. Each store is equipped with a client computer that accesses a centralized database housed on a central server. The server tracks inventory, customer activity, delivery schedules, and individual store sales. Each week the NBDS generates sales summary reports, low-in-stock reports, and delivery schedule reports for each store. The information contained on each of these individual reports is then consolidated into master sales summary, low-in-stock, and forecasting reports. Information contained on these reports facilitates restocking, product delivery, and forecasting decisions. Mr. Davis has an Excel worksheet that he uses to consolidate sales information from each store. He then uses this worksheet to make forecasting decisions for each store.
- a. Identify the different types of information systems used at Natural Best Health Food Stores.
- Provide an example of each. Is an expert system currently used? If not, how could Natural Best benefit from the use of such a system?
- b. Figure 1-4 identifies seven characteristics of a system. Using the Natural Best Health Food Stores scenario, provide an example of each system characteristic.
- c. What type of computing environment does Natural Best Health Food Stores have?

CASE STUDIES

A “COLLEGE EDUCATION COMPLETION” METHODOLOGY

Like many readers of this book, you are probably a college student working on a degree. Think of completing college as a project—a big project, lasting many years and costing more than you might want to admit. Some students do a better job managing the college completion project than others. Many fail entirely (certainly not you), and most students probably complete college late and way over budget (again, certainly not you).

As with any other project, to be successful, you should follow some sort of “college education completion” methodology. That is, you should follow a comprehensive set of guidelines for completing activities and tasks from the beginning of planning for college through to the successful completion.

1. What might be the phases of your personal college education completion life cycle?
2. What are some of the activities of each phase?
3. What are some techniques you use to help complete the activities? What models might you create during the process of completing college? Differentiate models you create that get you through college from those that help you plan and control the process of completing college.
4. What are some of the tools you use to help you complete the models?

FACTORY SYSTEM DEVELOPMENT PROJECT

Sally Jones is assigned to manage a new system development project that will automate some of the work being done in her company’s factory. It is fairly clear what is needed: to automate the tracking of the work in progress and the finished goods inventory. What is less clear is the impact of any automated system on the factory workers. Sally has several concerns: How might a new system affect the workers? Will they need a lot of training? Will working with a new system slow down their work or interfere with the way they now work? How receptive will the workers be to the changes the new system will surely bring to the shop floor?

At the same time, Sally recognizes that the factory workers themselves might have some good ideas about what will work and what won’t, especially concerning (1) which technology is more likely to survive in the factory environment and (2) what sort of user interface will work best for the workers. Sally doesn’t know much about factory operations, although she does understand inventory accounting.

1. Is the proposed system an accounting system? A factory operations system? Or both?
2. Which life cycle variations might be appropriate for Sally to consider using?
3. Which activities of analysis and of design discussed in this chapter should involve factory workers as well as factory management?

RETHINKING ROCKY MOUNTAIN OUTFITTERS



Barbara Halifax wrote her boss that she was still considering many potential approaches to the customer support system development project. She is still completing the project planning phase, so not much time has passed at this point. Consider the training required for the development staff if RMO decides to use an object-oriented approach for the project. How extensive would the training needs be for the RMO staff? What type of training would be required? Is it just about new programming languages, or is it broader than that? How far can the project progress before the decision is made?

Barbara mentions that either approach can be used and that, even though some Web development is involved, the team does not have to use an OO approach. Do you think she is correct? Why or why not? Do some types of projects *require* an OO approach?

Barbara also mentions that she plans to use some iteration and to involve users extensively throughout the project. What life cycle variations are under consideration? What else might she do to speed up the development process? What else might she consider adapting from the United Process, from Extreme Programming, or from Scrum?