Article :INFORMATION SYSTEM IN LIBRARIES AND ITS KEY ROLE IN DECISION MAKING

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Abstract:

Developments in Information and Communication Technologies continuously increase the number of ways in which information is transmitted, received, and conveyed. The rapid evolution of computer technology is expanding man's desire, to obtain computer assistance in solving more and more complex problems. The purpose of an information system is to provide accurate and relevant information to users at the right time and at the appropriate level of detail. Libraries and information centers are undergoing rapid change, the environment in which librarians work is changing in terms of greater access to a range of information, increased speed in acquiring information, greater complexity in locating, analyzing and linking of information.

Key words: Information system, MIS and Libraries

Introduction:

An information system is more than just the information technology; it is the system that

Emerges from the complex interactions and relationships between the information technology and the organization. Information systems, in particular those related to effective decision-making processes in an organization.

Information (concept):

Every society, no doubt, is an information society and every organization is information organization. Therefore, information is a basic resource like materials, money and personnel. Information can be considered as a commodity, usually in

the form of letters and reports. Essentially, therefore, information has become a critical resource, just like Energy, both of which are vital to the wellbeing of individuals and organizations in the modern world.

The third information world is the data world of computers, telecommunications and automated information systems where the information is often numerical or structured (Daniel, 1982).

Information systems (IS):

Information systems mirrors and helps in monitoring the operations. The need to obtain access conveniently, quickly and economically makes it imperative to devise procedures for the creation, management and utilization of databases in organizations.

Managers need relevant information, which is information that increases their knowledge and reduces their uncertainty. Thus it is usable by the manager for its intended purpose. Without relevant information, no manager can function effectively.

An information system is a system for accepting data/information as a raw material and through one or more transmutation processes, generating information as a product. It comprises the following functional elements which relate to the organization and its environments:

  Perception – Initial entry of data whether captured or generated, into the Organization;

  Recording – Physical capture of data;

 What will be recorded?

  Also How? When? Who? And Where?

• ***processing*** – transformation according to the "specific" needs of the organization;

• *Transmission* – the flows which occur in an information system;

• *Storage* – presupposes some expected future use;

• *Retrieval* – search for recorded data;

• *Presentation* – reporting, communication.

　What reports will be produced? Contents?

　　Also How? When? Who? And Where?

　　Decision making – information system engages in decision making.

Information and Information system: AN INTERRELATION

　Information concepts that are important for design:

　Information has a surprise value

　Information reduces uncertainty

　Redundancy can be used for error control

　Information has a value, if it changes a decision

　Both the have value of information and the cost of getting information need to be considered.

　Users often demand information without being aware of:

　　the cost of collecting/keeping the information

　　the benefits to be accrued by using it

　Sometimes, data is collected for future use

Much data is collected and stored without reference to its decision-making value:

If there is no choice, there is no information

If there is information, it helps in choosing

Users need assurance about the *quality* of information supplied by the IS

Noise in management information can arise due to factors like:

Bias

Frame of reference

Prejudices

And so forth

Information presentation can be improved

(a) By summarizing the same, and

(b) By its selective distribution:

Common mistake is IS design is to produce voluminous information.

Quality of information can be measured only indirectly

E.g. satisfaction level of decision maker

Processing delay and information interval play an important role in IS design

Information Systems in Libraries:

Now a day's data processing for business and industry has increasingly been undertaken by computers. In libraries, the use of computer has became essential, in the sense that it is based on a library operation such as acquisitions, serials, control or cataloguing etc.

1.   To facilitate the decision making process in the library by providing the managers with accurate, timely, and selective information that assists them in determining a specific course of action.

2.   To provide for the objective performance measurement and assessment of selected relevant areas of the library. The areas are to be determined during strategic planning.

3.   To provide pertinent information about the library's internal and external environment

4.   To provide information on alternative strategies and contingency plans.

5.   To identify, study, and survey the existing information infrastructure in an organization and helps in future planning.

6.   To create information base so that policy makers, administrators, and scientists can access the computer based information in special fields and build up their expertise;

7.   To function as a computer-based information storage-and-retrieval system database that collects structured information.

8.   The Information generated by research institutions, continuously updating and making the information available to users.

9.   To provide a communications link with international databanks and databases for selective bibliographic information to scientists, managers and other users.

10.   To examine, promote, and develop existing information services and resources to meet the information requirements

11.   To establish and maintain links with other national information centers and systems in the country.

12.   To create a linked collection of Internet-based, high-quality resources;

13.   To provide effective access of journals, research reports, dissertations, and working papers which are available in digital format;

14.   To establishing a network of research centers and research resources; situated in different parts of the country or world.

15.   To give environment for discussions, chat groups and video-conferencing facilities for managers, scientists, students to get live information.

16.   To share the resources of other libraries to supplement a library's own collection.

17.   To share scientific efforts and expertise;

18.   To ensure effective bibliographic control of the literature;

19.   Information system helps to facilitate and promote document-delivery and library-lending services;

20.   To develop a common collection-development policy;

21.   To share catalog service and to create a computerized union database;

22.   To analyze and share database services such as abstracting, indexing, and full-text services; in various recorded media.

23.   To coordinate the existing resources, services, and facilities within organization and outside in the specific field.

In order to understand the ***information system*** concept further, Salton (1975) highlighted the most important computer-based information systems as follows:

• Information retrieval system (IR);

• Question-answering system;

• Database system (DBS);

• Management information system (MIS);

• Decision support system (DSS).

Decision making and planning:

Planning and decision making have rightly been called the primary management tasks and these tasks occur at every level of management in any organization. Vein, Best (1988) defines information management as the economic, efficient and effective co-ordination of the production, control, storage and retrieval and dissemination of information from external and internal sources, in order to improve the performance of the organization. Integration of human and IT that helps is providing information for operational and strategic decision making. It also supports decision making at the highest levels of management.

Conclusion:

Information system Promote economic and efficient delivery of information. Information systems are becoming of ever greater interest in progressive and dynamic organizations. IS is used at all levels in the organization: It provides means for monitoring operations.

Information system Strengthen communication and collaboration between research, government, and educational communities; and contribute for lifelong Learning, opportunities. It also helps to improve and enhance the provision of adequate, relevant and update information. It also helps to create a conducive learning environment in which the actual sharing of knowledge and information is a prerequisite. It also ensures the protection and security of the available resources. Effective implementation of Information system enhance the recognition of an organization in the society with keeping in mind the real growing needs of the society and the challenges of ICT and globalization.

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