

Definition of MIS:-

MIS is a planned system of collecting, storing and, disseminating data in the form of information needed to carry out the functions of Management.

Structure of MIS:-

- Physical component
- Information system processing function
- Decision support
- Level of management activities
- Organizational
- function



Definition of Management:-

Management is the art of getting things done through and which the people informally organized groups.

Managerial functions:-

- Planning
- Organizing
- Staffing
- Directing
- Controlling

Basic Objective of MIS:-

1. **Capturing Data:** Internal and External sources contribute to Decision.
2. **Processing Data:** Process data for planning controlling, operating.
3. **Information storage and Retrieval:** can be stored data and retrieve.
4. **Information propagation.**

Characteristics of MIS: -

Following are the key characteristics of MIS: -

1. System approach:

MIS follows the system approach, which implies a step-by-step approach to the study of the system and its performance in the light of the objective for which it has been constituted. It means taking an inclusive view of sub-systems to operate within an organization.

2. Management-oriented:

The management-oriented characteristic of MIS implies that a top-down approach needs to be followed for designing MIS. A top-down method says the initiation of system development determines management requirements as well as business goals. MIS implies the management dynamically to the system development towards the completion of management decisions.

3. As per requirements:

The design and development of MIS should be as per the information required by the managers. The required design and development information is at different levels, viz., strategic planning, management control, and operational control. It means MIS should cater to the specific needs of managers in the hierarchy of an organization.

4. Future-oriented:

The design and development of MIS should also be a future purpose so that the system is not restricted to providing only past information.

MIS provides information about possible future problems and their solutions through appropriate marketing decisions. It acts as a preventive mechanism in marketing management and offers guidance to marketing executives.

5. Integrated:

A complete MIS is a combination of its multiple sub-components to provide the relevant information to take out a useful decision. An integrated system, which blends information from several operational areas, is a necessary characteristic of MIS.

6. Facilitates prompt and correct decision-making:

MIS provides updated information on various aspects of marketing to managers/executives. As a result, managers are aware of new marketing developments taking place. They are also in a position to take prompt decisions from time to time due to the feedback provided by MIS. It acts as a data bank for the benefit of marketing managers. MIS stands between the marketing environment and the marketing decision-maker. Marketing data flow from the environment to the MIS. The data is processed and converted into marketing information flow, which goes to the marketer for decision-making.

7. Needs cooperation of departments and executives:

Close cooperation and understanding among functional departments, executives and specialists (computer expert programmer and system analyst) are essential for purposeful collection and utilization of the market information. Information collection is important but its actual use in the decision-making process is more important. For this, cooperation of departments and executives is essential.

8. Common data flows:

This concept supports numerous basic views of system analysis such as avoiding duplication, combining similar functions, and simplifying operations. The expansion of common data flow is a cost-effectively and logical concept.

9. Long-term planning:

MIS should always develop as long-term planning because it involves logical planning to get the success of an organization. While developing MIS, the analyst should keep future-oriented analysis and the needs of the company in mind.

10. Relevant connection of sub-system planning:

The MIS development should be decomposing into its related sub-systems. These sub-systems must be meaningful with proper planning.

11. Central database:

it contains data in tabular form. The database is responsible for operations like insertion, deletion, updating of records. This database covers information related to inventory, personnel, vendors, customers, etc. the data stored in the database.

Key elements of Organizational Behaviour: -

There are basically 4 elements that are studied under the term "Organisational Behaviour". These are People, Structure, Technology, and Environment. The elements are discussed below:

People:

People refer to different employees working in organizations. These peoples work either individually or in groups and make up the whole working structure of the organization.

These are very important factors and as there is no alternative available in place of its employees for the companies. Employees help in achieving the objectives of the organization.

They need to manage and treated properly. Managers are required to properly study and understand the nature of their different employees. It will help in developing better employee and employer relations. Productivity will eventually improve by properly understanding this element.

Structure:

The structure is related to the roles and relationships of different individuals working in an organization. It is important that the roles and responsibilities of each individual working in an organization should be defined clearly.

It avoids any confusion and leads to better efficiency of peoples working there. It enables the proper division of the whole work and allocating the right work to the right person.

Employees, when getting work as per their skill, achieve better efficiency and help in the attainment of goals in a better way. Therefore, the structure has an important role in developing the proper employer and employee relation network.

Technology:

Technology is the one with the help of which employees are able to perform their tasks effectively. In its absences, it is difficult for employees to work with bare hands. Technology makes the task and work of people easy.

It includes different machines, methods, tools, and resources. The requirement of technology depends upon the nature of work to be done and the scale of operations.

Technology has an important role in improving work quality and reducing the cost of production. However, the usage of technology puts certain restrictions on the freedom of people working. It requires different terms and conditions to be followed.

Environment:

The environment is a crucial part of organizational behavior. There are two types of environment within which organizations exist that is the internal environment and the external environment.

An organization can't exist alone and is a part of a large system containing numerous elements like society, family, government, and other organizations.

Internal environment refers to an organization's culture, structure, and resources. Whereas the external environment includes various political, social, economic, cultural, and technological factors. All these factors have different influences on the working of the organization and need to be studied properly.

Types of IS: -

1. Decision Support System
2. MIS
3. Expert System
4. Executive Support System
5. Transaction Processing System
6. Office Automation System

Decision Support System: -

- A Decision Support System is an interactive information system that provides information, models, and data manipulation tools to help in making the decision in a semi-structured and unstructured situation.

- Decision Support System comprises tools and techniques to help in gathering relevant information and analyze the options and alternatives, the end-user is more involved in creating DSS than an MIS.
- Example: Financial planning systems, Bank loan management systems.

MIS:-

- Management Information System is designed to take relatively raw data available through a Transaction Processing System and convert them into a summarized and aggregated form for the manager, usually in a report format. It reports tending to be used by middle management and operational supervisors.
- Many different types of reports are produced in MIS. Some of the reports are a summary report, on-demand report, ad-hoc reports, and an exception report.
- Example: Sales management systems, Human resource management system.

Expert System:-

- Experts systems include expertise in order to aid managers in diagnosing problems or in problem-solving. These systems are based on the principles of artificial intelligence research.
- Experts Systems is a knowledge-based information system. It uses its knowledge about a specific area to act as an expert consultant to users.
- Knowledgebase and software modules are the components of an expert system. These modules perform inference on the knowledge and offer answers to a user's question

Executive Support System:-

- Executive support systems are similar to a DSS but are primarily used by executive leaders and owners to optimize decision-making.
- An expert system helps enterprise leaders find answers to non-routine questions so they can make choices that improve the company's outlook and performance. Unlike a DSS, an executive support system provides better telecommunication functionality and bigger computing functionality.
- Graphics software is integrated within an ESS to display data about tax regulations, new competitive startups, internal compliance issues, and other relevant executive information. This allows leaders to track internal performance, monitor the competition, and pinpoint growth opportunities.

Transaction Processing System:-

- A transaction encompasses all of the purchases and sales of products and services, along with any daily business transactions or activities required to operate a company.
- Quantities and the types of transactions performed vary, depending on the industry and size/scope of the company. Examples of typical transactions include billing clients, bank deposits, [new hire data](#), [inventory counts](#), or a record of client-customer relationship management data.
- By utilizing a TPS, organizations can have a high level of reliability and accuracy in their user/customer data while minimizing the potential for human error.

Office Automation Systems:-

- An office automation system is a network of various tools, technologies, and people required to conduct clerical and managerial tasks.

- An office automation system assists in enhancing communication among different departments so everyone can collaborate to complete a task.
- Typical examples of functions performed by an OAS include printing documents, mailing paperwork, mailing, maintaining a company calendar, and producing reports.

System Approach:-

The system approach is based on the generalization that all things are interrelated and interdependent with one another. A system is made up of related and dependent elements that form a unique system. A system is simply an assemblage of things to form a single unit.

The systems approach to management is a concept which views a company as an interconnected purposive system that consists of several business sections. The entire system can be broken into three parts namely - input, process, and output.

- Input involves the raw materials, funds, technology, etc.
- The process refers to activities related to management, technology, operations, etc.
- Output are the products, results, etc.
- The response or feedback in a system focuses on the information and data which is utilized for executing certain operations. These inputs aid in correcting the errors found in the processes.

It is a management approach that enables the leadership to see the company as a unified part of a major section of the larger outside the corporate environment. Even a small activity in a section of a company has a substantial effect on other sections of the company. Such a system may be biological, physical or social, and may enable the management to efficiently determine the long-term goals of the company. The systems approach states that, for realizing the operations of an entity, it is essential to see the entity as a whole system.

Elements of a System:-

A system is made of different subsystems: internal and external. These subsystems are interconnected and influence each other and the system as a whole. Each of the subsystems interacts with the adjacent subsystem and they work in synergy for the betterment of the entire system. The limits within which the internal subsystems function, are determined by the system boundary. The external subsystems, on the other hand, are those which lie outside the boundary limits but still influence the system.

For example: In a supermarket, the various subsystems are the marketing and advertising, sales, admin, and finance department. These are the internal subsystems that lie within the boundary. The external subsystem here is the buyers or the customers who visit the store. Only when all these subsystems work together, the system is said to function effectively.

System approach as planning, Organizing, and Controlling in MIS

System approach in planning:-

Planning is an essential feature of management. Planning involves deciding what needs to be done, who needs to do it, when to do it, and how to do it in advance. Two phases are part of the preparation process:

- Developing the strategy.
- Formulating the steps which are necessary to accomplish the plan, timing, and expense.

System Approach in Organizing:-

Organizing is important for managers because it leads to successful group action. It also helps to keep people working together. The following points are shows about the System Approach in Organizing -

The good structure of the organization is outlined in the policies and procedures.

- Informal organizing.
- The individual as a device
- The method of organizational contact.
- The power chain.
- The functional method.
- The system for the management process.

System Approach in Controlling

Controlling is necessary because the outcome of the desire needs to be achieved. The most popular approach consists of a three-step procedure—

- Setting a performance standard requires the quality of performance we need. Quantitative or qualitative may be these parameters.
- Performance assessment against this standard is important to assess performance against standards once a standard has been developed.
- Deviation Control-we understand that the first comparison of the norm with real results is made to calculate the deviation.

Features of Systems Approach:-

- A system consists of elements that interact. It is a set of interrelated and interdependent components organized in a way that generates a cohesive whole.
- In their inter-relationships, rather than in isolation from each other, the different subsystems should be examined.
- There is a boundary in an organizational structure that defines which parts are internal and which are external.

- In a vacuum, there is no device. It receives data, materials, and energy as inputs from other systems. Inside a system, these inputs undergo a phase of transformation and exit the system as an output to other systems.
- As it is sensitive to its environment, an organization is a dynamic structure. In his climate, he is vulnerable to change.

In the systems approach, attention is paid towards the overall effectiveness of the system rather than the effectiveness of the sub-systems. The interdependence of the sub-systems is taken into account. The idea of systems can be applied at an organizational level. In Applying system concepts, organizations are taken into account and not only the objectives and performances of different departments (sub-systems).

The systems approach is considered both general and specialized systems. The general systems approach to management is mainly concerned with formal organizations and the concepts are relating to techniques of sociology, psychology, and philosophy. The specific management system includes the analysis of organizational structure, information, planning and control mechanism, and job design, etc.

Advantages and Disadvantages of implementing MIS: -

Modern businesses have been leveraging management information systems (MIS) to manage, order, organize and manipulate the gigabytes and masses of information generated for various purposes. MIS helps businesses optimize business processes, address the information needs of employees and various stakeholders, and make informed strategic decisions. However, budget allocation and monitoring issues can affect the efficacy of MIS. It has its advantages and disadvantages depending on organizational deployment and usage.

ADVANTAGES

An MIS provides the following advantages:

1. It Facilitates planning: MIS improves the quality of plans by providing relevant information for sound decision-making. Due to the increase in the size and complexity of organizations, managers have lost personal contact with the scene of operations.
2. In minimizing information overload: MIS changes the larger amount of data into the summarized form and thereby avoiding the confusion which may arise when managers are flooded with detailed facts.
3. MIS Encourages Decentralization: Decentralization of authority is possible when there is a system for monitoring operations at lower levels. MIS is successfully used for measuring performance and making necessary changes in the organizational plans and procedures.

4. It brings Co-ordination: MIS facilitates integration of specialized activities by keeping each department aware of the problem and requirements of other departments. It connects all decision centers in the organization.

5. It makes control easier: MIS serves as a link between managerial planning and control. It improves the ability of management to evaluate and improve performance. The used computers have increased the data processing and storage capabilities and reduced the cost.

6. MIS assembles, processes, stores, Retrieves, evaluates and disseminates the information.

DISADVANTAGES:

1. Highly sensitive requires constant monitoring.
2. Budgeting of MIS is extremely difficult.
3. Quality of outputs is governed by the quality of inputs.
4. Lack of flexibility to update itself.
5. Effectiveness decreases due to frequent changes in top management
6. As MIS is online connected so hacking is also done by 3rd party people. In some cases, some sensitive data is stolen like the credit card details of customers.
7. If the type of data gathered by the company is not beneficial then the result of information is useless and a wastage of time and resources.