



Information Communication Technology in Library Science – A Study

Dr. M. SAKTHI SUGANTH

LIBRARIAN

NACHIMUTHU POLYTECHNIC COLLEGE POLLACHI

Abstract: - Information technologies have a major role on the way people work, live globally. Today libraries are well furnished to provide the newly Information Technology services. Information Technology enabled services complete the information needs of the users at the right place, time and the right person. ICT have brought incomparable changes to library and information services, such as OPAC, user services, reference service, current awareness services, interlibrary loan and customer relations can be provided more professionally and successfully using ICT. The paper attempts to discuss the rapid growth of information technology in the library services and the many problems faced by the LIS field in India and success of many years using digital technologies.

Keywords: -ICT, Library and Information Science, Information & Communication Technology

1. Introduction

In India, there were speedy developments in the IT sector and also has transformed library services worldwide. It has provided more amenities for the users and also provide enthusiastic of information. The availability of information at the right time and the right system is most important in the development of information and also in the development of actions. ICT has changed the outlook of libraries in a reflective way. In many libraries ICT has made particular effect on the technique such as acquisition, processing, storing & dissemination of information.

2. Effects of information technology in LIS field

In this field, the majority of functions include acquisition section, technical section, storage retrieval and dissemination. Manual entries have transformed to modern technology and it allows users to use technology and store information quickly. It is essential that Library Professionals are updated with the latest technology, which will lead to its effective implementation and usage.



ICT has tremendously changed the way of acquiring the books, issue-return policy, along with technical services such as cataloguing, classification and maintaining the library collection, serials subscription etc. This has created an ease to the library users to obtain information quickly, along with other services, in an efficient manner, with less time and human efforts. So, it is important to teach latest IT skills and techniques in the set of courses and give interactive and latest information training to the library professionals. LIS professionals also acquire latest practical skills along with their professional information.

3. Libraries provides some ICT based user services

It is necessary for the Library professionals to have an easy access to the information updates through ICT services which can be used in their daily activities. The first priority of any Library is user need and satisfaction and this helps users with enrichment of information. Some of the advantages to the users are:-

- Instant access to information
- Remote login facilities to users
- Users can avail library services 24*7
- Retrieval of endless information from varied sources
- Provides information elasticity which can be used by any individual augmented flexibility.

Libraries also provide various ICT based services to their users such as:-

- **Digital Library Services:** -These services are offered through digital information sources and it helps to minimize the usage of physical space. The user can easily access information through remote login and it also provides access to scattered information from different resources.
- **Web-OPAC:** -Information technology and the internet provide access to the libraries to their catalogue from any part of the world. Library users are consequentially benefitted by this with the fact that OPAC, being web-based; even they have such an access to information at any point of time and place, such as full-text documents, author, title, publisher, publication year and tables of content etc.
- **Inter Library Lending Services (ILL):** These services use networks to produce documents in e- format like journal articles, PDF files to the users. It is one of the best and most useful services available to the users, especially to research scholars even in remote areas.
- **Institutional Repository Services:** -It provides open access to institutional data and other works such as research papers, reports, articles, annual and grey literature. It also provides storage facilities and helps to preserve digital documents for a long time.
- **Current Awareness Service (CAS):**- This is a key service for users, which keeps them well- informed and up to date, of the trends in their fields of interest and other related



subjects. The Internet has given rise to huge scope for innovations in filling, ways of creation and sharing of current awareness services. CAS tools such as Listserv, Weblog, Webzines, and e-newsletters are very peculiar mediums to spread current awareness service to the users.

- **Online User Education:-** Libraries are using the e- services and resources, to execute online based bibliographic or library literacy programmes to attract their users. Users and followers can approach these programmes any time, even after it was actually conducted as it is stored and saved online.
- **Library Network Service:** - The foremost function of network is to interrelate and connect computers and such other communication devices so that data can be transferred from one location to another immediately. It causes multiple users to share a common pathway and converse with each other. The networks include the local area network (LAN) which is effective for local limits, and wide area network (WAN) that covers large geographical area such as a country or state. DELNET, INFLIBNET, MALIBNET, NICNET, ADINET etc. are major WAN in India.

4. Positive effects and Negative effects of IT in LIS field

There are many plus points and challenges of information technology in the LIS field such as: - It is very effortless to access to information in different library resources through information technology, but lack of trained professionals to provide digital service is a challenge. Collaboration and conception in library network and library were establishment of cost through consortia. Avoids time consuming tasks done by librarian and widens the scope of services offered by librarian. Remote login access by users and 24*7 services can be offered worldwide by libraries. Reduced workload of the library staff and insufficient funds are available in the library. IT gives more up to date technology where as in the library inadequate trained staff is there in the library.

5. Challenges of using ICT in Libraries in Worldwide

The inclusion of Information Communication Technology in library services has raised some challenges worldwide. These are:-

- **Information Access:** - Libraries allow access to selected information resources. This restricts the ability of users to identify, retrieve and use of information effectively.
- **Changing role of librarian and libraries in the digital era:** - The librarian and libraries are shifted traditional to the digital era. Several free digital library software's are available in recent time. Sharing of information through the digital library collections has become an attractive and trouble-free to library professionals.
- **Library Funding:** -The subscription costs of Books and Journals are very high. Libraries are challenged to find different ways to have enough funding to keep up to date on the newest technologies. The amount of funding that many libraries receive is directly to be utilized to give quality of services to users. Proper and sufficient funds are needed to maintain and upgrade the libraries other equipment and software. Software license fees,



internet connection fees, electronic journals and databases annual fees are very high to pay the libraries.

- **Maintenance and security issues in the library:** - Everyday maintenance of ICT facilities is critical to sustainability of any ICT services. It is a pre requisite to have qualified technical personnel for administration and maintaining ICT facilities and networks that the library organization runs.
- **Insufficient bandwidth:** - Bandwidth refers to the amount of data in sequence that can be carried in a given time period over a wired or wireless communication link, articulated as bits per second. Insufficient bandwidth is a most common problem. The internet connectivity in the libraries is extremely low. The need of bandwidth in the library is must without which users cannot download information through the internet.
- **Unpredictable power supply:** - ICT facilities depend on electricity for their functioning. Everyday power cut is a constant problem in certain places especially, in small cities, towns and villages. Most of the libraries are in a need to request the university/management to purchase a generator to combat the problem of unpredictable power supply.

Conclusion

Many libraries are ahead of ICT development but there are huge potential still to be explored. Information and communication technology is applied to make information services more suitable, better easy to reach and cost effective. The success of libraries and information science profession and professionals mostly depends on the way and amount in which they can use information technology in the stage of their tasks, and the productivity in setting their targets. Information Technology helps to grow the rank of the library, and it concentrates the work style of the library professions. Information Technology helps to go beyond the universal restrictions, and attempts to secure new device and methods to provide better and efficient services to our users.

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