

What is MIS?

A Management Information System is an information system that evaluates, analyzes, and processes an organization's data to produce meaningful and useful information based on which the management can take right decisions to ensure future growth of the organization.

What is Management?

Management refers to a set of functions and processes designed to initiate and coordinate group efforts in an organized setting directed towards promotion of certain interests, preserving certain values and pursuing certain goals.

What is Information?

Information is data that have been organized into a meaningful and useful context.

What is System?

System: A set of components that work together to achieve a common goal.

Subsystem: One part of a system where the products of more than one system are combined to reach an ultimate goal

Closed system: Stand-alone system that has no contact with other systems

Open system: System that interfaces with other systems

Characteristics of Information:

- Timeliness
- Purpose
- Mode and Format
- Redundancy
- Rate
- Frequency
- Completeness
- Reliability
- Cost benefit analysis
- Validity
- Quality

Five characteristics of a good Management Information System:

Management Oriented
Management directed
Integrated
Common data flows
Heavy planning element

What are the three approaches of MIS development?

Top down approach
Bottom-up approach
Integrative approach

What are the three levels of management?

Strategic level
Tactical decisions
Supervisory level

Limitations of the Management Information System:

MIS is not a substitute for effective management. It cannot replace managerial Judgement in making decisions in different functional areas.
MIS may not have requisite flexibility to quickly update itself with changing needs of time.
MIS cannot provide tailor-made information packages suitable for the purpose of every type of decision made by executives.
MIS takes into account mainly quantitative factors, thus it ignores the non-quantitative factors like morale and attitude of members of the organization.
MIS is less useful for making non-programmed decisions.
The effectiveness of MIS decreases due to frequent changes in top managements, organizational structure and operational team.
MIS effectiveness is reduced where culture of hoarding information and not sharing with others exists.

What is Data Mining?

Data Mining is the process of collecting large amounts of raw data and transforming that data into useful information.

Advantages

- Improves Customer Satisfaction/service
- Saves Time and Money
- Increases Sales Effectiveness
- Increases profitability

Disadvantages

- Require skilled technical users to interpret and analyze data from warehouse
- Validity of the patterns
- Related to real world circumstances
- Unable to Identify Casual Relationships
- Reserved for the few instead of the many

Data Mining Applications

- Banking
- Insurance
- Medicine/Healthcare
- Retail

Data Warehousing?

A Data Warehouse is a computerized collection of mined data.

Advantages

- Access to information
- Data Inconsistency
- Decrease Computing Cost
- Productivity Increase
- Increase company profits

Disadvantages

- Data must be cleaned, loaded, and extracted
- User Variability
- Difficult to Maintain

What is Data Mart?

A data mart is a simple form of a data warehouse that is focused on a single subject (or functional area), such as Sales, Finance, or Marketing.