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## MANAGEMENT INFORMATION SYSTEM: OPPORTUNITIES AND CHALLENGES

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### Abstract:

*Today, the increasing growth of Information Technology and its significant impact on increasing productivity of public and private organisations worldwide, as well as the global movement to use different types of information systems, namely management information systems (MIS), have caused India to follow suit. Information of the people and departments needed to operate organisations effectively and efficiently is provided by the management information system. It involves five main resources: personnel, physical equipment, digital software, data, and processes. A study of the challenges encountered throughout the design process, creation, operation, and evolution of management information systems in a nation may be quite useful in the decision-making processes of both public and private sector companies. This is a conceptual paper that tries to several elements of management information system, beginning with their history, workings, opportunities, and challenges in business. As a result, MIS administrators adopt a holistic approach to MIS and priorities issues affecting the entire firm over those affecting primarily the MIS department.*

**Keywords:** Information, Challenges, Management information systems, MIS Role, IT.

### Introduction

The concept of "management information systems" (MIS) refers to a methodical and scientific approach to assembling internal and external data into integrated and effective business data. MIS is not uncommon in large organizations. Its only distinguishing aspect is its computerization. Before computers, MIS approaches were used to give managers the information they needed to plan and govern their business operations. The computer has introduced new elements to decision-making, such as speed, precision, and increased data quantities, enabling more worthwhile decisions to be considered. A management information system is primarily based on information, which is a necessary component of any management information system. The most important resource in the management information system is information. We are all aware that Data is critical to our survival. We want to know our surroundings to make life more enjoyable and to feel like we are part of the social structure, and we need knowledge to do so. Information is a crucial input for reaching our objectives, such as learning to support one another and becoming a contributing member of society

According to Ein-Dor and Segev (1978), when an IS used to enhance management by the organization's directors, it transforms into a management information system (MIS). This system has the capacity to improve management performance. Most organisations are under a lot of pressure to improve the effectiveness and efficiency of their operational, tactical, and strategic processes as an outcome of the emergence of a globally competitive environment. A collection of components known as an information system (IS) may improve information for decision-making and boost competitiveness. Therefore, a number of organisations have decided to use these components in their associations (Spalding, 1998). As a result, organisations decide to use IS to improve their efficacy and efficiency. Business administration now includes a significant portion of information systems. Systems are increasingly crucial to the success of the business's strategic initiatives, corporate cooperation, and e-business and e-commerce activities (Hevner et al., 2004). Additionally, one of the critical management responsibilities is to

provide the knowledge necessary for critical decisions that have a direct impact on how well an organisation performs (Murthy, 2006). MIS is a group of personnel, equipment, protocols, and software used to carry out various business functions at different organisational levels. Operational, middle, and top management are the three fundamental layers of this system, where information is conveyed from the bottom to the top (Tripathi, 2011).

All organisations are under a significant obligation to enhance their operational, tactical, and strategic processes as a consequence of the development of a competitive global environment. A collection of parts known as an information system (IS) can increase competitiveness and offer better information for making decisions. As a consequence, a lot of businesses decide to adopt IS to raise their companies' efficiency and effectiveness. On the other hand, the implementation process may be hampered by a lack of understanding of the numerous and diverse issues that surround it. In addition, the issue of a lack of critical success elements appears to be a significant challenge to the introduction of management information systems (MIS).

## Literature Review

**Satish Kumar Gupta, Kanhaiya Lal Ambashtha & Rajeev Kumar (2022)**, "Challenges and opportunities of management information systems in business" It can be concluded that a management information system is an important part of the business which provides timely and accurate information to the business managers and helps them in taking appropriate decisions. With the change in technology management, new software is now used in information systems which lead to a fast and timely supply of information. But information systems have to face the challenges like implementation costs, employees' resistance to change, server crash problems and learning of new system problems and up-to-date information, etc. For the success of an information system, it is suggested that proper planning is very important in any information system because without planning nothing possible.

**Basel J. A. Ali , Rosni Bakar & Wan Ahmad Wan Omar (2016)**, "The critical success factors of accounting information system (AIS) and its impact on organisational performance of Jordanian commercial banks" the present study is an attempt to investigate the effect of Accounting Information System (AIS) success factors on organizational performance. Four types of AIS success factors namely service quality; information quality, data quality and system quality have been used in this study as the determinants performance. Data were collected with a structured questionnaire survey from 273 respondents in Jordanian banking sector. The findings revealed that service quality, information quality and system quality are the significant AIS success factors for increasing organizational performance. It can be inferred from this study that organizations involved in banking sectors can increase their performance by adopting and implementing AIS success factors, and while the adopting of AIS not fully utilize do not help firms with a highly organization performance.

**Lahar Mishra, Ratna Kendhe & Janhavi Bhalerao (2015)**, "Review on Management Information Systems (MIS) and its Role in Decision Making" this paper focuses on understanding the concept of MIS, the need for MIS, the advantages of MIS in an organization, the MIS model, decisions and the decision making system and majorly the role of MIS in decision making. It talks about MIS in brief considering the concept of MIS, the MIS model that is used by organizations, how MIS is beneficial, why is there a need of MIS in an organization. It then gives an overview of decisions and the decision making system which is necessary to understand the decision making process. Finally, the major focus of this paper is the role of MIS in decision making of an organization. How decisions are made in an organization using MIS, what challenges are faced by the organization in this process and a few recommendations to curb these challenges. It provides a brief understanding of why MIS improves decision making.

**Kulbir Singh and Baljeet kaur (2012)** "Role of management information system in business: opportunities and challenges" it provides information which is needed to manage organizations efficiently and effectively. It involves three primary resources: people, technology, and information. Management information systems are distinct from other information systems because they are used to analyze operational activities in the organization. Academically, the term is commonly refer to the group of information management methods tied to the automation or support of human decision making, e.g. decision, expert systems, and executive information systems. Organizations still need different types of MIS serving various organizational levels, functions, and business processes. These needs create both opportunities and challenges. In this paper an attempt has been made to study the role of MIS and opportunity and challenges in business.

## Need for management information system

Today, information systems and information technology are critical to the success of any business, and every manager should be familiar with information systems (ISs) and information technology (IT). Furthermore, the information system is increasingly seen as a crucial functional area, just like marketing, finance, operations, and human resources are in a business organization. Information technologies, such as interest-based information systems, are also becoming more significant in organisations. Prior to the development of computer technology, organisations had problems controlling all of their information. The managers may now quickly acquire, integrate, store, and manage information in the format they need based on their requirements and timeliness because of advances in computer technology. Many people use information at the same time. The data must be up-to-date, precise, concise, timely, comprehensive, well-presented, and storable.

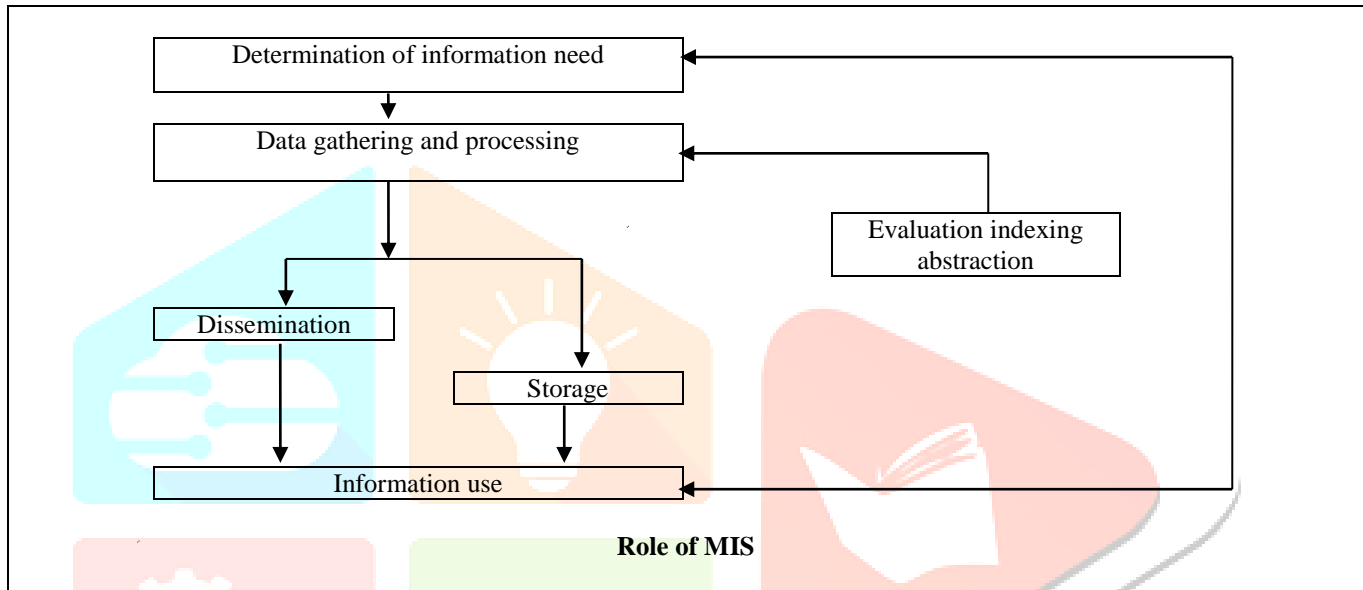
Management can get information when and where they need it, according to information systems. It offers relevant data for making decisions. At every level of the organisation, management information is a critical input for decision-making, planning, organising, executing, monitoring, and controlling. In order to fulfil their organisational goals, managers must ingest vast amounts of data, transform that data into information, draw conclusions from that knowledge, and take appropriate action. Information is just as valuable to a company as cash, equipment, and labour are. It is necessary for the business to survive. In

order to ensure effective and efficient decision-making, management information systems are crucial to managing information and making it simple for managers to gather, combine, and allocate information.

### Role of MIS

The role of the MIS begins with the identification of specific information needs by various people in the organisation and concludes with the gathering and processing of information. To make better decisions or manage successfully, it must assess the importance of the information in relation to the needs and send it to the appropriate person at the appropriate time in the appropriate format. As a result, MIS meets the information needs of all organisational levels. Information networking to help management decision-making is known as MIS. Identifying the information needs at various management levels and developing a system to adequately address those needs is the function of MIS in the corporate world.

In today's world, MIS and organisational strategies are becoming increasingly intertwined when one component (such as technology, software, databases, or telecommunications) changes, the other components such as organisational strategies must also adapt.



The decision-making of the management fulfils two key purposes. It first aids in the decision-making of the managers based on the prepared facts. Second, when the decision-making and decision-making processes are fixed and only the input data vary, it is an appropriate method for assisting with various managerial decisions. To identify the issues being encountered, the managers use MIS as a tool. MIS aids managers in identifying issues and determining solutions (Shafii, 2005; Mcleoo, 1998).

### Opportunities for implementation of Management Information System

- **Data sharing and Economy of scale:** MIS enables data interchange between authorised users, giving those individuals access to more data. The same piece of information could be accessible to several people. It is simple to integrate new data with existing data and to immediately identify merged discoveries. The concept of economies of scale refers to the idea that the sum of the individual costs for a number of integrated operations may be less than the total cost of those processes. With the help of MIS, all business functions may be merged, and data can be quickly transferred across departments.
- **Enforcement of standards and balancing conflicting requirements:** The organisation is helped by MIS in enforcing data standards. It is therefore critical to ensure that company-wide standards for data names, usages, and formats are properly maintained. Personal disputes must be overcome for management responsibilities to operate properly. MIS enables the creation of a unified data collection that is sent to all departments in accordance with their requirements. As a consequence, one department no longer needs to rely on another for essential and vital information. They can obtain the same information in their department. There will be no more interpersonal conflicts across departments.
- **Integrity and Redundancy control:** A management information system has the benefit of combining data from several locations and departments while still maintaining separate records. Managers now have easy access to all of the data within the organization. Data in file-oriented systems is now combined into a single database, eliminating the need for several copies of the same data. Data repetition and control redundancy will decrease because there is no longer a need to repeatedly review data.
- **Consistency and Security of data:** MIS helps increase data accuracy and consistency. Data with identical alphabets and ambiguity cannot be entered incorrectly since MIS recognises these issues while the data is being entered into the system. Security in the context of MIS refers to limiting unauthorised users' access to data. Because MIS is in charge of operational data, it may create access control measures to ensure that only authorised users can access it.

- **Responsiveness and Flexibility:** The ability to reply to a request for data from various areas in a much simpler and more flexible manner is made possible by the fact that the data that was previously held in multiple separate files by numerous distinct user areas is now kept in a single database.

### Challenges for implementation of MIS

- The development of a new computerized-based information system is a problem for the organisation because of the cost factor, and it also creates problems because there is a need to keep the information system up-to-date as time passes. Employees should also be up-to-date about all changes on their companies' websites. Managers and customers do not have sufficient knowledge, so they cannot solve problems related to decision-making and achieve objectives.
- Managers and customers do not have sufficient knowledge, so they face problems related to decision making and achieving their objectives. A lack of knowledge made users unable to make decisions, so they needed guides for proper guidance. The managers and users are unaware of the designer team's understanding of the system's operation.
- Managers face problems with software and information technology. The current working environment is unfamiliar to the designers and the researchers in the field. Machine operators have a low willingness to adopt and recognise their own. The information collected for the management information system has some errors in it as well.

### Conclusion

The management information system is a crucial part of every business that wants to have real information about their enterprise. A business enterprise needs much useful information regarding their production, supply, marketing, transportation, tax charges, and much more. So, an enterprise needs a system that helps it preserve and procure its crucial information. Although MIS (management information systems) are critical for any business, they also present some challenges. We can conclude that MIS should be made according to the requirements and adaptability of its users. The employees of the enterprise should be given proper training for the system they will be using in the near future. The researchers should modify or reinvent the system according to the needs and present perspectives of the public, business enterprises, and any other users of the system. The system should be so developed that machine operators willfully work on it.

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