

Week 6

Information System



DBA 303

Business Information System

Learning Outcome

- At the end of the lecture, student should be able:
 - To analyze the role of information systems in today's competitive business environment
 - To identify the major management challenges in building and using information systems in organizations.

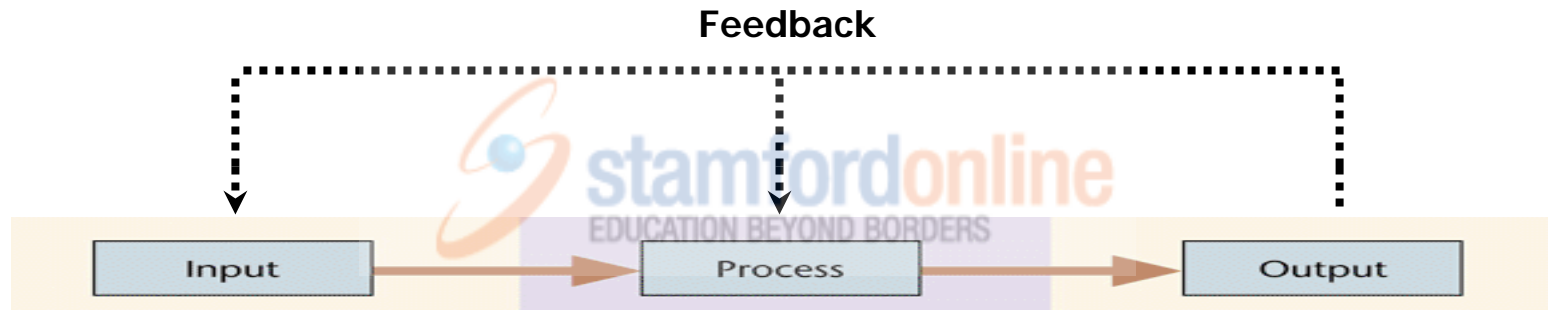
Definition Information System

- Information System (IS) is a set of people, data, procedures, hardware, and software that work together to achieve the common goal of information management
- In other words, Information system (IS) is the combination of technology, people and process that an organization uses to produce and manage information.



Information Systems

Output that is used to make changes to input or processing activities



Gathering and capturing raw data

Converting or transforming data into useful outputs

Producing useful information, usually in the form of documents

Factors Stimulating Interest in Information Management

- **Increasing complexity of business activity**
 - International economy
 - Worldwide competition
 - Increasing complexity of technology
 - Shrinking time frames
 - Social constraints
- **Improved computer capabilities**
 - Size
 - Speed

Business disciplines and use of information systems

- **Accounting**
 - Record business transactions, produce periodic financial statements, and create reports required by law
- **Finance**
 - Organize budgets, manage the flow of cash, analyze investments, and make decisions that could reduce interest payments and increase revenues
- **Marketing**
 - Analyze demand for various products in different regions and population groups

Business disciplines and use of information systems (2)

- **Human Resources**
 - Help with record keeping and employee evaluation
- **Manufacturing**
 - Allocate resources such as personnel, raw material, and time
 - Control inventory, process customer orders, prepare production schedules, perform quality assurance, and prepare shipping documents
- **Service**
 - IS are often the backbone of service organizations



Business disciplines and use of information systems (3)

- **Retail**

- Some retail stores (e.g., Wal-Mart, Sears) are now linked to communication networks by satellite
- Management can determine which items move quickly and which do not

- **New Businesses**

- ISs have made new products and services possible, such as credit reports and shipment tracking

- **Government**

- Tax authorities, national insurance and welfare agencies, defence departments, economic organizations, immigration authorities

Benefits of using Information Systems

- By reducing the costs of processing transactions with the same deal that they use to reduce production costs
- By increasing the amount of information which is accessible for people inside the organizations
- By giving the organization the opportunity to gain more leverage in competitive advantage (reduce cost, better product)
- Most important, it helps to improve decision making process



Information Systems help improve the decision-making process by:

- (a) providing more information about the problem
- (b) presenting a greater variety of possible alternatives
- (c) showing consequences and effects of choices
- (d) measuring the outcome of different possible solutions
- (e) providing feedback on the decision that is made

Key management challenges maintaining IS

- Organizations often undergo major changes to improve organizational operations and functions.
- To continue to offer valuable support information management practices have to follow into the spirit of changes.
- Modern information technology allows for considerable flexibility in current information systems.
- Thus information systems can be changed to match the new needs for information management and to continue to support the organization's objectives.



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