

## Decision Making in an Organization for Formal concept Analysis of Management Information System and Business Analysis



**Alahari Harsha Kannaiah Naidu**

B.Tech 4th Year, ECE,  
Sreenidhi Institute of Science & Technology,  
Hyderabad-501301.



**Aleti Manisha**

B.Tech 4th Year, ECE,  
Sreenidhi Institute of Science & Technology,  
Hyderabad-501301.

### ABSTRACT:

Management Information System (MIS) provides information for the managerial activities in an organization. The main purpose of this research is, MIS provides accurate and timely information necessary to facilitate the decision-making process and enable the organizations planning, control, and operational functions to be carried out effectively. Management Information System (MIS) is basically concerned with processing data into information and is then communicated to the various Departments in an organization for appropriate decision-making. MIS is a subset of the overall planning and control activities covering the application of humans, technologies, and procedures of the organization. . 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.

### KEYWORDS:

Management Information Systems (MIS), Information Technology, Decision Making and MIS, Business Analysis.

### 1.INTRODUCTION:

MIS provides several benefits to the business organization: the means of effective and efficient coordination between Departments; quick and reliable referencing; access to relevant data and documents; use of less labor; improvement in organizational and departmental techniques; management of day-to-day activities (as accounts, stock control, payroll, etc.); day-to-day assistance in a Department and closer contact with the rest of the world. MIS provides a valuable time-saving benefit to the workforce. Employees do not have to collect data manually for filing and analysis. Instead, that information can be entered quickly and easily into a computer program.

As the amount of raw data grows too large for employees to analyze, business analysts can build programs to access the data and information in response to queries by management. With faster access to needed information, managers can make better decisions about procedures, future directions, and developments by competitors, and make them more quickly. We are living in a time of great 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.

### 2.Main Discussion—Role of MIS in Improving decision making:

Preliminarily, it is inherent to state that decision making is an integral part of any business (The maniac, n.d.). This is because a majority of operations in an organization revolve around decisions made by the management and other key stakeholders in the organization. And in order for decision to be made adequately, it is vital for there to be a good information system since decisions are based on information available. In relations to this, Jahangir (2005) states that based on the significant role that information plays in choice of decision to be made, organizations must ensure that they have a good management information system. As a notable general observation, a good MIS ensures good decision making just in the same way bad MIS propel the making of bad decisions. UStudy.in (2010) supports the above observation by saying that “The quality of managerial decision-making depends directly on the quality of available information” and the managers should therefore cultivate an environment that encourages the growth and viable sprouting of quality information.

Essentially, before deciding on which MIS strategy to use, it is vital to ensure that the choice made is fully compatible with your current system. This will not only help in avoiding erratic choices but it will also save you the time and money that would have been otherwise wasted by that person (Rhodes, 2010; Jahangir, 2005). In addition to that, it is noteworthy for the MIS strategy or tool used to be in line with the decisions that are to be made. In other words, there should be a connecting point between the decision to be made and the MIS to be used by individual or corporate business owners (Jarboe, 2005).

As a key consideration, Management Information Systems is a highly complex and delicate arena that calls for a lot of caution to be taken by its managers. It is for this reason that it is recommendable for organizations to ensure that they carefully select the individuals who are placed to control the systems. The more cautious and professional a person is, the better the person gets an assurance of positive prospects of in MIS with regards to decision making and other related areas of business (Lingham, 2006). Having clearly delineated that, what then are some of the scholarly arguments, facts, opinions and observations made by various macroeconomists with regards to the roles of Management Information System in improving decision making?

To begin with, MIS provides a fitting platform for good decision making (Kumar, 2006). Essentially, without the established systems of getting information in MIS, it would be extremely difficult for organizations to make their decisions. This is because they would be forced to making baseless information due to the lack of confirmed information. Moreover, MIS normally lays a firm foundation for the establishment of concrete decisions through its systematic tools, timely information and adequate managerial policies and regulations.

Furthermore, Management information Systems' statutes regarding businesses act as guidelines to business owners when making critical decisions about their businesses. As a result, managers and key decision makers are bridled from overstepping their boundaries or exceeding their business mandate. This is very crucial as it helps in keeping businesses checked and balanced thus ensuring that only proven decisions are considered while the untried ones are thwarted. More importantly, the capacity to guide decision-making facilitates progress and improvement of the operations in a company (Lingham, 2006; Chambers, 1964, p.15-20).

In addition, most MIS programs are endowed with the capacity to give real-time updates of the occurrences in company or system. By real-time, scholars simply refer to immediate updates of occurrences in a system. These immediate updates help managers to take necessary actions as soon as is deemed appropriate—especially during the discovery and management of crises. This augments progress and improvement in company operations through timely decision making. This is important for companies in the modern-day generation where any slight lapse in decision making can lead to very huge losses (Allen, et al., 2010). Still, Management information systems are very elemental improving company securities (Davenport & Short, 1990). For example, in many instances, most management information systems can be easily programmed by the owner to conduct certain actions at certain times. In effect, managers can program the system to perform certain routine checks which can help in improving efficiency of a company through easy discovery of bugs or problems. Furthermore, the programmability of most MIS saves a lot of priceless time and resources for owners.

In other words, through programmability, business managers can program the systems to automatically discover certain deficiencies and even solve them. Consequently, the manager or system operator can use the time and resources he/she would have used in monitoring or fixing problems for other key uses. By routinely programming a Management Information System, the business is bound to make positive progress since time and resources can be easily channeled into rightful business paths (Allen, et al., 2010). As a fundamental point, a good number of MIS used today can perform multiple tasks all at the same time.

This potential to multitask increases efficiency in a company since several business operations can be conducted simultaneously. With special regards to decision making, the capacity to multitask ensures that decisions are made speedily when compared to those systems which can only handle one task at a time. Closely related to the above point, Jahangir (2005) says that some MIS allow multiple users to access the same content all at the same time without any discrepancies. This potentiality boosts accountability from the business operators since multiple people can access a particular content and verify whether they are consistent or whether they are not. As a matter of fact, most organizations tend to suffer due to poor accountability from those charged with the mandate to manage certain details.

This safeguard action of some MIS is what macroeconomists refer to as the “gate-keeping” role of MIS in decision making and overall well-being of the organization. On another level, a good number of MIS play the role of record keeping or institutionalization of data bases that can easily keep confidential or invaluable information. In essence, decision making often calls for the reading of certain past work (Jahangir, 2005). This is where record-keeping comes in handy. On the flipside, databases normally function towards providing future places of information retrieval. Principally, the record keeping and data-basing tool of MIS definitely ensures that decisions are made viably while businesses run smoothly. In contributing to the arguments regarding role of MIS in improving decision making,

Rhodes (2010) also adds that:

Management information systems give managers quick access to information. This can include interaction with other decision support systems, information inquiries, cross-referencing of external information and potential data mining techniques. These systems can also compare strategic goals with practical decisions, giving managers a sense of how their decisions fit organizational strategy. In summary, Rhodes simply believes that management information systems are a huge contributing factor in the getting of viable information from organizations. Sadly, very few organizations have been able to ardently take up on this role and even lead other organization in the society in doing the same. It is for this reason that there has been a limited improvement in decision making based on the tailoring of viable information. A candid way of solving this challenge is given later in this paper under recommendations.

Over the recent years, there has also been an increased usage of automated Management Information Systems. To a large extent, these automated systems have hugely revolutionized the decision-making process in a positive way (UStudy, 2010). For instance, by using automated MIS, companies no longer have to rely on 24-hour services from workers. Instead, the machines are able to be programmed to do things on our behalf (Jarboe, 2005). Of course this offers a huge plus in decision-making since managers are relieved of making some decisions—especially the technical ones which can be best interpreted and solved by the automated system. As a cautionary point, organizations should not entirely rely on automated systems—especially when the decisions to be made have adverse implications to the organization.

This is based on the alleged observation that auto systems may sometimes be faulty and thus require frequent periodic monitoring (Demetrius, 1996). So in order not to fall a victim of over-relying on automated systems, Jahangir (2005) advises managers and company owners to ensure that they find a balance in utilizing the human element in operating while assigning some duties to the automate system. By blending the duties of these two extremes, Jahangir states that, this will ensure that both ends of the organization continue to actualize together while maximizing the potential for each side through check and balances of operations done by the management. Again, MIS is renowned for vesting its operations on systematic methods of operations. Crucially, this ensures that decisions made in a business are orderly and well-planned—which, in effect, encourages objectivity during decision making. As a result, businesses and the decision making process are improved through its systematic and orderly formula of operating (Jawaddekar, 2006, p.363-370).

Jahangir (2005) adds that the principles, strategies and modes of operation in MIS can be intellectually used by macroeconomists to sieve between good and bad decisions. Once the sieving is done, good decisions are encouraged while the bad ones are sidelined and greatly discouraged. Effectually, this ensures positivity in terms of decisions made by organizations—which, essentially, links up directly to improving the decision making process. A good number of scholars amass that MIS tends to be a more practical business tool with testable methods of operations. Its proposition and argumentations, therefore, provide tangible information that can be used to make substantiated decisions (Jawaddekar, 2006, p.350-355). This is in great contrast with a majority of business tools, existing today, which are mostly hypothetical. In effect, decisions founded on MIS tend to be accurate and viable when compared to its counterparts—which, in turn, encourage improvement of business decisions. Finally, Management Information systems play the crucial role of providing a wide range of streamlined options from which decision-makers are able to make their preferred choices Vittal & Shivraj (2008, p.359-361). Vitality, this ensures that whatever choices are made by decision makers, the outcome, more often than not, becomes positive. This, as a matter of fact, is the reason why many decision makers tend to prefer using MIS tools when making tough business choices. And as renowned concept, having good decision choices guarantees viable decisions in our businesses (Vittal & Shivraj, 2008, p.360-365; Jawaddekar, 2006, p.356-359).



### 3. Business Analysis in Organizations:

Traditionally business analysis was undertaken by Business Analysts who most often were located in the Information Technology (IT) or finance departments - but their skills are now in demand across the board with business analyst jobs forecast to grow by more than 11% by 2016-17 and business analysis skills featuring more and more prominently in job selection criteria. With the rise of digital and the Internet of Things, the business world has, unlike ever before, access to vast datasets of every aspect of their business. The interplay between analytics, business and decision making continues to intensify at all levels of the business. A 2014 skills and salary survey conducted by IAPA of 496 respondents resulted in the following insights into business analytics in Australia:

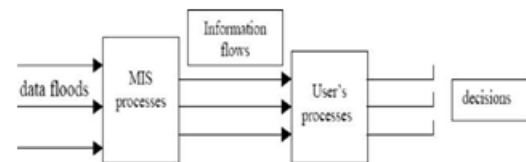
- A combination of technical (operational analytics and value creation) and soft skills (persuasion and influence and change management) are important, with 43% of respondents indicating keeping skills up to date was the biggest challenge and a clear preference for non-degree education
  - Social media and social network data analysts earn 50% more than their counterparts and marketing is the most common owner of the analytics function in an organization
  - Approximately a third of respondents work in professional services and the other two thirds for industry where they provide services to internal customers, e.g. financial institutions, telecommunications, public sector
- Business analytics operates across a range of domains across the organization.

### 4. MIS AND DECISION-MAKING:

Management Information System (MIS) is basically concerned with the process of collecting, processing, storing and transmitting relevant information to support the management operations in any organizations. Thus, the success of decision-making, which is the heart of administrative process, is highly dependent partly on available information, and partly on the functions that are the components of the process. For example, if managerial objectives are absent or unclear, probably due to inadequate information, there is no basis for a search. Without information obtained through a search, there are no alternatives to compare, and without a comparison of alternatives the choice of a particular course of action is unlikely

to yield the desired result. According to Alabi (1997) the search could be through:

- Undirected viewing—this involves a general exposure to information where.



**Figure 1. MIS and decision-making process**

There are so many definitions of MIS. For the purpose of this research, MIS can be defined as a system providing management with accurate and timely information necessary to facilitate the decision-making process and enable the organizations planning, control, and operational functions to be carried out effectively. So in this way MISs increase competitiveness of the firm by reducing cost and improving processing speed. Almost all business organizations normally have some kind of information system for management. Accounting rules, stock control and market monitoring systems are the most traditional and common examples. The power of technology has transformed the role of information in business firm. Now information has become recognized as the lifeblood of an organization (Figure 2). Without information, the modern company is dead. (Papows, 1998) The search could be that the viewer has no specific purpose in mind.

- Conditioned viewing—the directed exposure does not involve active search to a more or less clearly identified area or type of information.
- Informal search—this is a relatively limited and unstructured effort to obtain specific information for a specific purpose. The information wanted is actively sought.
- Formal search—this is a deliberate effort, usually following a pre established plan, procedure or methodology to secure specific information relating to a specific issue

Adebayo (2007) stressed the need for MIS in decision making as it provides information that is needed for better decision making on the issues affecting the organization regarding human and material resources. MIS may be viewed as a mean for transformation of data, which are used as information in decision-making processes. Figure 1 shows this understanding about information as data processed for a definite purpose. (Lucey, 1997).

## 5.CONCLUSION:

MIS differ from regular information systems because the primary objectives of these systems are to analyze other systems dealing with the operational activities in the organization. In this way, MIS is a subset of the overall planning and control activities covering the application of humans, technologies, and procedures of the organization. Within the field of scientific management, MIS is most of ten tailored to the automation or support of human decision making. Management information systems (MIS) make it possible for organizations to get the right information to the right people at the right time by enhancing the interaction between the organization's people, the data collected in its various IT systems, and the procedures it uses. It brings together the raw data collected by the various business areas of the organization, which, while useful for specific functions such as accounting, does not provide, by itself, information that can be used to make decisions. As organizations grow, MIS allows information to move between functional areas and departments instantly, reducing the need for face-to-face communications among employees, thus increasing the responsiveness of the organization.

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