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The Role of Computers in Management Information System

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Abstract: *In virtually every business, a computer is an essential tool for running day-to-day operations, enhancing productivity, and communicating with customers, suppliers, and the public. Managers use computers for a variety of reasons, including keeping their teams on track, budgeting and planning projects, monitoring inventory, and preparing documents, proposals, and presentations. Managers need to understand not only the basic functions of the corporate software tools used in the office but also the Internet and other external computing tools that can improve the way manage their departments.*

Keywords: Role of Computers

I. INTRODUCTION

Computers have had a significant impact on how information is processed within organizations. Throughout history, information has been processed manually, but with modern management where decision-making is so fast, and the era of corporate governance is not possible without the help of information systemsmanaged by computers. Computers are crucial components of a company's management information system or MIS. In previous decades, most businesses had a few computers that served as information hubs. Today, a variety of computing devices funnel critical data from various sources, such as sales, timecards, and inventory. The MIS software collects data and generates actionable information to help the business.

II. WHAT IS MIS ?

A management information system is a system consisting of people, machines, procedures, databases, and data models, as its elements. The system gathers data from the internal and external sources of an organization. Basically, MIS is an acronym of three words, viz., Management, information, and system. to fully understand the term MIS, let us try to understand these three words.

Management

Management is the art of getting things done through and with the people in formally organised groups. The function of management is Planning, Organising, Staffing, Directing, and Controlling.

Information

Information is data that is processed and pressed in a form that assists decision-making. it may contain an element of surprise, reduce uncertainty, or provoke a manager to initiate an action. Data usually take the form of historical records. In contrast to information, raw data may not be able to surprise us may not be organised and may not add anything to our knowledge.

DATA--------→PROCESSING------ →INFORMATION

System

The term system is the most loosely held term in management literature because of its use in different contexts. However, a system may be defined as a set of elements that are joined together to achieve a common objective. The elements are interrelated and interdependent. The set of elements for a system may be understood as input, process, and

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output. A system has one are multiple inputs; these inputs are processed through a transformation process to convert these inputs into outputs. The three elements of a system are

INPUT------→PROCESS --------→OUTPUT

III. NEED AND LEVELS OF INFORMATION HANDLING.

Technically, computerized MIS cannot decide, but it can process data and follow instructions to the best of its ability. For example, the computer can be properly instructed to compare inventory levels with pre-programmed decision rules on re-order level and quantity, and generate purchase requisitions, purchase inquiries, and purchase orders, among other things. This could be compared to automatic control of purchase documents.

The modern role of management information systems (MIS) in managerial decision-making in a complex organization has been compared to that of a military commander. Commanders frequently employ a strategy based on direct observation of partial situations. Managers who track operations through periodic communications with remote sales depots, plant divisions, and other offices use this style. For example, a travel agency's central marketing organization must keep track of all of its booking offices spread across India in order to make marketing-related decisions.

IV. LEVELS OF INFORMATION HANDLING

DSS – Top Level
MIS – Middle Management
TPS – Shop Floor
OAS – Clerical Level

The levels of information handling in a modern complex organization can be classified as decision support system, management information system, transaction processing system, and office (and other) automation system.

At the pinnacle, top-level managers may require a decision-support system (DSS). This would be an interactive system that allows the user-manager easy access to decision models and data to support semi-structured and non-structured decision-making tasks. DSS inputs can include some processed data, mostly management-generated data, and some unique models. The DSS would include queries and responses, operations research models, and simulation. DSS would produce special reports to answer difficult questions and responses to management inquiries.

V. ROLE OF COMPUTER IN MANAGEMENT INFORMATION SYSTEM

Information systems are in use from an ancient time. With the development of computing technology, computers became an important part of today's modern information systems which satisfies speed, dependability etc.

Following are the roles of computers in Information Systems\Data Collection

- Data Verification
- Data Processing
- Data Storing
- Information Supply
- Information Presentation
- Data Updates
- Security of Data
- Information Sharing
- System Automation

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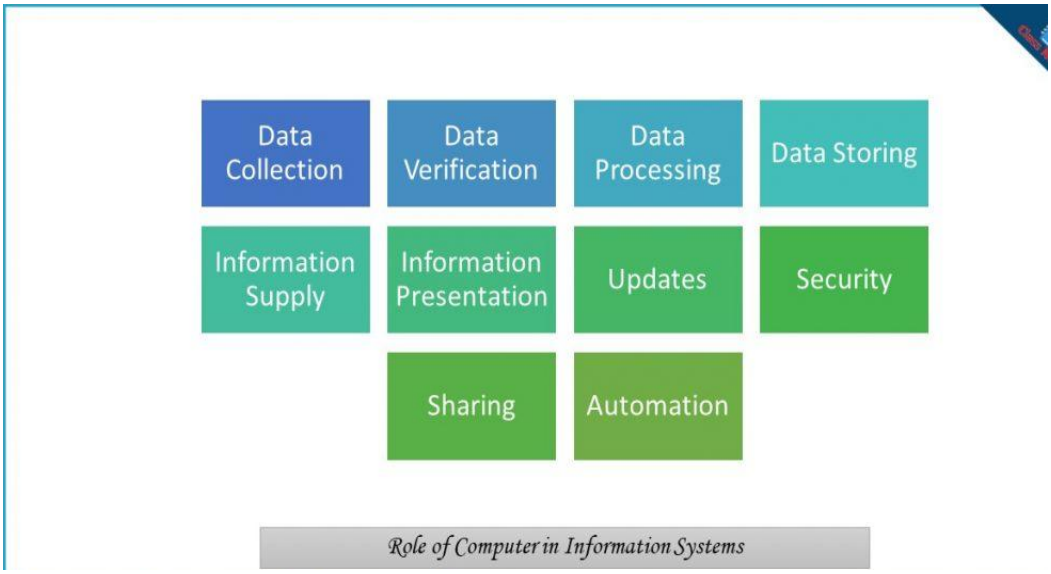

Role of Computer in Information Systems

- **Data Collection -** Information systems collect, store and supply data. This is done by using computers. Data can be collected from computer networks or can be inserted by human resources. Software resources can also automate the collection of data (searching and finding best results) which is the most important part.
- **Data Verification -** Data in information systems can be verified using computers. Thus data can be corrected or rejected before going to the processing level which final helps in getting accurate information.
- **Data Processing -** Data in information systems can be processed (sorted, filtered, joined etc.) by computer to finally generate information that is desired, useful, meaningful to human resources or other information systems. Various program takes part in data processing.
- **Data Storing -** Data is everything in information systems. Today's computers can store enormous amount of data. Information can derived from these stored at any time using data processing.

Information Supply - Computer can supply or provide information to human or another information system which can schedule or manually operated.

Information Presentation - Computers can not only provide a long table filled with data in an informative way, but it can also represent data in graphs, charts, images, comparative way that is much more meaningful than a long tabular data sheet.

Data Updates - With time, stored data can turn into obsolete data as might be the data is changing in real time. So it is required to update data as it changes and computers can do this really fast and with ease. Thus all the information provided by information systems will be up-to-date and more precise.

Security of Data - Information in information systems can be general to highly confidential. Though computer systems are not 100% secured but at least they can confirm security at a very high level with comparatively less cost. Computers can secure data with various technologies like access control, data encryption etc.

Information Sharing - Computers enable the sharing of information to the next level. Using various network resources, computers enables a system to share information automatically to an application, human etc.

System Automation - Computers in information systems can turn the system to automate some of the task that generally requires one or more human resources. Such as, generating report , sending reports in emails etc. Advanced information systems can also use artificial intelligence to automate more by tracking user behaviourand interaction with the system.

VI. CONCLUSION

Based on the findings and recommendations, it has been found out that the management role computer information plays in system significant because the end result is encouraging though it compared to the human brain.This is despite the fact that the use of computers in data processing also has some disadvantages such as high cost of acquiring and

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reduction in manpower. Hence smaller organizations which have the intention to get their business computerized have been advised to go ahead though some recommendations have been made to guide them in the computerization. Such recommendations are:-

Carrying out of feasibility study report before delving into it. This will enable tem find out if they actually need computers or not, which areas it is needed and how much it will cost them to acquire one.

They incorporate the workers into the plan so as to dispel their negative reactions towards the new change.

To adopt the parallel change- over technique where the manual method (old method) will run hand in hand with the computer method. This is to enable with the computer method. This is to enable them compare the two methods before choosing the best.

REFERENCES

[1]. Uma Gupta ,Management Information Systems – A Managerial Perspective,
[2]. Golgoti publication, 2004 2. Post and Anderson ,
[3]. Jawadekar, MIS Text and Cases, TMH.
[4]. Mary Sumner —Enterprise Resource Planning‖ Pearson.
[5]. Ellen Monk —Enterprise Resource Planning‖ Cengage.
[6]. Goyal —Enterprise Resource Planning‖ TMH.
[7]. Management Information Systems, TMH , 2008
[8]. www.MCClimited.com
[9]. www.sap.com