Volume 7, Issue 2, February 2019 International Journal of Advance Research in Computer Science and Management Studies

Research Article / Survey Paper / Case Study Available online at: www.ijarcsms.com

Management Information Systems to Aid Decision Making in an

Organization

Divyang Modi¹ Department of Computer Engineering Institute of Technology, Nirma University Ahmedabad, Gujarat – India Prit Modi² Department of Computer Engineering Institute of Technology, Nirma University Ahmedabad, Gujarat – India

Prakrut Chauhan³ Department of Computer Engineering Institute of Technology, Nirma University Ahmedabad, Gujarat – India

Abstract: Management Information System (MIS) gives data for various administrative exercises in any organization or institution. The primary motivation behind this research is, MIS gives precise and opportune data important to encourage the basic leadership process and empower the associations planning, control, and operational capacities to be completed efficiently. Management Information System (MIS) is fundamentally concerned with processing obtained data into information, which is then imparted to the different Departments in an association for fitting decision-making. MIS is a subset of the general planning and control exercises covering the utilization of people, innovations, and methods of the respective organizations. The information system is the system to guarantee that data is accessible to the managers whenever they require it, in whichever form.

Keywords: Management Information Systems (MIS), Decision-Making, Information Technologies, MIS for organizations.

I. INTRODUCTION

MIS gives quite a few advantages to the business associations: the channel for powerful and productive coordination between Departments; brisk and solid referencing; access to important information and reports; utilization of less labour; enhancement in authoritative and departmental systems and techniques; management of everyday exercises (like records, stock control, finances, and so forth); everyday help with a Department and closer contact with the rest of the world.

MIS gives an important and time-saving advantage to the workforce. Employees don't need to gather information physically to document and for examination purposes. That data can be entered rapidly and effectively into a PC program. As the amount of crude information becomes unreasonably huge for representatives to break down, business analysts can construct projects to get to the information and data in response to the questions by the executives. With quicker access to required data, supervisors can settle on better choices about methods, future bearings, and advancements by contenders, and make them all the more rapidly.

We are living in a period of extraordinary change and working in an Information Age. Directors and Managers need to acclimatize huge masses of data, convert that data into information, frame decisions considering that information, and settle on choices prompting the accomplishment of the set business goals. For an association, data is as essential an asset as is cash, machinery or labour. It is basic for the survival of the organization in this competitive world.

II. INFORMATION TECHNOLOGIES

Management Information System (M.I.S.) is essentially worried about processing and converting data into information. Data gathering includes the utilization of Information Technology (IT) containing: PCs and media communications systems (E-Mail, Voice Mail, Internet, phone, etc.). Computers are critical for increasingly quantitative, than subjective, data accumulation, stockpiling and recovery; Special highlights are speed, precision, and capacity to store a large amount of data. Media communications act as the channel for single direction or two-way communication and for the transmission of messages. A mix of IT is utilized: phone, PC, processor, printer, and so forth. A great deal of time as well as money are spared and the security of information and messages is guaranteed. A management information system (MIS) empowers organizations to give answers to managers looking for learning. MIS does this by joining crude data about the association's tasks with information accumulated from representatives in expert systems that mirror the organization's strategies.

Prior to the across the world utilization of PCs, numerous companies and organizations discovered challenges in collecting, storing, arranging and appropriating large volumes of data and information. Advancements in PC innovations made it possible for the administrators to choose the information they need, in the shape most appropriate for their necessities and in time they need. This information must be present, and more often than not, is required by numerous individuals concurrently. So it must be precise, compact, timely, complete, attractive and storable. Most firms these days rely upon IT. Be that as it may, PCs themselves won't enhance the hierarchical profitability: this possibly happens on the off chance that they are utilized productively and viably. Setting up the progressed mechanical systems expected to gather and sort data and representative information can be exorbitant except if senior management, particularly the CFO, controls the buying of the essential systems required by various practical zones from the very beginning.

The information system is the instrument to guarantee that information is accessible to the directors and managers in the form they need it and when they require it. It is intended to help their work through giving important information to their basic leadership. PC systems can unmistakably help associations in the preparing of data into precise, attractive, up-to-date and costeffective information. Whether or not that information is additionally compact, pertinent, convenient and complete will depend generally on the capacities of the people associated with its handling and selection. The term management information system (MIS) showed up in U.S. naval force report in the utilization of PCs to develop a solitary incorporated system to deal with all the naval force assets. The MIS thought spread quickly all through the authoritative systems network, energized by a spate of consequent reports and gatherings supported by the American Management Association. MIS was an "information" system since it educated managers, not on the grounds that it was brimming with information in technical sense, although the distinction before long got obscured as the word of MIS spread.

MIS is each system, which imparts information to the administrative exercises in an association. For about 10 years, from its acquaintance in 1959 till the finish of the 1960s, this extremely wide meaning of MIS spread quickly and was supported by modern organizations, specialists, scholarly analysts, management journalists, and computer makers. The expression "management information system"(MIS) is synonymous with PC based systems. Utilized comprehensively, it is viewed as the system fulfilling all the information needs of managers. MIS is the investigation of giving information to individuals who settle on decisions about the demeanor of profitable assets in an opportune, exact, and complete way with least psychological and financial expense for securing, preparing, stockpiling, and recovery. Another definition accentuates the utilization to which the information is put, as opposed to the manner in which it is delivered: "A system to transform data from internal and external sources into information and impart that information in a suitable form, to managers at all dimensions and in all capacities to empower them to make convenient and powerful choices for planning, coordinating and controlling the exercises for which they are responsible." (Bee and Bee, 1999) Others, nonetheless, give it an increasingly constrained scope. They consider it to be a system gathering and dissecting data and delivering reports. Its motivation is to assist supervisors with solving organized issues. In any case, it ought to likewise satisfy various different purposes:

- It should provide a basis for analysis of internally or externally generated warning signals.
- It should obscure the redundant human work associated with processing by automating day-to-day operations.
- It should help the management in formulating the routine decisions, as well as impart relevant information for making non-routine decisions.
- It should serve as a strategic weapon to have an edge over the competitors.

III. DECISION MAKING AND MIS

Management Information System (MIS) is essentially concerned with the way toward gathering, preparing, storing and transmitting significant information to help the management tasks in any associations or organizations. In this manner, the success of the decision making process, which is the core of any managerial process, is exceptionally reliant partly on accessible information, and partly on the capacities that are the parts of the procedure. For instance, if administrative goals are missing or indistinct, most likely because of lacking information, there is no reason for an inquiry. Without information acquired through a search, there are no choices to think about, and without an examination of choices, the decision of a specific game-plan is probably not going to yield the ideal outcome. As per Alabi (1997) the inquiry could be through:

- Undirected Viewing
- Conditioned Viewing
- Informal Search
- Formal Search

Adebayo (2007) focused on the requirement for MIS in decision making as it gives information that is expected to better the decision making on the issues influencing the association or the organization in regards to human and material assets. MIS might be seen as a means for change of data, which are then utilized as information in decision-making processes. Figure 1 depicts this very understanding.



Fig. 1 MIS and Decision Making

There are such a large number of definitions of MIS. Taking into consideration this research, MIS can be characterized as a system furnishing management with precise and opportune information important to encourage the decision-making process and empower the associations planning, control, and operational capacities to be completed viably. Hence MIS's increment the intensity of the firm by decreasing expense and enhancing processing speeds. Practically all business associations regularly have some sort of information system for management. Accounting rules, stock control and market observing systems are the most customary and common models. The power of innovation has changed the job of information in business firms. Presently, information has turned out to be perceived as the very soul of an organization (Figure 2). Without information, the present day organization is dead (Papows, 1998).



Fig. 2 Information - the soul of an organization

In spite of the gigantic interest in IT lately, exhibiting the impacts of such venture on hierarchical execution of an organization has proven to be very troublesome. MIS vary from ordinary information systems in light of the fact that the essential targets of these systems are to dissect different systems managing the operational exercises in the association. Along these lines, MIS is a subset of the general planning and control exercises covering the use of people, innovations, and systems of the organization. Within the field of scientific management, MIS is most often tailored to the automation or support of human decision making (O'Brien, 1999). Figure 3 demonstrates the conceptual disintegration of the diverse management systems in any association or organization (Sørensen et al., 2009).

Well-constructed and well managed MIS can equip the authorities with requisite knowledge it needs to increase the profitability of the company and reduce the operational costs. By quick access to critical procedural and operational information, MIS can increase the overall efficiency of the company.



Fig. 3 The birth of the concept of MIS

IV. CONCLUSION

MIS differs from standard information systems in light of the fact that the essential goals of these systems are to break down different systems managing the operational exercises in any organization. Along these lines, MIS is a subset of the general planning and control exercises covering the utilization of people, technological advances, and the systems of the organization. Inside the field of scientific management, MIS is most often tailored to the automation or support of human decision making. Management information systems (MIS) makes it feasible for the companies to get the correct information to the correct individuals at the ideal time by upgrading the collaboration between the association's kin, the data gathered in its different IT systems, and the techniques it employs. It unites the crude data gathered by the different business zones of the association, which, while valuable for explicit capacities, for example, accounting, does not give, without anyone else's input, information that can be utilized to make decisions. As organizations develop, MIS enables information to move between utilitarian regions and divisions in a split second, lessening the requirement for one-on-one interactions among workers, hence expanding the responsiveness of the company.

References

- 1. Papows, J., 1998. Enterprise.com: Market Leadership in Information Age. London: Nicholas Brealey Publishing.
- 2. Adebayo FA (2007). Management Information System for Managers. AdoEkiti: Green Line Publishers.
- 3. Lucey, T., 1997. Management Information Systems. London.
- 4. Alabi AT (1997). Management Information System (MIS) and Effective Control in Nigerian Universities: A Case Study of University of Ilorin. Paper presented for Post-graduate seminar on Productivity, Effectiveness and Efficiency in Education, University of Ilorin.
- 5. Bee, R., Bee, F., 1999. Managing Information and Statistic. Trowbridge: Cromwell Press
- 6. O'Brien, J. A. Management Information Systems: Managing Information Technology in the Internetworked Enterprise. Boston: Irwin McGraw-Hill 1999.
- 7. Sørensen, C., Bildsøe, P., Fountas, S., Pesonen, Pedersen, S., Basso, B., Nash, E. Integration of Farm Management Information Systems to support realtime management decisions and compliance of management standards. Center for research & technology.