

USE OF COMPUTERS AND IT IN MANAGEMENT CONTROL

Definition:

MIS can be defined as — A system of obtaining, abstracting, storing and analyzing data to produce effective information or use in planning, controlling and decision making process.

Characteristics of Good Management Information System :

- Information must be clear and conciseness.
- The information should be relevant the business organization. Unnecessary information should be avoided.
- MIS must be simple and easy to understand.
- It must help in the process of decision making and corrective actions.
- MIS should help in solving the complicated problems effectively.

Need of MIS:

1. Internal factors

- **Resources:** This involves the analysis of available resources in the organization like money, material, machines and etc.
- **Planning and control information:** To get required information about budgets, sales forecasts etc.
- **Operational information:** The technique evaluates the overall operations of the business.
- **Production function:** It is required to increase the production, Product quality and to reduce wastages etc.
- **Marketing function:** To obtain required information for plan sales forecast, advertising budget consumer satisfaction, sales value competitors etc.

2. External Information Needs

- **Political and Government:** This involves information about political fiscal policies, government policies, procedures, rules and regulations.
- **Economic condition:** To get required information such as money value, GNP, Inflation rate interest rate etc.
- **Technology:** To get information's about new advanced machinery, new process etc.

MIS resources:

It consists of five major resources.

Computer hardware:

It refers to computer system and other associated equipment including the communication link. Computer, monitors, disk, printers, optical scanners.

Software :

Programs: Operating system programs, word processing programs and procedures.

Data : It is in the form of symbols, digits, alphabets, graph, pictures etc.

People:

Specialists system analysts programmers and computer operator.

IMPLEMENTATION OF MIS

Management information system is implemented through the following steps.

- Input data
- Information's stores and retrieval
- Analysis
- Output
- Decision making
- Actions

Input data:

The necessary data can be collected. The object is the development of better Information system for management.

Information stored and retrieval:

The necessary data can be stored and utilized and when required. The information can be indexed and classified for quick accessibility of the management.

Analysis:

To utilize the data effectively it is necessary to analyze them. To analyze the problem and develop alternatives and select the best one.

Output:

Output is in the form of reports, charts ,tables, graph etc.

Decision making:

The output information is used to decision making process.

Action:

After decision is taken, it is converted in to action.

Applications of MIS:

- To provide long term plans
- To find out new opportunities
- To allocate resources
- To provide planning and control
- To provide sales forecasting
- To help management decision about quality, quantity and market price etc
- To provide government policy and regulation
- To provide effective managerial activities

Important Devices for Information System:

i) Speech Recognition devices

Instead of keyboard input data in to the computer is through speech by normal manner. It can be used several companies for several uses. Clear communication is also possible some disadvantage also in this system. Similar sound words like to ‘ too ‘ and two ‘ are complex problems.

ii) Network

It is one of the most important technologies. Computer is connected by internet and other communications network. The network serves as share processing, software and database. Computer networks enable and uses and work groups to communicate and collaborate electronically and share the use of hardware, software and data resources. The networks have become the primary information technology that supports the business operations of many organizations.

Importance of MIS or Role of MIS:

S. No.	Major Subsystem	Application
1	Marketing	Sales planning, Sales Analysis, Sales forecasting
2	Manufacturing	Production planning, cost control analysis
3	Logistics	Planning and control
4	Finance and Accounting	Cost analysis, planning, income measurement.
5	Top Management	Strategic planning, policy, resource allocation

Management and MIS:

MIS supports management activity. Information system provides information to managers of three levels of responsibilities. MIS helps to guide managers to carry out their planning, organizing, directing, controlling and coordinating the function effectively.

i) Operational control

Operational control provides detailed information and accurate on a daily or weekly basis. A market manager must know of past and present sales record, consumer’s behavior, advertising budget. The MIS must provide him timely and detailed information obtained from daily operations.

ii) Middle management

Middle levels managers such as department’s heads are concerned with the current and future performance. For example information about marketing level problems with customer’s reduction in sales, quality of product are needed by middle managers. They required information from within and outside organization.

iii) Top level-strategic planning

Top management the MIS must provide information to top management for strategic planning and control. They need the following external source of information.

- Economic condition
- Technological condition
- Government policy
- Actions of Competitors Company

They need the following internal sources of information.

- Sales volume
- Financial analysis

- Human resources
- Product quality, customer's satisfaction

MIS should provide information to the managers accurately and correct time.

So MIS should be designed in suitable way depending upon the organization. The top managers receive overall financial analysis and summarized of department performance.

Decision Support System:

Decision support systems which support the process of making decisions. It is also operated by people who are not computer specialists who use the DSS to help them

plan and make decisions. The process of development of decision support system is depended by the end user. DSS helps the managers to solve non-routine problems in the organization.

Role of MIS play at various levels of management:

- Trends in Information Systems
- Expanding roles of IS in business and management
- The expanding participation of end users and managers in Information Systems
- Data Processing: (1950-1960)
- Electronic data processing systems: Transaction processing, record keeping, and traditional accounting applications
- Management Reporting: 1960-1970s
- Management information system: Management reports of pre-specified information to support decision making
- Decision support: 1970s 1980s
- Decision support systems: Interactive ad hoc support of the managerial decision making
- Strategic and End User support: 1980s-1990s
- End user computing systems: Direct computing support for end user productivity and work group collaboration
- Executive information systems: Critical information for top management
- Expert systems: Knowledge based expert advice for end use
- Strategic information system: Strategic products and services for competitive advent
- Electronic Business and Commerce: 1990
- Internetworked E-business and E-commerce systems: Internetworked enterprise and global E-business operations and electronic commerce on the internet, intranets, extranets, and other networks.