

IMPACT OF INFORMATION TECHNOLOGY AND ROLE OF LIBRARIES IN THE AGE OF INFORMATION'S

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ABSTRACT :

Information technology is currently taking centre stage and transformed the whole world into a global village with a global economy, which is increasingly dependent on the creative management and distribution of information. The enormous advantages it has in easing the delivery of information around the world. The paper discusses the impact of information technology and role of libraries in the age of knowledge and information societies. It also highlights the problems faced by the Library & Information Service (LIS) sector in India and achievements over the years using modern information technologies.

KEYWORDS: ICT, Information Technology, Library Services

1. Introduction:

Information technology has transformed the whole world into a global village with a global economy, which is increasingly dependent on the creative management and distribution of information. Over the past decades the world has been experiencing significant changes in which the need to acquire, utilize and share knowledge has become increasingly essential. Now, in the 21st century, the age of knowledge and information is in its higher gear. This is an age when invisible knowledge and information take the role of prime movers leading all sector. The World Bank has used metaphor "knowledge is development". Lack of knowledge is largely responsible for underdevelopment. In a knowledge and information-oriented society, creative brains become leaders of economy and knowledge workers are in great demand. If knowledge can be equated with development, then the wider the knowledge gap, the broader the development gap.

Current trends :

Library is a vast storehouse of information. Emergence of Internet and communication Technology (ICT), libraries has been acquiring different approaches of the same and mode of service is changed. Therefore, different types of libraries have born in society, such as:

Hybrid library: The hybrid library is a term used to describe libraries containing a mix of traditional print library resources and the growing number of electronic resources. Hybrid libraries are mixes of printed books and magazines, as well as electronic materials such as downloadable audio books, electronic journals, eBooks, etc. Hybrid libraries are the new norm in most public and academic libraries.

Automated library: A library where access points and housekeeping operations are computerized is called an

automated library. The graphic records are still print-on-paper publication (Sharma, 2005)31.

Digital library: A library in which a significant proportion of the resources are available in machine-readable format (as opposed to print or microform), accessible by means of computers. The digital content may be locally held or accessed remotely via computer networks. —A digital library is popularly viewed as an electronic version of a library where storage is in digital form, allowing direct communication to obtain material and copying it from a master version Digital library is not only digitization of physical resources, but also thoughtful organization of electronic collection for better access. Such organization provides coherence to a massive amount of shared knowledge base.

Virtual library: The access point as well as the graphic records are in electronic/digital form when these electronic/digital libraries are connected via various networks, particularly the INTERNET, this is called virtual library. A "library without walls" in which the collections do not exist on paper, microform, or other tangible form at a physical location but are electronically accessible in digital format via computer networks. Such libraries exist only on a very limited scale, but in most traditional print-based libraries in the United States, catalogs

and periodical indexes are available online, and some periodicals and reference works may be available in electronic full-text. Some libraries and library systems call themselves "virtual" because they offer online services (example: Colorado Virtual Library).

Changing Concept of Libraries:

The concept of Library and Library professionals has changed as changes takes places in the field. Some of the changes, for example has stated below for understanding of the changes.

A. Concept Library science Information science :

1. Unit Library centre Information centre
2. Medium Book Data base
3. User Reader Recipient
4. Staff Librarian Information officer
5. Service On demand As & when needed
6. Tool Catalogue Controlled vocabulary

B. Changing Roles of LIS Professionals:

Presently, librarians are playing an integrated role beyond their traditional job. In a fast changing world, there are new demands and influences on libraries and information centres. Using modern technologies, libraries all over the world are now shifting their emphasis from traditional to multidimensional work

force. As a corollary to this, LIS professionals are supposed to play versatile role in different areas of libraries and information centres to meet the expectations and needs of the present situation.

1. Advocate: LIS professionals act as lawyer when they deal with the issue relating to law such as copyright law, intellectual property right, etc. Librarian champion the cause of academic libraries through various advocacy programs to promote the library and resources. They can communicate news about the library through newsletters, web sites and memos to parents and staff. Their job is to keep principals and teachers up to date on what is happening in the library and to promote library activities and special projects. Librarians must communicate the mission, goals and objectives of the resource centre to the entire user community .

2. Consortia manager: The LIS professional for Consortium operations is responsible for coordinating and overseeing consortium operations, including strategic planning, systems development and project management. Related responsibilities include facilitating communication among the participating libraries. In addition to these responsibilities, the Librarian for Consortium Operations acts as the consortium's representative with vendors for contracted products and services.

ICT-Based User Services :

Some library users are adopting electronic habits, making increasing use of the new ICT including computers, the Internet, the Web, Intranet, Extranet and other technologies. As a result, library users are placing new demands on their libraries. They require access to the latest information, updated information resources and access to ICT facilities that they could use in their work. Use of ICT in libraries enhances users satisfaction. It provides numerous benefits to library users.

Some of the benefits are:

- Provide speedy and easy access to information
- Provides remote access to users
- Provides round the clock access to users
- Provides access to unlimited information from different sources
- Provides information flexibility to be used by any individual according to his/her requirements
- Provides increased flexibility
- Facilitates the reformatting and combining of data from different sources Libraries are also providing various ICT-based services to their user, including the following
- Provision of Web access to OPACs
- Electronic document delivery
- Networked information resources
- Delivery of information to user desktops
- Online instructions
- Online readers advisory services

Role of Libraries :

In the modern knowledge society libraries have a new role and there are various types of library models. In the modern society, where the use of electronic services and Web-based information sources constantly increases, libraries are managed in a more democratic way, have more flexible communication system and work organization, and their service development is based on the quality and user-orientation of services. In the modern knowledge society libraries have a new role and there are various types of library models. These are as follows:

- ◆ Traditional library as a memory institution
- ◆ Library as a learning and research centre
- ◆ Library as a cultural and communication centre
- ◆ Electronic library
- ◆ Digital library
- ◆ Virtual library as library without walls

Libraries had been performed many important roles in the past agrarian and industrial societies. But those roles were limited in scope. In the 21st century, libraries have to perform pivotal roles in disseminating and sharing the culture of knowledge. In this age of knowledge libraries should be repositories of all of the knowledge and information accumulated by human kind. They will have to store all kinds and forms of material and information and disseminate beyond the geographical boundaries. Today's advanced information technology is enabling libraries to accomplish this immense task. Exchange of knowledge has always been the most important objectives of libraries. Various systems have been developed to share and exchange the records of human knowledge. But libraries in the 21st century should fulfil more dynamic role. They should exchange knowledge and information with users inside and outside their country, thus going beyond their traditional reference and lending services. This would possible when libraries agreed to expand their roles beyond the geographical boundaries by using state of art technologies. The modern libraries certainly cannot be passive repository for books and other printed materials. The opposite requirements of storing increasing collection in various forms and of maintaining easy access to most part of it can only be balanced by deploying information and communication technologies. Libraries should upgrade their services by digitizing their resources for online use. These services should be accessible to anyone, regardless of time or location, through digital communication. Information and Communication Technology (ICT) has transformed library services globally. Most current information are recorded in electronic format, ICT has also contributed immensely to the performance of librarians in the discharge of their duties such as in cataloguing, reference services, circulation management, serials control etc. ICT has contributed to the library in the following specific ways.

Library management software's

Libraries utilize software's designed to manage different library routines and processes. Most of these software's are integrated and have modules for the different activities or tasks carried out in the library like cataloguing, statistics, acquisition processes, serials control etc. Some examples of such software's are CDS/ISIS, GLAS, ALICE for Windows, X-Lib and SLAM. SLAM is used in the University Library FUTA and stands for (Strategic Library Automation Management).

OPAC: This means Online Public Access Catalogue and is the computerized version of the library catalogue or a database of the library holdings. The advantage of the OPAC over manual methods is ease of use and the fact that it saves space. It provides access to the catalogues of a library on the local intranet, extranet or even the internet.

Office Operations: Word processing, accounting,, database management and communication through e-mail are all enabled in the library through ICT

Applications of ICT in Academic Libraries

Now a days there are several information communication technology for various housekeeping, management and administrative functions of the library, different electronic and digital media, computer aided electronic equipments, networks and internet has provided significant role in retrieval and dissemination of information and playing an vital role for modernization of libraries main of them are:

5.1. Library Automation Library Automation is the concept of reducing the human intervention in all the library services so that any user can receive the desired information with the maximum comfort and at the lowest cost. Major areas of the automation can be classified into two-organization of all library database and all housekeeping operations of library.

5.2. Library Networking Library networking means a group of Libraries and Information Centres are interconnected for some common pattern or design for information exchange and communication with a view to improve efficiency.

5.3. Library Management Library Management includes the following activities which will certainly be geared up by the use of these fast ICT developments, Classification, Cataloguing, Indexing, Database creation, Database Indexing.

5.4. Digital Library

A digital library is an assembled of digital computing, storage and communication machinery together with the content and software needed to reproduce, emulate and extend the services provided by conventional libraries based on paper and other material means of collecting, cataloguing, finding and disseminating information. A full service digital library must accomplish all essential services of traditional libraries and also exploit the well-

known advantage of digital storage, searching and communication. It provides access to part of or all its collection, such as plain texts, images, graphics, audio and video materials and other library items that have been electronically converted, via the internet and www.

5.5. Technical Communication Technical Communication consisting of technical writing, editing, publishing, DTP systems etc

6. ICT-Based User Services

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7. Impact of ICT on Libraries and Librarians

Computer has brought in a new impact to the library and information usage. In libraries, information technology has assisted library professionals to provide value added quality information service and give more remote access to the inter-nationally available information resources. Today's highly sophisticated information technology to facilitate the storage of huge amounts of data or information in a very compact space. Information technologies promise fast International retrieval of stored information and revolutionize our concept of the functions of a traditional library and a modern information centre. Recently technological developments have dramatically changed the mode of library operations and services Modern ICT is impacting on various aspects of libraries and the information profession. Advancements in ICT and the wide spread

use of ICT is resulting in digital information sources and digital media replacing and becoming the dominant form of information storage and retrieval. ICT also survives and makes true rules of Library Science 'Every reader his/her book/information', 'Save the time of the reader', 'Library is a growing organism'. ICT with its tremendous information sources, rapid transmission speed and easy access ensures the satisfaction of the user with complex demand, break down the distance barrier and shortened the time required and ensure the right information to the right reader at the right time. It also increases and solves the library's demand of collection development. It is really an excellent tool for the Library information centres.

Conclusion:

In most of the developing countries the modes of information generation, collection and organization differ. In this study, an attempt has been made to determine the extent of the use of information technologies in library service. It is necessary to mention that the IT has been tremendously influencing all spheres of our life. The use of such new technologies has been profoundly affecting the information use patterns and behaviours of library users, dramatically changing the mode of library information and services and especially with major impacts in audio visual markets, education and training field, research literature, publishing and so on. Unprecedented changes in the use of information are reshaping our personal activities, our community and organizational practices as ITs bring the global information to our finger end in the 21st century libraries are taking a central role in this notable movement.

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