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**<u>UNIT-I</u>: Introduction to MIS:** Definition of MIS, Role and Impact of MIS, MIS: Support to the management, As tool for Management Process, Basic model of organization, Modifications to the basic model, organization as a system, MIS: organization, Strategic management of business.

**Introduction to MIS:** In today's competitive world of business and information systems, Management Information systems have strategic purpose in business management. The role of MIS is now not limited to business operations management. The new role of MIS is to support business manage in strategic analysis, strategy formulation, and strategy implementation to achieve short-term and long-term business goals.

Computer, network, communication, internet and web technologies together have radically changed the business management process and have an impact on the role of the manager.



**Definition:** The **MIS is defined** as <u>an integrated system of man and machine</u> for providing the <u>information to support</u> the operations, the <u>management</u> and the <u>decision-making</u> function in the <u>organisation</u>.

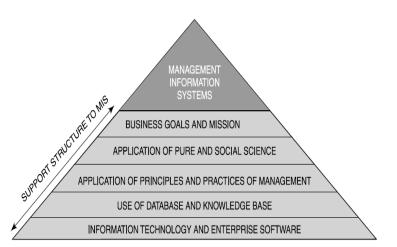
The **MIS** is defined as a system based on the database of the organisation evolved for the purpose of providing information to the people in the organisation.

"Management Information System (MIS) is an integrated man/machine system for providing information to hold up the operations, management and decision making functions in an organization."
- G.B. Davis

Though there are a number of definitions, all of them converge on one single point, i.e., the MIS

is a system to support the decisionmaking function in the organisation. The difference lies in defining the elements of the MIS.

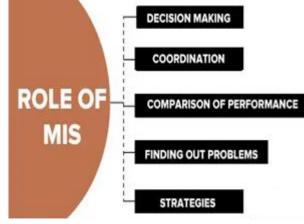
The concept of MIS: The concept MIS is a blend of principles, theories and practices of the Management, Information and System giving rise to single product known as Management Information System (MIS). The conceptual view of the MIS is shown as a pyramid in Figure.



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# Management Information Systems. (MIS) – U1

- **\*** Role of the Management Information System (MIS):
  - MIS is an organized integration of hardware and software technologies, data, processes, and human elements. It is a software system that focuses on the management of information technology to provide efficient and effective strategic decision making.
  - A management information system (MIS) plays an important role in business organizations.
  - > There are **many roles of MIS** and some of the important MIS role are discussed below:
    - Decision making
    - Coordination among the department
    - Finding out Problems
    - Comparison of Business Performance
    - Strategies for an Organization
  - Decision making: Management Information System (MIS) plays a significant role in the decision-making process of any organization. In any organization, a decision is made on the basis of relevant information which can be retrieved from the MIS.



- Coordination among the department : Management Information System satisfy multiple need of an organization across the different functional department.
- Finding out Problems: As we know that MIS provides relevant information about every aspect of activities. Hence, if any mistake is made by the management then MIS, information will help in finding out the solution to that problem.
- Comparison of Business Performance ; MIS store all past data and information in its Database. That why the management information system is very useful to compare business organization performance.
- Strategies for an Organization: Today each business is running in a competitive market. An MIS supports the organization to evolve appropriate strategies for the business to assent in a competitive environment.

# Impact of the Management Information System (MIS):

- Since the MIS plays a very important role in the organisation, it creates an impact on the organisation's functions, performance and productivity.
- The impact of MIS on the functions is in its management. With a good MIS support, the management of marketing, finance, production and personnel becomes more efficient. The tracking and monitoring of the functional targets becomes easy.
- The manager's attention is brought to a situation which is exceptional in nature, inducing him to take an action or a decision in the matter. A disciplined information reporting system creates a structured database and a knowledge base for all the people in the organisation. The information is available in such a form that it can be used straight away or by blending and analysis, saving the manager's valuable time.
- The MIS creates another impact in the organisation which relates to the understanding of the business itself. The MIS begins with the definition of a data entity and its attributes. It uses a dictionary of data, entity and attributes, respectively, designed for information generation in the organisation.
- The MIS calls for a systemisation of the business operations for an effective system design. This leads to streamlining of the operations which complicates the system design. It improves

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the administration of the business by bringing a discipline in its operations.

- Since the goals and objectives of the MIS are the products of business goals and objectives, it helps indirectly to pull the entire organisation in one direction towards the corporate goals and objectives.
- The impact is on the managerial ability to perform. It improves the decision-making ability considerably.
- Since the MIS works on the basic systems such as transaction processing and databases, the labor of the clerical work is transferred to the computerised system, relieving the human mind for better work.

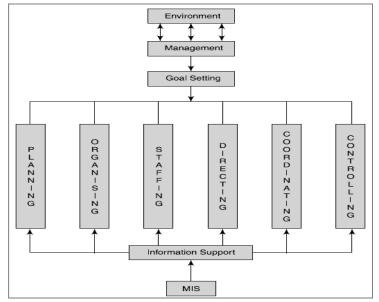
#### **MIS:** A <u>Support</u> to the management and As <u>tool for Management</u> Process:

- The management process is executed through a variety of decisions taken at each step of planning, organising, staffing, directing, coordinating and control. The MIS aids decision-making. If the management is able to spell out the decisions required to be taken, the MIS can be designed suitably. The decisions required to be taken by the management in these steps are tabulated:
- Functions of Management : # Planning # Organize # Staffing # Direct # Coordinate # Continue/control (feedback)

Steps in management	Decision
Planning	A selection from various alternatives—strategies, resources, methods, etc.
Organisation	A selection of a combination out of several combinations of the goals, people, re- sources, method, and authority.
Staffing	Providing a proper manpower complement.
Directing	Choosing a method from the various methods of directing the efforts in the organi- sation.
Coordinating	Choice of the tools and the techniques for coordinating the efforts for optimum results.
Controlling	A selection of the exceptional conditions and providing the decision guidance to deal with them.

> MIS: A Support and tool to the management in decision making:

- The objective of the MIS is to provide information for a decision support in the process of management. It should help in such a way that the business goals are achieved in the most efficient manner.
  - Since the decision-making is not restricted to a particular level, the MIS is used as a **tool** to support all the levels of the management in conducting the business operations.
  - Unless the MIS becomes a management aid, it is not useful to the organization, the process of management with MIS is illustrated in the Figure.



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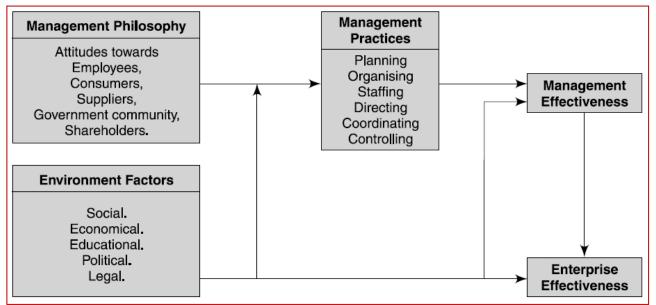
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- Management Information Systems. (MIS) U1
- Basic model of organization: (OR) Negandhi Estafen <u>BasicModel</u> for Analysis of Management/ Org. Effectiveness:
- 'Negandhi Estafen' provides a good model for enterprise effectiveness in achieving the goals and objectives.
- > The effectiveness is dependent on the management philosophy and the environment factors.
- The environment factors provide the opportunities to survive and grow with certain constraints.
- The management philosophy sets the guidelines for deciding the management practices of run the enterprise.
- Environment factors are difficult to control, so the management has to change its philosophy towards the various factors in the business, viz., the employees, consumers,



suppliers, government, and the shareholders.

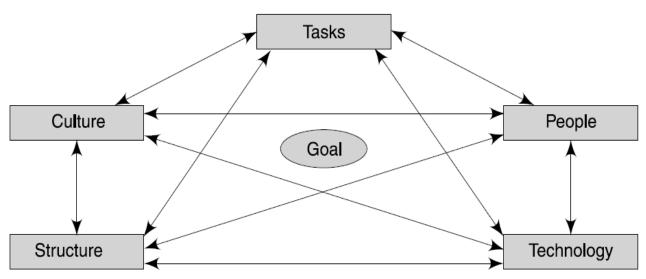
- Basically, it is a change in attitude towards these players. For example, how to look at the employees? If the attitude is to treat them as business partners, you will empower them and cerate a sense of belonging to the organisation.
- ➤ A good MIS designed for such a support is absolutely essential. MIS, therefore, is a tool for effective execution of the management process.



Organizational effectiveness is hard to measure. However, when we understand it well, the signals in the organization can provide us with input on improvements for the organization. Let's conclude this article with three approaches to measuring organizational effectiveness.

### **\*** Modifications to the basic model - Organization as a system:

- ➤ A system is an assembly of elements arranged in a local order to achieve certain objectives.
- The organisation is also a system of people. The individuals in the organisation are selected in terms of number, quality and ability and are placed in hierarchical order to plan and execute the business activities to achieve certain goals and objectives.
- > This is the simplest justification for calling the **organisation a system.**
- > The management theorists, however, have seen organisation in different views and perspectives.
- They have identified more elements in the system besides the people. H. J. Leavitt identified task, technology and structure as additional three elements of the organization system. He says that the task, technology and people structure are dependent on each other and their significance cannot be ignored as elements of the system.
- > The arrangement of task in terms of process and work design is dependent on the people.
- The choice of technology of handling the task is dependent on the people. It can be choose the best technology and well designed tasks, but they have to be suited for the people. Over and above, these are to be arranged improper structure.
- Further, a fourth element has been added as culture. According to Leavitt an organisation should be viewed as a socio-technical system consisting of people, tasks, technology, culture and structure. The modified Leavitt's model is shown in Figure.

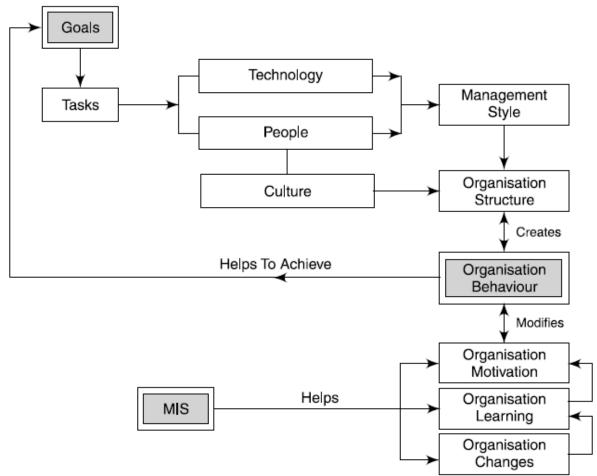


- In view of the nature of the task, the organisation is supposed to carry out, it has to be designed as an open system capable of adjusting itself to the changing environment.
- Hence, the organisation is a socio-technical system whose sub-systems are tasks, people, technology, culture and structure, each having its own input and output satisfying at first its own objectives and eventually the corporate organisation's goals and objectives.
- The system and their goals are not stable. The goals change in response to the changes in the business focus, the environment and in the people in the organisation. A significant change calls for change in the organisation structure.
- ➤ A goal displacement is said to have occurred when the system goals replace the organisation system goals.

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# Management Information Systems. (MIS) – U1

- \* MIS: organization, Strategic management of business:
- Management Information System (MIS) should be designed viewing the organisation and MIS design should give due weightage to the human side of the organization and its culture.
- The task and technology are the physical aspects of the organisation which can be ascertained very easily. But culture and people are very difficult to assess from the design point of view. The structure of the fi ve subsystem should be considered while designing the MIS.
- ➢ MIS design should give reports in line with the organisation structure. This means that the main decision-makers and the power centers must be recognised in the MIS.
- ➢ In a tall hierarchy with a high degree of centralisation, the MIS should give control information to the higher management where decision-making is concentrated.
- ➢ If the organisation works on a standardised system where rules, policies, systems and procedures have been laid down, then these become part of the MIS.
- ➤ If the basic model of the organisation is modified as a product or a project organisation system, then the MIS should focus on the management of product or project where the concerned manager has a composite responsibility of planning and control of the multiple functions.
- The organisation system is an open system and MIS should be so designed that it highlights the critical business, operational, technological and environmental changes to the concerned level in the organisation, so that the action can be taken to correct the situation.



- The principle of the feed forward control should be extensively used as a design feature to provide a prior warning to the decision maker.
- An is moving through the business phases of introduction, growth, maturity and decline, MIS should provide an information support, relevant to that phase of the business cycle.

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# Management Information Systems. (MIS) – U1

MIS plays a very important role in creating organisation behaviour which in turn sets the goals for achievement. Technology and people decide the organisation structure and style of the management. Figure explains the impact and relationship of MIS on the organization behaviour.

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#### **Model Questions: UNIT1**

- 1. Define MIS. Explain the role and Impact of MIS on any organization. (CO 1)
- 2. Explain how MIS support the management in managing its functions. (CO 1)
- 3. 'MIS is as a tool of management process'. Elucidate. (CO 1)
- 4. How effectiveness of Management can be analyzed using the basic model of organization? (CO 1)
- 5. What is Strategic management of business and explain. (CO 1)
- 6. Organization as a system, explain. (CO 1)
- 7. What are the Characteristics of a Management Information System. (CO 1)
- 8. Explain about Components of MIS? (CO 1)
- 9. Describe about Essentiality of Strategic Planning. (CO 1)

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