

concept was further modified when a distinction was made between data and information. Information is a product of an analysis of data. This concept is similar to a raw material and the finished product. However, data can be analyzed in a number of ways, producing different shades and specifications of the information as a product. It was, therefore, demanded that the system concept be an individual- oriented, as each individual may have a different orientation towards the information.

This concept was further modified, that the system should present information in such a form and format that it creates an impact on its user, provoking a decision or an investigation. It was later realized then even though such an impact was a welcome modification, some sort of selective approach was necessary in analysis and reporting. Hence, the concept of exception reporting was included in MIS. The norm for an exception was necessary to evolve in the organization. The concept remained valid till and to the extent that the norm for an exception remained true and effective. Since the environment turns competitive and is ever changing, fixation of the norm for an exception becomes a futile exercise at least for the people in the higher echelons of the organization. The concept was then evolved that the system should be capable of handling a need based exception reporting. This need maybe either of an individual or a group of people. This called for keeping all data together in such a form that it can be accessed by anybody and can be processed to suit his needs. The concept is that the data is one but it can be viewed by different individuals in different ways.

Over a period of time, when these conceptual developments were taking place, the concept of end user computing using multiple databases emerged. This concept brought a

the needy destinations. The system is expected to fulfill the information needs of an individual, a group of individuals, the management functionaries, the managers and the top management. MIS satisfies the diverse needs through a variety of systems such as Query Systems, Analysis Systems, Modeling Systems and Decision Support Systems, MIS helps in Strategic Planning, Management Control, Operational Control and Transaction Processing.

MIS helps the clerical personnel in the transaction processing and answers their queries on the data pertaining to the transaction, the status of a particular record and references on a variety of documents. MIS helps the junior management personnel by providing the operational data for planning, scheduling and control, and helps them further in decision making at the operations level to correct an out of control situation.

MIS helps the middle management in short term planning, target setting and controlling the business functions. It is supported by the use of the management tools of planning and control. MIS helps the top management in goal setting, strategic planning and evolving the business plans and their implementation. MIS plays the role of information generation, communication, problem identification and helps in the process of decision making. MIS, therefore, plays a vital role in the management, administration and operations of an organization.

1.7 Impact of MIS on an organization

Since the MIS plays a very important role in the organization, it creates an impact on the organization's functions, performance and productivity. With good support, the

resources are provided and the human & organizational barriers to progress are removed.

- An appropriate information processing technology required to meet the data processing and analysis needs of the users of the MIS is selected.
- MIS is oriented, defined and designed in terms of the user's requirements and its operational viability is ensured.
- MIS is kept under continuous surveillance, so that its open system design is modified according to the changing information needs.
- MIS focuses on the results and goals, and highlights the factors and reasons for non-achievement.
- MIS is not allowed to end up into an information generation mill avoiding the noise in the information and the communication system.
- MIS recognizes that a manager is a human being and therefore, the systems must consider all the human behavioral factors in the process of the management.
- MIS recognizes that the different information needs for different objectives must be met with. The globalization of information in isolation from the different objectives leads to too much information and its non-use.
- MIS is easy to operate and, therefore, the design of the MIS has such features which make up a user-friendly design.
- MIS recognizes that the information needs become obsolete and new needs emerge. MIS design, therefore, has a basic potential capability to quickly meet new needs of information.

- A belief that the computerized MIS can solve all the management problems of planning and control of the business and lack of administrative discipline in following the standardized systems and procedures, faulty coding and deviating from the system specifications result in incomplete and incorrect information.

1.11 Advantages of MIS

The following are some of the benefits that can be attained from MIS.

Organizations are able to highlight their strengths and weaknesses due to the presence of revenue reports, employees' performance records etc. The identification of these aspects can help the company improve their business processes and operations. MIS gives an overall picture of the company and acts as a communication and planning tool.

The availability of customer data and feedback in the MIS can help the company to align their business processes according to the needs of the customers. The effective management of customer data can help the company to perform direct marketing and promotion activities. MIS can help an organization to gain a competitive advantage. Competitive advantage is a firm's ability to do something better, faster, cheaper, or uniquely, when compared with rival firms in the market.

1.12 MIS in Public Sector Organizations

Public administration in Government and PSUs has changed considerably over the past few years as did the use of MIS. A 'stage of growth' frame work is developed and used to describe the relations between various government departments and use of MIS over a period of time. This framework was applied to certain large public sector

organization and it was found that the use of IS in the PSUs did not develop according to the needs and developments in the organization over the past few years. Communication and Information are the lifeblood of any organization. Neither planning nor designing nor any other managerial process is possible without them. Communication may be viewed as the process of exchange of information, it provides the means of contact between organizational members and organizational decision centers.

In the recent times, government organizations are inundated with data and information that are either generated by internal government transactions or gathers from outside sources. Such data and information are needed for designing future welfare schemes by the government. The government officials must equip themselves to cope up with the phenomenon of information explosion, not to be buried in the avalanche of irrelevant data. They must manage information, that is, a system or structure must be developed to collect, organize, process and disseminate the right type of information at the right time to the right person. Awareness of this need is very essential in the development of MIS for public sector organizations. IT is transforming not only the functioning of the government organizations and its processes but is also redefining the existing systems in the bureaucratic setup at a very faster pace.

In the coming decade most of the citizens would become IT savvy and the PSUs must therefore be prepared to offer services tailored to the citizens needs. MIS has evolved as an integration system for financial transactions, procuring, delivery of services online, auditing ect...It has become very essential for the staff in the PSUs to use MIS almost for every work. Under these circumstances, MIS is expected to provide the staff

market relations will drive costs down and increase efficiency and/or effectiveness of service delivery.

The Information Age in India

Almost simultaneous with the development of a reform agenda, there has been a growing sense in India of a real or impending 'information age'. The roots of ideas about a new 'information age' – treated here as synonymous with emergence of an 'information economy', 'information society' or 'post-industrial society' – are invariably traced back to the work of writers such as Daniel Bell, Fritz Machlup, Yuji Masuda and Alvin Toffler. Through analysis of extant trends, they described a vision of a new world paradigm that was already coming into existence and that would increasingly develop. General features of this new paradigm include a dominance of services over other economic sectors, niche instead of mass markets and the emergence of a 'post-bureaucratic' form of organisation.

The early, and optimistic, writings about the information age have been much criticised. Critics argue:

- That things have not changed as much as predicted. Peasant farmers – who, with their families, form a major proportion of the world's population – continue to live and work much as they have ever done. They have yet to appreciate the pleasures of surfing the Net or teleworking. Even in the high citadels of the new world, shifts in working patterns and social life may be tangible and important, but they are not yet revolutionary.

The study to identify and suggest the best leadership approaches, software process and procedures for development of MIS is confined to government organizations and the study of similar type in private organizations is out of the scope of the present research.

1.24 Data sources and Research Methodology

As the study is an explorative and analytical one, the study used both qualitative and quantitative data from primary and secondary sources. Primary data was collected through a structured questionnaire circulated to all the selected PSUs. Separate structured questionnaires were designed for top level government officials, mid level executives, IT Staff and for the beneficiary citizens. The questionnaire consisted of general MIS information, MIS deliverables, use of MIS and evaluation of MIS. Beneficiaries were asked to respond their satisfaction levels on various MIS deliverables and their experiences.

Secondary data has been collected from various sources namely literature of MIS in PSUs, annual reports of PSUs, Govt documents, manuals ect...

The following public sector organizations have been selected for the study.

1. MGNREGS, Rural Development Dept.
2. Civil Supplies Dept.
3. Tribal Welfare Dept.

The study was conducted to know and assess the impact of the existing MIS at the above selected public sector organizations on the Top Govt. officials, mid level executives, IT Staff and to the beneficiaries using a structured questionnaire. The questionnaire has also been distributed to randomly selected beneficiaries of these three