# Management Information System
## Referred Book
## James_OBrien_George_Marakas_Management_Information_Systems_10th_ Edition

## C h a p t e r 1 Foundations of Information Systems in Business

**1. What is Information System?**
**Ans:**

### Information System

A Complete disciplinary approach of an interrelated component that able to collect, process, store, retrieve and distribute information that used to support decision making, coordinate and control of that specific information.

In other words, an Information System can be defined as a set of coordinated network of components which acts together towards producing, distributing and processing information. An Information System is the organized combination of people, Hardware, Software, Communication Networks and data resources.

**2. Types of Information System.**
**Ans:**

Several types of information systems can be classified as either operations or management information systems. Figure 1.6 illustrates this conceptual classification of information systems applications.
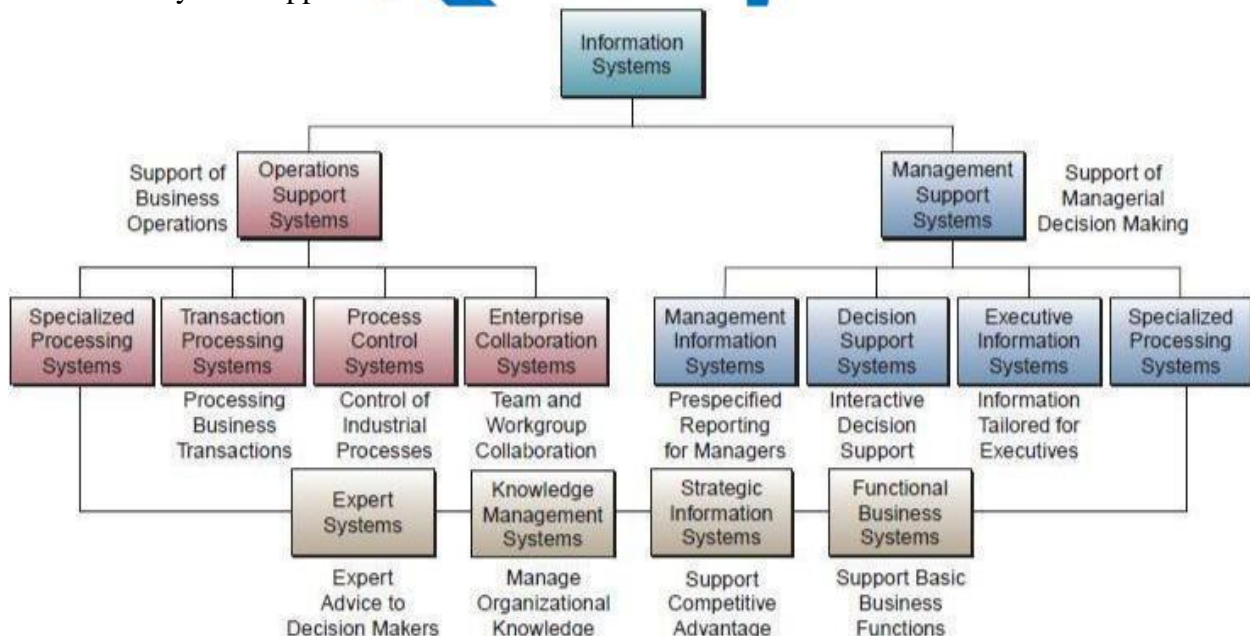


**FIGURE 1.6** Operations and management classifications of information systems.

**Operations Support System:** Operations support systems produce a variety of information products for internal and external use. The role of a business firm's operations

support systems is to process business transactions, control industrial processes, support enterprise communications and collaborations, and update corporate databases efficiently.

**Transaction processing systems**

Transaction processing systems are important examples of operations support systems that record and process the data resulting from business transactions.

**Process control systems**

Process control systems monitor and control physical processes. For example a petroleum refinery uses electronic sensors linked to computers to monitor chemical processes continually and make instant (real-time) adjustments that control the refinery process.

**Enterprise collaboration systems**

Enterprise collaboration systems enhance team and workgroup communications and productivity and include applications that are sometimes called *office automation system.*

**Management support systems**

When information system applications focus on providing information and support for effective decision making by managers, they are called management support systems. Providing information and support for decision making by all types of managers and business professionals is a complex task.

**Management information systems**

Management information systems provide information in the form of pre-specified reports and displays to support business decision making. Examples: sales analysis, production performance, and cost trend reporting systems.

**Decision support systems**

Decision support systems Provide interactive ad hoc support for the decision-making processes of managers and other business professionals. Examples: product pricing, profitability forecasting, and risk analysis systems.

**Executive information systems**

Executive information systems Provide critical information from MIS, DSS, and other sources tailored to the information needs of executives. Examples: systems for easy access to analyses of business performance, actions of competitors, and economic developments to support strategic planning.


**3. How a business firm can use Information System for competitive advantages?**
**Ans:**

Competitive advantages of a firm that over it competitors allowing it to generate better sells and margins and/or retains more customers than its competitions. An Information System (IS) is the organized combination of people, hardware, software, communication software and policies and procedures that stores, gain, transforms and accommodate information in a organization.

So, the advantages are brief as following
- Implementing ERP software in the organization.
- Introducing E-commerce to attain new customers.
- Creating Loyal Customers
- Capturing the lifetime relationship with customers

**4. What is Information Technology?**
**Ans:**

**Information Technology**

Information technology is one of many tools managers use to cope with change.

**Computer hardware** is the physical equipment used for input, processing, and output activities in an information system.

**Computer software** consists of the detailed, preprogrammed instructions that control and coordinate the computer hardware components in information system.

**Data management technology** consists of the software governing the organization of data on physical storage media

**Networking and telecommunications technology**, consisting of both physical devices and software, links the various pieces of hardware and transfers data from one physical location to another.

**5. Give the Differences between information system and information technology.**
**Ans:**

**Comparison of Information System and Information Technology**

Information system and information technology are similar in many ways but at the same time they are different. Following are some aspects about information system as well as information technology.

- **Origin:** Information systems have been in existence since pre-mechanical era in form of books, drawings, etc. However, the origin of information technology is mostly associated with invention of computers.

- **Development:** Information systems have undergone great deal of evolution, i.e. from manual record keeping to the current cloud storage system. Similarly, information technology is seeing constant changes with evermore faster processor and constantly shrinking size of storage devices.

- **Business Application:** Businesses have been using information systems for example in form of manual books of accounts to modern TALLY. The mode of communication has also gone under big change, for example, from a letter to email. Information technology has helped drive efficiency across organization with improved productivity and precision manufacturing.