In-class exercise:

IMPROVING DECISION MAKING: USING A DATABASE TO CLARIFY BUSINESS STRATEGY (at the end of chapter 2, page 72)

In this exercise, you will use databases software to analyze the reservation transaction for a hotel and use that information to fine-tune the hotel’s business strategy and marketing activities.

The Presidents’ Inn is a small three-story hotel on the Atlantic Ocean in Cape May, New Jersey, a popular northeastern U.S. resort. Ten rooms overlook side streets, 10 rooms have bay windows that offer limited views of the ocean, and the remaining 10 rooms in the front of the hotel face the ocean. Room rates are based on room choice, length of stay, and number of guests per room. Room rates are the same for one to four guests. Fifth and sixth guests must pay an additional $20 charge each per person per day. Guests staying for seven days or more receive a 10 percent discount on their daily room rates.

Business has grown steadily during the past 10 years. Now totally renovated, the inn uses a romantic weekend package to attract couples, a vacation package to attract young families, and a weekday discount package to attract business travelers. The owners currently use a manual reservation and bookkeeping system, which has caused many problems. Sometimes two families have been booked in the same room at the same time. Management does not have immediate data about the hotel’s daily operations and income.

You will find a database for hotel reservation transaction developed in Microsoft Access on our course webpage (adopted from MyMISLab). Develop some reports that provide information to help management make the business more competitive and profitable. Your reports should answer the following question:

• What is the average length of stay per room type?
• What is the average number of visitors per room type?
• What is the base income per room (i.e. length of visit multiplied by the daily rate) during a specified period of time?
• What is the strongest customer base?

After answering these questions, write a brief report describing what the database information reveals about the current business situation. Which specific business strategies might be pursued to increase room occupancy and revenue? How could the database be improved to provide better information for strategic decisions?

Homework assignment

ACHIEVING OPERATIONAL EXCELLENCE: BUILDING A RELATIONAL DATABASE FOR INVENTORY MANAGEMENT (at the end of chapter 5, page 182)

In this exercise, you will use database software to design a database for managing inventory for a small business. Sylvester’s Bike Shop, located in San Francisco, California, sells road, mountain, hybrid, leisure, and children’s bicycles. Currently, Sylvester’s purchases bikes from three suppliers, but plans to add new suppliers in the near future. This rapidly growing business needs a database system to manage this information.
Initially, the database should house information about suppliers and products. The database will contain two tables: a supplier table and a product table. The reorder level refers to the number of items in inventory that triggers a decision to order more items to prevent a stockout. (In other words, if the number of units of a particular item in inventory falls below the reorder level, the item should be reordered.) The user should be able to perform several queries and produce several managerial reports based on the data contained in the two tables.

Using the information found in the tables on the course webpage, build a simple relational database for Sylvester’s. Once you have built the database, perform the following activities.

- Prepare a report that identifies the five most expensive bicycles. The report should list the bicycles in descending order from most expensive to least expensive, the quantity on hand for each, and the markup percentage for each.
- Prepare a report that lists each supplier, its products, the quantities on hand, and associated reorder levels. The report should be sorted alphabetically by supplier. Within each supplier category, the products should be sorted alphabetically.
- Prepare a report listing only the bicycles that are low in stock and need to be reordered. The report should provide supplier information for the items identified.
- Write a brief description of how the database could be enhanced to further improve management of the business. What tables or fields should be added? What additional reports would be useful?