

## **Data**

In this module we will take a closer look at the data, how it is stored and used, and how it is secured.

While it is not expected that you will become database experts after this class, it is critical that all business majors (as well as IFSM majors) understand the fundamentals of how data is stored, arranged, classified, linked together, and secured for efficiency in providing information.

Data is the key to information systems. Data are the raw facts collected from various transactions and events throughout an organization. Individually, the data represents a specific item such as a product code, customer address, invoice amount, etc. Collectively, information systems transform the data into useful information. Collecting the totals of all the invoices for a given month lets us know how much was sold. Therefore, if information is derived from data, it is critical that the data be correct both in content and format. This accuracy and data integrity will enable the organization to rely on the information to effectively manage, control, plan, and oversee what's going on in the business.

In today's business environment, there is tremendous power in linking databases throughout the enterprise to get the right information to the right people at the right time. In addition, databases can provide strategic business intelligence to effectively support decision making. However, it's important to emphasize that ultimately it's the ability of employees and managers to interpret the information, understand how to apply it effectively, and use their experience and knowledge to maximize the value of the information in their decision making.