

Introduction to Information Systems

Concepts & Definitions Relevant to Information Systems

- Data: facts, symbols, represents value of entity
- Information: data which has been processed to have meaning, presented in manner which can be understood by human – requires selection, organization, and possibly manipulation of the data to have use or value for organization
- Process: defined steps or tasks that are logically derived which when performed achieve a predictable outcome
- System: group of identifiable items (humans, machines) organized to accomplish goal
- Efficiency – how well is the task performed; measure of production divided by consumption
- Effectiveness – was it the right task to perform? ; measure of extent to which a system achieves its goals

Characteristics of Information that has a Value to the Organization

Timely	Flexible
Accurate	Reliable
Complete	Verifiable
Economical	Accessible
Relevant	Secure
Simple	

I-P-O

- Input

- Processing
- Output
- Three major elements of computer system.

Input

- Ability to send data for processing
- Activity of gathering and capturing raw data
- Some examples:
 - Keyboard
 - Display (monitor)
 - Scanner
 - Laser
 - Diskettes, CDROM, hard disk, zip, etc.

Processing

- Performing analysis of data via calculations, comparisons, and the like
- Transforming data into information
 - Central Processing Unit
 - Registers (temporary and special purpose memory storage locations of Random Access Memory)

Output

- Ability to present results of processing in manner suitable for user
 - Printer
 - Display (monitor)
 - Hard drive, floppy drive, zip, CDROM

System Concept includes Feedback

- Must have ability to check on results and improve or reengineer system to meet effectiveness and efficiency criteria
- Information Systems are dynamic in that feedback allows for changes, modifications to occur to keep pace with the business environment