Management Information System Chapter 1

Introduction to MIS

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What is Management

Management

The **process** of **coordinating** work activities so that they are completed **efficiently** and **effectively** with and through other people.

- Process: Represents ongoing functions or primary activities engaged in by managers
- Coordinating: Distinguished a managerial position from a nonmanagerial one.

- Efficiency: Getting the most output from the least amount of input
 - Doing things right (not wasting resources)
 - Concerned with means

Example:

Cutting inventory levels

Decreasing the amount of time to manufacture products

• Effectiveness: Completing activities so that organizational goals are achieved.

Example:

Doing the right things

Concerned with ends

EFFICIENCY AND EFFECTIVENESS IN MANAGEMENT

Efficiency (Means) Effectiveness (Ends) Goal Resource Usage **Attainment High Attainment Low Waste Management Strives For:** Low resource waste (high efficiency)

High goal attainment (high effectiveness)

KEY RESOURCES OF MIS INFORMATION

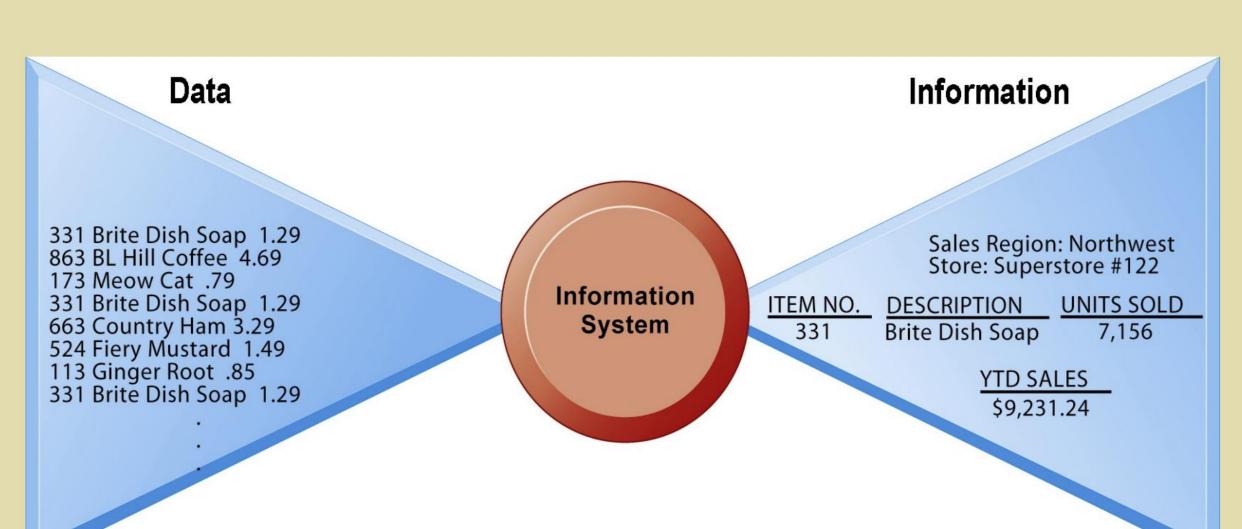
Data

Are raw facts that <u>describe a particular phenomenon</u> e.g Current Temperature, Price of property, Age of a person etc.

A message which source wants to communicate to the receiver e.g Text, Voice, Image, movies, Music etc

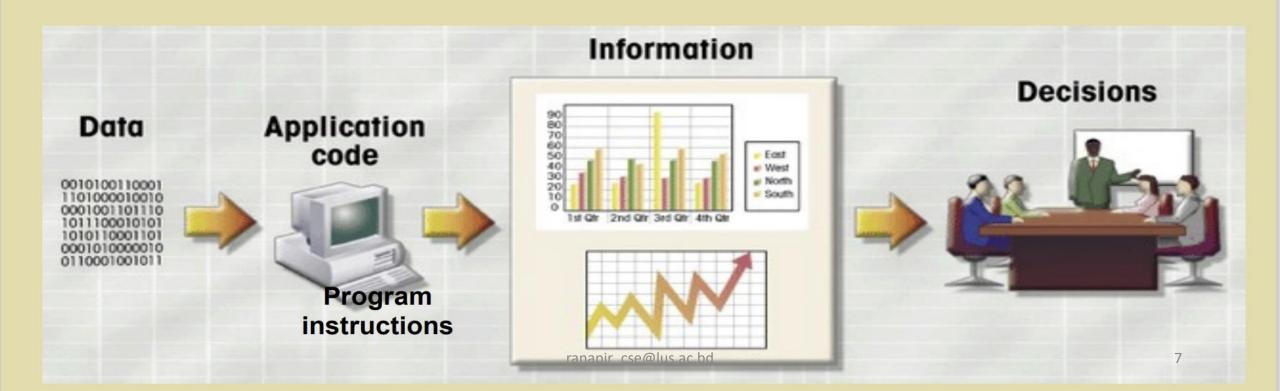
- Information: Data that is organized, meaningful, and useful
- data with context
- processed data
- value-added to data
 - summarized
 - organized

DATA AND INFORMATION



• DATA

- Raw facts stored in databases
- Need additional processing to become useful
- INFORMATION
 - Required by <u>decision maker</u>
 - Data processed and presented in a meaningful form
 - Transformation (any process that changes data into information).



DATA COLLECTED WITHIN AN ORGANISATION

Data collected

Where from?

Used for?

Order details, customer details complaints

customers

Financial data

bank

Cost of goods, new products

suppliers

Sales data

Sales Dept

DATA COLLECTED WITHIN AN ORGANISATION

Data collected	Where from?	Used for?
Order details, customer details complaints	customers	Supplying goods, creating invoices and statements Improved performance
Financial data	bank	Planning strategic decisions
Cost of goods, new products	suppliers	Selling to customers
Sales data	Sales Dept	Monitor sales against forecasts, re-order of stock

Characteristics of Valuable Information

- Accuracy
- Verifiable
- Timeliness
- Organized
- Meaningful
- Cost Effective

Accuracy

- The information a user receives has been processed correctly
- Free from errors
- Inaccurate information may lead to incorrect decisions

Verifiable

- User can confirm and verify the information
- Identify source of information

Timeliness

- Having information when user need it
- Right information must be produced to users at right time

Organized

• Information is arranged to suit the need and requirements of the user

Meaningful

- Relevant to the user who receives or uses it.
- Unnecessary information must be eliminated.

Cost Effective

• The cost to produce the information should be less that the actual cost of the information.

What is a System?

A system is:

- A set of interrelated components with a clearly defined boundary
- Components work together to achieve a common set of objectives
- Accepts inputs and produce outputs

Basic Functions of a System

Input:

 Capturing and assembling elements that enter the system to be processed.

Processing:

Transformation process that converts input into output

Output:

• Transferring transformed elements to their ultimate destination