

# Learning Resource

## Data

This week we will take a closer look at data, how it is stored and used, and how it is organized. While it is not expected that you will become database experts, it is critical that you 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 is 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. For example, 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. Accuracy and data integrity 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 is the ability of employees and managers to interpret the information, understand how to apply it effectively, and use their experience and knowledge that maximizes the value of the information in their decision making.

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