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GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES IMPACT OF MANAGEMENT INFORMATION SYSTEM IN DECISION MAKING

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ABSTRACT

The role of Management Information Systems is described and analyzed in light of its capability for decision making. Decision making process and its impact on top level management in a business organization is explained with an emphasis on automated decision making. This paper focuses on decision making information system MIS plays a vital role in not only collecting and managing information, but also representing it in various formats useful for the management to make important organizational decisions.MIS provides faster access to the required information which helps the organization to make effective and timely decisions regarding every aspect such as investments, employments, products, etc depending upon the organization.

Decision making basically refers to choosing a certain line of action from among several alternatives Decision making is a major metric to determine the organizations success or failure. The effectiveness of the organization depends upon the quality of decisions that informs its operation. This paper focuses on understanding the need, benefits, types of MIS, the MIS model, decision making system and majorly the role of MIS in decision making of the organization.

Key words: Benefits of MIS, Decision making, MIS, MIS concept, Need for MIS.

I. INTRODUCTION

Management information systems (MIS) is an organized, diverse and automated information system that is concerned with the process of gathering, storing and transferring relevant information to support the management operations in an organization. Currently, organizations are in the race for enhancing their capability in order to survive in the competitions of the new century global market. Therefore, organizations are attempting to advance their agility level by improving the decision making process to be more efficient and highly effective to meet the successive fluctuations of the market. The data is distributed among various departments in an organization. The processing of data takes place in various forms such as graphs, diagrams, charts, reports to generate accurate and relevant information for the management.

This paper focuses on decision making information system. Decision making basically refers to choosing a certain line of action from among several alternatives. It is integral management that occurs in every level of management and in every function. The effectiveness of the organization depends upon the quality of decisions that informs its operation.

Decision making is a major metric to determine the organizations success or failure. This paper focuses on understanding the need, benefits, types of MIS, decision making system and majorly the role of MIS in decision making of the organization.

Quality of information affect on managerial decision-making. There are a lot of measures for the information quality and these measures differ from one researcher to another. To help decision makers to make right decisions, the information should to be accurate or free of error, complete or contain all the details required, in a form that is short enough, presented in the same format, relevant to the purpose for which it is required, available quickly and timely to support information needs.





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Management Information Systems is a system that converts data into information, communicated in an appropriate form to managers at levels of an organization. The information can contribute to effective decision making or planning to be carried out (Patterson, 2005).

Organizations that do not have formal Information sharing practices will fail to leverage their managers' intellectual capital for business innovation and growth (O'Neill & Adya, 2007).

MIS enables the exchange of experiences, which transfers the required information to the management levels to sustain competitive advantage since it affects the decision making to improve the quality of services provided. Barachini (2009).

MIS basically involves the process of collecting, processing, storing, retrieving and communicating the relevant information for the purpose of efficient management operations and for business planning in any organizations. Thus, the success of effective decision-making, is consider as the heart of administrative process, ishighly dependent partly on available information, and partly on the functions that are the components of the process (Nath & Badgujar, 2013).

III. CONCEPT OF MIS

Information is a set of classified and interpreted data used in decision making and it has also been defined as "some tangible or intangible entity which serves to reduce uncertainty about future state or events".

Management information system has a purpose to meet the general information needs of all the managers in an organization or in some subunits of the organization.

The information is provided in the form of reports and outputs of mathematical simulations. There are two types of reports namely, periodic and special report. All managers use the information output as they make decisions to solve the firm's problems. A management information system has also been defined as "an integrated user machine system for providing information to support operations, management and decision making functions in an organization. The system utilizes computers, manual procedures, models for analysis, planning, control and decision making, and a database".

IV. NEED FOR MIS

Organizations found it difficult to manage the information as a whole, before computer technology bloomed. Developments in computer technology made it possible for the managers to easily gather, integrate, store and manage the information in the form they require depending upon their needs and timing. Information is used simultaneously by many people. The information needs to be current, accurate, concise, timely, complete, well presented and storable. For organizational productivity, solely depending on personal computers is not reliable until it is used efficiently and effectively. Also, advanced technological systems for integrating and sorting the data can be costly unless the senior management provisions it to the staff. Thus, information systems came into picture.

Information system is a mechanism that ensures information is available to the managers as per their need and time. It provides relevant information for decision making. Management information is an important input at every level in the organization for decision making, planning, organizing ,implementing, and monitoring and controlling.

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

282





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the survival of the enterprise. Hence management information system plays a major role in managing information and making it easy for the managers to collect, integrate and assign the information and ensures effective and efficient decision making.

Management Information System gives an organization and its management a new dimension in managing its knowledge and help in carrying out and maximizing the management's initiatives in harmonizing the appropriate strategies in the short and long planning MIS is indispensible in the area of decision-making as it can monitor by itself the instability in a system, verify a course of action and take action to keep the system in control.

V. BENEFITS OF MIS

MIS makes a major difference for the business organizations. It provides several benefits such as :

- 1. effective and efficient coordination between Departments
- 2. quick and reliable referencing
- 3. access to relevant data and documents
- 4. use of less labor
- 5. improvement in organizational and departmental techniques
- 6. management of day-to-day activities
- 7. day-to-day assistance in a Department and closer contact with the rest of the world.
- 8. provides a valuable time-saving benefit to the workforce

For an organization the most important factoris to efficient and effective work in minimum amount of time. MIS supports this aspect of gaining profit and ensures that 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 data is growing, it is becoming difficult for business analysts to analyze the data, hence MIS provides a platform for building programs to access the data in response to the 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.

VI. CONCLUSION

Management Information Systems is of paramount importance to reach effective decisions in an organization. The literatures presented in this study explained the significant role of MIS in the decision-making process enhancing in an organization. MIS is deemed to be an integrated user-machine system that provides information to support operations, management and decision-making functions at various levels of an organization. Organizations are aware that MIS is aspecial-purpose system useful for management objectives. The study has highlighted that MIS should be accessible in supplying appropriate and high quality of information from its generation to its users. To MIS, to be vital and effective, a carefully conceived, designed and executed database should exist to communicate the adaptive decisions.

The hardware and software components of management information systems are reviewed along with the type of organization functions for which applications software is designed to support. Three business strategies that drive the development and deployment of management information systems — cost-reduction, quality-improvement, and revenue-growth — will be introduced and serve as the foundation for the discussion of the types of management information systems that can be implemented to support the strategies. Opportunities and challenges presented by the use of the Internet as an integral part of management information systems are also examined along with an analysis of staffing challenges for information technology (IT) departments.

Finally, it is believed that to enhance MIS, any organization that use MIS to enhance its decision making processes should develop effective communication channels between management and information professionals. Good communications then facilitates the task of developing relevant and appropriate information systems. It is no simple checklist to automatically produce the perfect MIS. Organization thus would be aware that what is required is an





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awareness and understanding of key principles and functions in which the design, implementation and operation of MIS are the results of rational decisions rather than haphazard development without considering the real organizational needs.

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