Management Information System

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MIS is system to convert data from internal and external sources into information and to communicate that information, in an appropriate form, to managers at all levels in all functions to enable them to make timely and effective decisions for planning, directing and controlling the activities for which they are responsible.

A set of computer based systems and procedures implemented to help managers in their crucial job of decision-making. The actual process will involve the collection, organization, distribution and storage of organization-wide information for managerial analysis and control. Management Information System refers primarily to such organizational information system which are generally large.

The combination of human and computer-based resources that result in the collection, storage, retrieval, communication and use of data for the purpose of efficient management.

These definition emphasizes on -

Organization-wide information, Decision support, Managerial emphasis and Computer based systems.

In our view. MIS involves all these perspectives and in fact, much more the three subcomponents- management, information, and Systems together bring to focus clearly and effectively:

1. Management emphasizing the ultimate use of such information systems for Managerial decision making rather than merely stressing on technology.

2. Information highlighting on processed date rather than raw data and in the context in which it is used by managers and other end user.

3. Systems emphasizing a fair degree of integration.

A system exists because it is designed to achieve one or more objectives. So, a system is a set of components that act as an organic whole, ln the context of programming, a system is an integrated collection of programs and data files that act as a unit. The purpose of the system is normally to process information. The output of the system is information. The input to the System is information provided by the user.

Fayol'e classic definition of management was derived from his own experience - To manage is to forecast and plan, to organize, to command, to co-ordinate and to control. As Drucker says - Management is a practice not a science, lt is not knowledge.

Operation of MIS which means that the information system is viewed as a means of processing data, i.e., the routine facts and figures of the organization, into information which is then used for decision making. It changed the decision behavior which distinguish data from information.

The term information technology (IT) represents the various types of hardware and software used in an information system, including computers and networking equipments. Actually the goal of MIS is to enable

mangers to make better decisions by providing quality information. The processing of data into information and communicating the resulting information to the user is the very essence of MIS. Management Information Systems stressed information-often thought to be a refined form of data.

Information is knowledge and understanding that is usable by the recipient, It reduces uncertainty and has surprise value. Information has no value in itself; its value derives form the cost of producing the information. There is a tendency to assume that more information, earlier or more up to date information, more accurate information etc. is all better information. It may be better information but only if it improves the resulting decisions, otherwise it has no value.

Information systems can markedly alter life in the organization. Some information systems change the organization balance of rights, privileges, obligations, responsibilities, and feelings that has been established over a long period of time. What this means is that managers cannot design new systems or understand existing systems without understanding organizations.

Information systems play a crucial role in the management of any contemporary enterprise such as a small, medium or large organization, a profit making or a social service setup: a public or a private sector undertaking or an Established business house.

So what is the information? One answer to that question is to examine the use of information technology on three levels: (1) data management, (2) information systems, and (3) knowledge bases. Data consists of factual elements (of opinions or comments) that describe some object or event. The physical equipment used in computing is called hardware. The set of instructions that controls the hardware is known as software. Data is a piece of information. Data is the term for collections of facts and figures etc. These basic facts are stored, analyzed, compared, calculated and generally worked on to produce messages in the form required by the user, i.e., the manager, which is then termed information. Database is an organized collection of related information. Data can be thought of as raw numbers of text. Data management system focus on data collection and providing basic reports. Information represents data that has been processed organized, and integrated to provide more insigt. Information systems are designed to help managers analyze data and make decisions. From a decision maker's standpoint the challenge is that you might not know ahead of time which information you need, So it is hard to determine what data need to be collected, knowledge represents a higher level of understanding, including rules, patterns, and decisions. Knowledge based systems are built to automatically analyze data, identify patterns, and recommend decisions. Humans are also capr5le of wisdom, where he put knowledge, experience, and analytical skills to work to create new knowledge and adopt to changing situations. To date no computer system has attained the properties of wisdom ▣

Reference: 1. Management Information System- S Sadagopon, 2. Management Information System - T. Lucy

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