

E-ISSN: 2709-9369
P-ISSN: 2709-9350
www.multisubjectjournal.com
IJMT 2019; 1(1): 118-121
Received: 25-02-2019
Accepted: 29-04-2019

Riptika Pal
Librarian, Achhruram
Memorial College Jhalda,
Purulia, West Bengal, India

How technology supports library in providing services effectively

Riptika Pal

Abstract

This paper discussed the role of technology in library by establishing a relationship between 'library' and 'technology'. Over the years, libraries had supported education through information and reference services. It provides programs to meet the needs of the people in search for educational skill. Library resources are distributed to the institution, including prisoners, hospitals, rehabilitation programs as well as disabled and elderly people's homes. Now library acquires technology to provide services to the remote users. Libraries are using the Information Technology in general and to automate a wide range of administrative and technical process, build databases, networks and provide better services to their users. The use of IT has become imperative for the efficient management of modern libraries. Library Automation is one of the major applications of IT in libraries. It is helped to change the libraries In-house activities (Acquisition, Cataloguing, Indexing, Serial control, Circulation etc.) from manual system to automation (Venkataraman, 1998). The current study highlights the areas where ICT can be applied. Basically, the paper explains different technologies and their use in the library operation.

Keywords: Information technology, library automation, ICT, digital library, software

1. Introduction

Technology makes our life easier than ever. It gives a digital platform for today's generation and has become part of our lives. There are so many devices available in the market from which anyone can acquire knowledge and enhance skills by reading them. Also library has been considered as a great source of information rather we can say it's a most authentic source of information. Few years back library had seemed to be neglected due to the lack of updated information. But the scenario has become different now. Librarians play the major role in supporting library with the help of technology. Today libraries continue to serve as points for the public's first exposure to new technologies. The very nature of a librarian's service role within the academic sector and community, helping students learn in any and all subjects, and using the best tools for the job, makes them the perfect person to ask about what tools are the most efficient, as they can provide training and guidance. This not only helps students, but could help administrators and planners in the process of acquiring new technology, and in selecting the best software.

2. How library helps in teaching and learning

Libraries are considered to be one of the more efficient teaching components. A good library is a must for the intellectual, moral and spiritual progress and growth of a community's peoples. People acquire education through institution like schools, colleges, agencies and organizations and library is the most outstanding of such institution. A library is fundamentally an organized set of resources, which include human services as well as the entire spectrum of media (e.g., text, video, hypermedia). However, to realize fully the benefits of technology in our education system and provide authentic learning experiences, educators need to use technology effectively in their practice. Libraries serve social and intellectual roles in bringing together people and ideas also.

Libraries also played an important role in any nation. If the nation is to build up and attain an assess potential of growth per capita income, the large percentage should be educated. Libraries can also inspire education to every individual of all ages. They teach skills and strategies individuals need to learn and achieve. Libraries is like a storehouse of knowledge as most of the topics including history, geography, economics, politics and science related topics are all available. Without a library, any educational institution will not be complete. These types of libraries are present in many colleges and universities. Libraries played an important role in the modern society for education and research.

Corresponding Author:
Riptika Pal
Librarian, Achhruram
Memorial College Jhalda,
Purulia, West Bengal, India

In other words, it is an important tool for the development of the society by enhancing the cause of education and academic research. The library provides information to thousands of peoples who need them. With the development in Science and Technology, there is an explosion in information. In order to meet the growing needs of users, many steps are taken to upgrade the existing ones and building of new ones. Information is power as well as access to data is essential for the development of individuals and companies.

3. Impact of technologies in library services

The growth of information and the dependency on it have paved the way for the information society and subsequently the knowledge society. Information has always been prime factor for the development of society and is often regarded as a vital national resource. Information services try to meet this objective. Information has become important part of our lives and should be available when needed. Information services are generated using new tools and techniques to facilitate the right users to the right information (Khodeh and Dhar, 2002) [4]. The implementation of information technology in the libraries has demanded new forms of library services to get more user satisfaction. Digital library service has evolved after the implementation of IT in the library and information centers. Information technology has had a significant impact and has successfully changed the characteristics of information services being generated in libraries. The past two decades have seen great changes in library due to information technology. The technological advancement has made significant impact on the growth of knowledge and unlocking of human potential. In library, the impact is clearly visible on information resources, services, and people (Manjunatha, 2007) [7].

Another impact is remote access of variety of commercial and noncommercial information sources i.e. online full text databases, e-journals, e-books, library catalogue (OPAC) etc. The present-day information seekers can access the worldwide information through internet on their desktop without any time limitation.

4. Benefits of technologies in library

ICT has changed the nature of Libraries. A variety of terms such as hybrid, digital and virtual library are used to refer to the academic library. A digital library can be defined as a "Managed collection of information with associated services where the information is stored in digital format and accessible over a network". The virtual library has been defined as "Remote access to the content and services of libraries and other information resources, combining an on-site collection of current heavily used materials both print and in electronic form with an electronic network which provides access to and delivers from the external worldwide library and commercial information and knowledge sources. Hybrid libraries are libraries that provide access to both electronic resources and paper-based resources". From the definitions, it is clear that most of today's Libraries fall in the hybrid category. The internet has made information access and retrieval both simple and complex. Information retrieval systems are being designed to suit the need of end users and therefore try to simplify the process.

5. ICT based services available in library

The emergence of the information revolution as championed

by information and communication technology (ICT) has enabled libraries to devise viable strategies for improved service delivery (Igwe, 2010) [3]. Library uses various technologies to provide information to its users. Followings are the some of the ICT tools which are basically used for different communication purposes. Libraries are also providing various ICT-based services to their users, including the following.

5.1 RFID Technology

New technology has changed the way of library transaction (check-in and check-out). Libraries are providing ICT-based library services to increase the possible ways of fast and user-friendly services. One of the best invention of technology for library is the 'Radio Frequency Identification' (RFID). Nowadays, libraries are adopting RFID technology to provide enriched and efficient library services. This technology achieves the fourth law of library science, (i.e. 'save the time of the users') by providing quick and effective services (Ranganathan, 1931) [9].

5.2 Closed-Circuit Television (CCTV)

CCTV stands for Closed Circuit Television and also known as video surveillance (Kumar & Svensson, 2015) [6]. This technology plays an important role in the library management. Through the help of CCTV librarian can supervise the whole activities of libraries. It helps to look after the staffs as well as the users.

5.3 Social Media

Social media like Facebook, Twitter, Blogs, etc. have become the central focus for quickest information dissemination. Most of the libraries are using these social media for the promotion or marketing of their e-resources. Basically, Blogs are used to disseminate short communication of library, whereas Facebook has become most useful ICT tool for every kind of information dissemination. Now, Facebook live plays a very significant role for telecast the current ongoing programme.

5.4 Resource Sharing

ICT can be used for resource sharing among libraries and information centers. It provides a great prospect for sharing both the human and material resources of a library with others library. The role of technology is very much significant for cooperative acquisition, cooperative processing (cataloguing and classification), exchange of information materials (e-resources), joint publication, networking, joint training of personnel, interchange of staff for seminars, and workshops (Igwe, 2010) [3].

5.5 Use of Library Automation Software

Library automation is the excellent way of reducing the human involvement for library services. The aims of the current automation technology is to provide maximum services in minimum time and lowest cost. Library automation is the application of ICTs to library operations and services. Many library automation software's are available for library operation such as Libsys, Koha, SLIM21, etc.

5.6 Web-based Online Public Access Catalogues (Web-OPAC): It is the computer form of library catalogue to access information materials in the library. It is an online

database of materials held by a library or group of libraries. It is a computerized library catalogue made available to the public. Most OPACs are accessible over the internet to users all over the world (Mishra and Mishra, 2014) ^[8].

5.7 Digital Library Service

Digital library provides a variety of digital information sources. It reduces the physical space; the user can access to information remotely and it also provides access to distributed information resources. Its advantage is that it has the ability to handle multilingual content.

5.8 Electronic Document Delivery Service

The libraries are implementing ICT-based Inter-Library Lending (ILL) using networks to deliver copies of journal articles and other documents in digital format like PDF (Portable Document Format) to the users' desktops. It helps the users to access information which is not available in their respective libraries.

5.9 Institutional Repository Service

Institutional Repository (IR) is a set of services that a university offers to the members of its community for the management and distribution of digital materials by the institution and its community members.

Librarians bring skills and standards required to manage digital information resources and work towards continued preservation of and access to digital resources.

5.10 Current Awareness Service- CAS

Current Awareness Services has been an important means for keeping the users up to date in their areas of interest. A current awareness service may be as simple as a copy of the table of contents or a bulletin containing bibliographic records, of articles selected from the current issues of journals and other material, and usually organized by subjects.

5.11 Audio-Visual Services

Many libraries particularly media libraries and large academic and public libraries hold audiovisual material such as music, films, pictures, and photographs etc. The new multimedia of an audio CD, Video CD (VCD), and Digital Video Disks (DVD) have the advantage of higher storage capacity, random access and longer life than audio and video tapes and cassettes. Many libraries allow their members to borrow these. Multimedia documents can now be played on standard PCs, stand-alone or networked.

5.12 Electronic theses and dissertations (ETDs)

Related to institutional repositories, especially in university libraries, is the provision of access to full-text copies of Electronic Theses and Dissertations (ETD). Without ICTs it has been impossible to access full-text copies of theses and dissertations from a remote location.

5.13 Electronic Books Service

Electronic books (e-Books) are one way to enhance the digital library with global 24X7 accesses to authoritative information, and they enable users to quickly retrieve and access specific research material easily, quickly, and effectively.

5.14 Electronic Journals: Many publishers who offer

subscriptions to print journals, sometimes also offer a subscription to the electronic version of the journal free of charge. Some of the publishers who are providing e-journals include Emerald, Elsevier, Sage, Springer, EBSCO, J-Gate, John Wiley, etc.

5.15 Electronic Mail (E-mail) Service

This is the most widely used resource of the internet. It is used for sending and receiving of messages otherwise known as mails. The messages are communicated through electronic device. E-mail enables faster and cheaper organizational communication.

5.16 Internet Service

This ICT resources is a means to speedy flow of information. It is a network of computers, communicating with others, often via telephone line. The internet provides a worldwide platform for information sharing among individuals, institutions and organizations. The use of internet enables the provision of current and useful information to enhance productivity and good governance.

5.17 Document Scanning Services

Scanner is important equipment in the modernization of library. It is useful for scanning text, image and content pages of books and providing great help for establishing a digital and virtual library.

5.18 Reprographic Service

Reprographic technology is used for the reproduction of the documents. Using technology, the photocopy and the reproduction of the documents has become very easy and accessible. In this technology, printed documents are converted into digital form, then photocopy is prepared. For the same, computer scanner and software is required. This service is provided to library users for photocopy of some pages of books, journal articles or other materials.

5.19 Library Network Service

The important function of the network is to interconnect computers and other communication devices so that data can be transferred from one location to another instantly. Networks allow many users to share a common pathway and communicate with each other.

6. Conclusion

The internet has thus integrated nearly all aspects of the library activities, the librarians can now use the Internet for exploiting the catalogue of the other institutions, ordering books and journals online, participate in ILL, use e-mail, and discuss through list serves, support reference service through remote databases. Effective application of information technology in library transmits users' satisfaction. The present scenario demands the updated technology for the faster and approachable library services. Gradually, new technologies are developed, consequently there is the need to develop our skills and capacity to provide enhanced library services. Library resources must be used at a large amount. The successfulness of a library and the library professional always depends on the quality of the service. The government has also launched support programs to improve the quality and standards of higher education in India. The technology that enables library services has improved the teaching-learning scenario in an

efficient way to reach the target users.

7. References

1. Gannie SA. A Glimpse of Information Technology Enable Library Services. *Int J Digit Libra Serv.* 2013;3(1):78-82.
2. Hensley CB. Selective Dissemination of Information (SDI): State of the Art. In: *Spring Joint Computer Conference*; c1963. p. 257-262. Available from: <https://www.computer.org/csdl/proceedings/afips/1963/5062/00/50620257.pdf>
3. Igwe KN. Resource Sharing in the ICT Era: The Case of Nigerian University Libraries. *J Interlibr Loan Doc Deliv Electron Reserve.* 2010;20(3):173-187. <https://doi.org/10.1080/1072303X.2010.491016>
4. Kjode S, Dhar U. Library services and functions in changing environment - An overview. *Indian J Inf Libr Soc.* 2002;15(1&2):24-29.
5. KMP. Use of ICT resources and services at state university libraries in Gujarat: a study; c2018. Available from: <http://hdl.handle.net/10603/247168>
6. Kumar V, Svensson J (Eds.). *Promoting Social Change and Democracy through Information Technology.* IGI Global; c2015.
7. Manjinatha K, Pai RD, Mathew SK. *Impact of Technology on quality of services in technical and management libraries in Karnataka.* Manipal, T.A. Pai Management Institute; c2007.
8. Mishra L, Mishra J. ICT resources and services in university libraries. *Int J Digit Libra Serv.* 2014;4(3):243-250.
9. Ranganathan SR. *The Five Laws of Library Science.* Madras Library Association (Madras, India) and Edward Goldston (London, UK). Available from: <http://arizona.openrepository.com/arizona/handle/10150/105454>
10. Spector JM. *Foundations of Educational Technology: Integrative Approaches and Interdisciplinary Perspectives.* Routledge; c2015.
11. Venkataraman P, Rao C. Impact of information technology on library operations and services. In: Satyanarayana B (Eds.). *Information Technology: Issues and Trends.* New Delhi: Cosmo Publication. 1998;1:184-193.