## Impact of ICTs on Library Services

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**Abstract**

*Today's libraries are transforming into digital libraries because of cheap and easy availability of the ICT and awareness among the users. Though there exist digital libraries but majority of the libraries still are traditional in nature. Further, many of the operations and services are still traditional. This paper describes the ICT and its impact over the present libraries and the services which can be better handle with the use of ICT.*

*Keywords* – Libraries, Digital Libraries, Traditional Libraries

**Introduction**

Libraries are said to be exited in the society since the starting of civilisation in the world. But traditionally, the libraries were meant for storing of the books. Later, with the passage of times and invention of printing technology, other means of knowledge sharing and dissemination were developed such as the periodicals and other printed matter.

There, the main emphasis was given on the lending of the books; however, since starting of 20th century, library education and training was started as a subject. As a result, various types of the services were started by the libraries for their users. Reference service, documentation service, referral service, current awareness service and selective dissemination of the information service were the common services in the last century that continued almost till the last decade of 20th century.

But the last decade of earlier century witnessed various developments and the information and communication technology is one of such development which introduced worldwide in the field of library services. Various changes are seen in the ways, the libraries store information and disseminate them for the benefits of their users. In fact, the specific role of ICT in up gradation of libraries and information centers has become an absolute necessity.

## 2. What it ICT?

ICT that stands for Information and Commendation Technology is basically a combination of information technology and communication technology. Information technology usually deals with the hardware and software elements that allow us to access, store, organize, and manipulate the information by electronic means, while communication technology, deals with the equipment, infrastructure and software through which information can be received, accessed and disseminates, for example phones, faxes, modems, networks, etc.

ALA Glossary defines information technology "as the application of computers and technologies to the acquisition, organization, storage, retrieval and dissemination of information" (Ashok Babu, 1999).

Webster's New Encyclopaedia defines information technology "as the collective term for various technologies involved in the processing and transmission of Information they include computing telecommunications and microelectronics" (Devarajan, 2005).
Thus, ICT is the combination of information and communication technologies that is used frequently for different purposes in library services.

## 3. Traditional Library Services

The main function of the libraries is to support their parent organisation in achieving the organisational objectives. They are involved in providing support for research and educational activities in universities, institutions, and other academic organisations. It involves content development, acquisition, technical services, providing institutional repositories, inter-library loan, and document delivery services etc. However, some academic libraries also establish writing centres and centres for information literacy too (https://www.quora.com/What-are-the-functions-of-an-academic-library).

Traditionally, the libraries gave emphasis on the storage and preservation of physical items, particularly books and periodicals those in which librarian were a custodian of the library. Information is physically assembled in one place; users must travel to the library to learn what is there and make use of it (Kaur, 2015). Library collection over the years, has been based on the printed word. This has made its stakeholders – library personnel, publishers, booksellers, university administrators and users - to conform to a certain way of actions (Asamoah-Hassan, 2001).

Traditional libraries were providing services based on the print media and the developments were based on the manual power. The traditional practices mainly influenced by cataloguing, classification and indexing and reference services etc. However, the main weaknesses of traditional libraries include:

- Information sources available only in print;

- Services based on available collection of a single library only;
- Information access was through secondary sources only and have limited access points to search the information;
- Maintenance of the traditional library is a challenging task and costly affair involving manpower;
- Catalogue has limitations in its handling and using with limited access points;
- More repetitive task involved in library functions and operations which need more staff; and
- More manpower and more finance is needed for maintaining stacks and providing services from the libraries.

Therefore, new technologies are very effective and found suitable at later stapes to remove these barriers.

**Impact of ICTs in Libraries**

Traditionally, libraries were the collections of books, manuscripts, journals, and other sources of recorded information. Thus, the main emphasis on storage and preservation of physical items, particularly books and periodicals cataloging at a high level rather than one of detail, e.g., author and subject indexes as opposed to full text browsing based on physical proximity of related materials. But in the last 50 years, libraries have increasingly developed into a provider of information resources and services that do not even require a building (Ogunsoal, 2011) because of the application of ICT in libraries and information services which are to access, retrieve, disseminate services and to store information quickly. Thus, the ICTs have changed the whole phenomenon of information management. A large numbers of services exist which are generated by ICT and some of the modern technologies for operations and services in different areas of libraries and information centers.

Murugesan et al. (2011) have grouped them into following pattern.
- **Library Housekeeping Operations**
  - Ordering
  - Acquisition
  - Cataloguing
  - Classification
  - Serials control
  - Circulation control
  - Stock verification
- **Information Processing and Services**
  - Indexing
  - OPAC
  - Internet Services
  - E-mail services
  - Multimedia services

- o   CD-ROM databases
- o   Web-based information services
- **Storage and Retrieval of Information**
  - o   Creation of databases
  - o   Developing search patterns to retrieve information.
- **Library Networking**
  - o   Local Area Networking (LAN)
  - o   Metropolitan Area Networking (WAN)
  - o   Wide Area Networking (WAN)
- **Office Automation**
  - o   Word Processing
  - o   Accounting and budgeting
  - o   Maintenance of library statistics

Above operations and the services can be tackled with the help of computer and information technology very effectively.

### 5. Mobile Library Services

Further, with the advancement in mobile technology, the people are increasingly dependent on their mobile phones and there is a majority who do use them as diaries, for taking notes and for email and internet access. Libraries are also investigating ways to deliver their services to mobile phones and other small screen devices so their customers can access them any time anywhere, which allows readers to access full e-Books and journal articles through their library's subscriptions on any mobile device. Such services are collectively known as 'm-libraries' and an increase in expectation from library users is seen that libraries will provide some services in a mobile-friendly way (Bhushan, 2015).  Some of the services that are possible through mobile technology, include the following:

- Text Alerts/Notification
- SMS Reference
- Virtual Reference Service
- Mobile OPAC
- Mobile Content Delivery
- Mobile Internet

A step aheadin the era of smart phone technology, numerous libraries have started to provide some of their services over the mobile phones, and for that they have also re-designed their websites also.

### 6. Problems in Application of ICT in Libraries

Though ICT has potential for modernizing the library activities in the prevailing situation but it is pathetic. It is observed that a large percentage of library professionals and authorities are not aware of the use of ICT in their libraries. The main problems in terms of ICT application in libraries are (Murugesan et al., 2011):

- Lack of definite and clear goal by the parent organisations in order to modernize / upgrade the libraries as a result the real purpose of ICT application is being defeated.
- Inadequate fund is the main cause for the academic libraries.
- Library professionals do not enjoy freedom to work as a result they are not encouraged to undertake modernization of libraries.
- Lack of adequate knowledge in selection of right and appropriate technology and equipment for modernization of library has been the setback for ICT application in libraries
- Some time psychological barriers of the library personnel also prevent them from switching over to modernization.

## 7. Conclusion

On the basis of above discussion, it can be inferred that the traditional library services demand self-comprehensive collection building in anticipation of demand from users. But electronic information can be disseminated much more quickly and is stored in different modes.

That's why the libraries are now being urged to take on the critical job of digitising information and making it available on the network, a crucial step towards becoming a true electronic library. Collection building therefore in the past few years has become more of collaboration with related libraries and institutions and resource sharing among members in a consortium. Further, as Asamoah-Hassank (2001) mentions, today success in information provision to users is measured by how accessible the information is and its relevancy and not who actually owns it. If it is done well then it will be economically unwise for each library to build its own collection that invariably may be a duplication of another library's stock. Thus, resource sharing comes into the picture that is possible through the library consortia which themselves are the results of ICT.

So, we need ICT based services and accordingly libraries have to transform fully themselves from print format to digital format in the coming years.

## References

➢ Ashok Babu, T. (1999). Modern Information Technologies: their Impact on Library Services", Library Information Technology in modern era: Libraries and Librarians in New Millennium. New Delhi; Commonwealth. Pp. 65-72.

➢ Asamoah-Hassank, Helena R. (2001).Transforming Traditional Libraries into Electronic Libraries: the Contribution of the African University. Available at: http://ir.knust.edu.gh/bitstream/123456789/1206/1/TRANSFORMING%20TRADITIONAL%20LIBRARIES%20doc.pdf.

➢ Bhushan, P (2015).Library 3.0: Future Technologies for Libraries. In G.Z. Shine et al (Eds.): Emerging Technologies and Future of Libraries Issues and Challenges (pp. 6-14). Daya Publishing House, New Delhi.

➢ Devarajan, G. (2005). Applied Research in Library and Information Science. New Delhi: Ess Ess Publications. P 74.

➤ Kaur, H. (2015). Role of Digital Libraries in the Present Era: Challenges and Issues. In S. Thanuskodi (Ed.): Handbook of Research on Inventive Digital Tools for Collection Management and Development in Modern Libraries (pp. 86-102). IGI Global.

➤ Murugesan, N., Durai Pandy, R., Regina, R. and Baskaran, P.  (2011) Application of Information Communication Technology for Academic Libraries. Available at: http://14.139.186.108/jspui/bitstream/123456789/2406/1/343-1.pdf.

➤ Ogunsola, L. A. (2011). The Next Step in Librarianship: Is The Traditional Library Dead?" Library Philosophy and Practice (e-journal). Paper 606. Available at: http://digitalcommons.unl.edu/libphilprac/606.