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## MANAGEMENT INFORMATION SYSTEM AND ITS APPLICATIONS IN EDUCATIONAL INSTITUTIONS - AN INTRODUCTION

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### Abstract

The paper attempts to report the findings of a study to evaluate MIS in the educational institutions. Due to growth and developments in information and communication technologies have been impacting upon Educational organizations. The conceptual elements of MIS identified on the basis of theory in management and library and information science. The study explores the application of MIS in academic libraries and other knowledge centre in India. This principles and methods have been utilizing management information systems to improve the competency and efficiency of administrative services. Even though of academic institutions comprehensible equipment with computers and local area networks, there are a large amount of problems and obstacles basically of organizational and methodical character which are necessary to solve for successful MIS introduction.

**Keywords:** Management Information System, Educational Institutions, Academic libraries, MIS, Evaluation, India.

### Introduction

We live in a time of enormous change and working in an Information Age. Managers have to assimilate masses of data, convert that data into information, form conclusions about that information and make decisions leading to the achievement of business objectives. For an organization, information is as important resource as money, machinery and manpower. It is essential for the survival of the enterprise.

Before the widespread use of computers, many organizations found difficulties in gathering, storing, organizing and distributing large amounts of data and information. Developments in computer technology made possible for managers to select the information they require, in the form best suited for their needs and in time they want. This information must be current and in many cases is needed by many people at the same time. So it has to be accurate, concise, timely, complete, well presented and storable. Most firms nowadays depend on IT. But personal computers (PCs) themselves will not improve organizational productivity: this only comes about if they are used efficiently and effectively.

The information system is the mechanism to ensure that information is available to the managers in the form they want it and when they need it. It is designed to support their work through providing relevant information for their decision-making. Computer systems

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can clearly aid organizations in the processing of data into accurate, well presented, up-to-date and cost-effective information. Whether that information is also concise, relevant, timely and complete will depend largely on the capabilities of the people involved in its processing and selection.

### **Definition**

What is Technology?

Generally, Technology is a word for the processes by which human beings fashion tools and machines to increase their control and understanding of the material environment. The term is derived from the Greek words *tekhne*, which refers to an art or craft, and *logia*, meaning an area of study; thus technology means, the study, or the science.

### **What is Information Technology?**

Information technology (IT) and computers can be viewed as tools enabling the rapid capture, manipulation, storage and communication of information. They may help the managers to administrate and control, to make decisions but not to lead. IT is a term that covers the hardware and software used for storing, processing or communicating information. It is through IT that companies can define, gather, store, manipulate, and communicate data to smooth the flow of information.

### **What is management information system?**

The term management information system (MIS) made its first appearance in U.S. navy report on the use of computers to construct a single integrated system to manage all navy resources.

The MIS idea spread rapidly throughout the administrative systems community, encouraged by a spate of subsequent reports and conferences sponsored by the American Management Association. MIS is every system, which provides information for the managerial activities in an organization. For about a decade, from its introduction in 1959 to the end of the 1960s, this very broad definition of MIS spread rapidly and was endorsed by industrial corporations, consultants, academic researchers, management writers, and computer manufacturers.

The phrase “management information system” (MIS) is identical with computer-based systems. Used broadly, it is seen as the system satisfying all the information needs of managers. MIS is the study of providing information to people who make choices about the disposition of valuable resources in a timely, accurate, and complete manner at a minimum of cognitive and economic cost for acquisition, processing, storage, and retrieval. Another definition emphasizes the use to which the information is put, rather than the way it is produced:

“A system to convert data from internal and external sources into information and 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.” (Bee and Bee, 1999). Others,

however, give it more limited scope. They see it as a system collecting and analyzing data and producing reports. Its purpose is to help managers to solve structured problems. But it should also fulfill a number of other purposes:

- It should provide a basis to analyse warning signals that can originate both externally and internally; this is the main function of data base;
- It should automate routine operations thus avoiding human work in the processing tasks;
- It should assist management in making routine decisions;
- It should provide the information necessary to make non-routine decisions;
- It should serve as a strategic weapon to gain competitive advantages.

### **Characteristics of MIS**

In present scenario, MIS play a vital role in library and information science. The characteristics of the MIS are given below.

1. Computerization
2. Common database
3. Batch reporting oriented
4. Oriented to past information
5. Not very sophisticated analytically
6. Semi structured decisions or slightly changing decisions
7. Primarily user internal data flow
8. Inflexibility

### **Goals of MIS**

An institution's MIS should be designed to achieve the following goals:

- Enhance communication among employees.
- Deliver complex material throughout the institution.
- Provide an objective system for recording and aggregating information.
- Reduce expenses related to labor-intensive manual activities.
- Support the organization's strategic goals and direction.

### **Applications of MIS in Educational Institutions**

Modern information communication technologies (ICT) usage for management purposes at Educational Institutions.

It was noticed in West Bengal that there are still a lot of educational institutions have no computer in library and there was very less computers in some colleges and schools. Besides, they have no proper library and also qualified librarian this type of many institutions. Librarians support to students, staff members and other individuals in locating documents or information sources and using it for the purpose of professionally or personally. A librarian works with students assisting them to find out and locate the information. They also teach the students how to access, evaluate and use the appropriate information. An academic librarian performs four main roles: teacher, instructor, program administrator and information officer. To offer proper service, application of library management system is necessary in educational institutions.

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MIS play a significant role of management. They are: Planning, Organizing, Staffing, Directing, Coordinating, Controlling etc.,

Necessary conditions for successful MIS application

According to Wikipedia, Management information system (MIS) is a system that provides information needed to manage organizations effectively. Management information systems are regarded to be a subset of the overall internal controls procedures in a business, which cover the application of people, documents, technologies, and procedures used by management accountants to solve business problems such as costing a product, service or a business-wide strategy.

Smooth MIS application in educational institutions can be implemented with the following conditions:

- Crucial and demanded by the majority of university personnel processes primary inclusion in the plan of university automation which performance is impossible without IT application.
- MIS is not created for one or two managers.
- MIS application responsibility division between administrative personnel, developers and employees.
- Advanced development of administrative and educational problems solution techniques and technologies focused on IT application.
- Necessary resources (material and human) allocation for high-grade pre-project inspection, analysis and technical designing of MIS components.
- Standardizations and documenting of all automation stages.
- University structure reorganization and processes re-engineering management.
- Firm belief about transition to modern information technologies inevitability creation in university collective.
- Parameters system creation, which will allow defining an extent of goals achievement in the field of MIS application.
- Economic and other kinds of MIS effects on university's activities estimation.

In consideration of the technical aspects the most suitable conception for MIS creation is rather popular during last years ideas of integration connected with WEB-technologies use. The concept of WEB-technologies or WEB-services allows uniting various technologies in the uniform information environment and is deprived negative sides of other integration technologies.

### **Conclusion**

The modern ICT have become the main force determining the pattern of the 21st century and giving great opportunities in our life. Computers and MISs are one of the important organizational resources for the academic institutions. A vast number of institutions could not operate properly and successfully without the implementation of MISs in the new changing environment. MISs has great contribution to increased competitiveness and effectiveness of librarians in decision-making process and solving of different problems

which appeared in managing educational institution libraries. Hence, Librarians must be trained as the academic library is the integral part of the educational process.

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