



International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

LIS Professionals in Technological Era: Transformations and Challenges

Dr. Piyali Das

Librarian, M. U. C. Women's College, Burdwan, West Bengal, India

ABSTRACT

At present, we are living in an information society, which is based on promptly growing information resources. The traditional concept of libraries, which are completely decorated by print document, is changed to digital form with the support of Information Technology (IT). The changing environment has changed the role of LIS professional from being a custodian of books or printed materials to a provider of information resources. The librarians are facing new demands, new challenges, new expectations and a variety of information services from users. They are now to be more familiar with the skill of handling new technologies related to collection building, processing, organizing and disseminating of knowledge and information. For functioning smoothly in the digital environment, besides gaining the professional knowledge in Library and Information Science, the library professionals should have the knowledge of information technology and its application in library operations and services, both in theoretical as well as in practical domain also. Dramatic changes, largely the result of rapidly evolving information and communication technologies (ICTs), have affected significantly on the knowledge and skills requirements for library and information science (LIS) professionals to exist in this atmosphere. LIS professionals have to take digital technology as an opportunity not as a hazard in order to serve the information users in a superior way than before.

Keywords: ICT, digitization, new technology, digital transformation, digital information, information professional.

Introduction

Earlier period library was considered as a storehouse of printed material whereas library professionals were merely as warden of that house. Libraries like most institutions today are faced with disruptive technologies that challenge their relevance in a digital era. Search engines, social media, networked technologies, digitization are the main driving factors which drastically changes the way of society. As a result, seeking, processing and proper use of information requires new skills to this new information environment. Technology is used in libraries to do daily operations such as, process, store, retrieve and disseminate information. Presently libraries are not judged by quantitative resources. It has transformed the mode of delivery of services from traditional information domain to e-resources, online databases and online information retrieval and storage domain.

The quick transformation of technology affects the field of library & information science and these transformations will have an effect on subject professionals also. ICT has made a tremendous impact on every profession including librarianship. The LIS professionals have to cope-up with the proliferation of information as well as high expectations of users. Technology changes the role of information professionals, their job opportunities, inspiration and yet existence. These drastic changes, if managed properly, can be used effectively and efficiently to provide the right information to the right user at the right time. Information and communication technology not only affects the complex housekeeping operations of libraries, but also facilitates communication through networks for collection, storage and dissemination of information and has become a vast ocean of internet-based services.

At the same time ICT also works as a force to change the work style of library & information professionals. The technology is transforming speedily so library professionals or librarians require improving themselves about awareness of new technologies, otherwise they will not be able to offer the most excellent potential services to their ultimate users. Now we are heading inside to the ICT based library and librarians have the ability to utilize the changing technology to offer the best service to their patrons. This new era library is:

1. Combined collection of online and as well as traditional types of resources;
2. Housekeeping operations of library, such as acquisition, storage, preservation, retrieval is done through the domain of technology;
3. Entire collection is globally accessible and available directly or indirectly across a network;
4. Registered users are eligible to deal with available information without existing physically.

Why library accept this change:

The foremost goal of the library is to satisfy the information requirement of users to the maximum extent by using library resources. This raises a gap between user demand and library's available resources. Libraries are suffering from limited buying capacity, complex nature of recent documents and storage problems which include limited space, proper preservation policy. Present libraries extend their service beyond the walls of their parent institutions to online open access information spaces, dealing with intelligent internet resource sharing tools and online social communication media, and networking technologies. Library staff should also be in a position to support diverse and international universal learning communities that understand and are responsive and proactive to the needs of all types of communities that use the library, ensuring that they receive a correspondent high quality information service. Factors demanding adoption of ICT in libraries are:

1. Information explosion;
2. Searching strategy in traditional libraries;
3. Affordable cost of technology;
4. Demand of new generation users.

Advantages of use of technology in libraries:

- E-books, e-journals and e-resources are accumulated in a smaller space or in virtual mode, it does not accrue any physical space, it helps to reduce the space shortage of the library.
- There is no specific access time for searching or learning, users are able to access any time from any place of the year. Resources are available at the user's fingertips.
- Online reading materials sometimes allow users to attach their own thoughts, queries and opinions which many times are helpful to flourish the new ideas or concepts.
- Users can download text and use it for future reference which is also an advantage of technology.
- It frequently consents for several, simultaneous users at a time.
- Books which are subscribed by the library are available to all users at a time which helps to eliminate the problem of a useful book being misplaced or lost.
- Modern libraries are now implementing Web-scale discovery systems that enable the use of a single central index and search interface that allows searching across local library services, subscriptions collections as well as open access resources.
- Technology allows libraries to become labour intensive.
- With the help of an online database (OPAC) we are able to travel easily from the catalogue to a particular book more quickly.

Changing role of LIS professionals

In today's digitized world, we all are trying to know everything with the help of internet technologies within a few seconds. accessibility of the internet is easy everywhere at a sensible cost. ICT has brought unparalleled changes and transformation on every extent of library activity especially in the form of the library collection development strategies and library building. Users demand the latest information regarding their domain. To meet the changing demands of library users in an ICT environment librarians need to constantly improve their competencies and professional skill in order to develop efficiency and competence. Thus, LIS professionals have to change themselves and acquire more skills and additional roles.

In this new transformed environment, the role of librarians changes from librarian to information manager or knowledge manager. The changing role of the library professional indicates the challenges created by latest web technologies which demand a set of updated skills for facing user's satisfaction. So every library professional should have the following skills to perform their duties effectively.

- **Leadership Role and Managerial Skills**

To-days librarian is more or less to be a designer, knowledge developer as well as a moral manager of present knowledge-based information society in order to meet the information demand of the user community. So librarians should afford leadership, apply knowledge proficiency and enrich their management skills To meet information requirements and provide appropriate information services to users at specific times. Leadership is a style of working and motivating the users. Delicate qualities, performance styles and decision making capability are few criteria to measure good leadership. It is the most significant skill required for librarians to achieve the objectives of library usages. Librarians, as a leader should have maintained good relationships with management, staff and users.

- **IT Skills as Digital Information Provider**

Present IT based environment demand, librarians should gather current electronic information from public domain or a variety of available sources and prepare institutional e-resource repositories to help end users to access the required information. Skill of IT helps to Develop new and better strategies for information handling. A librarian should have good IT knowledge to handle everyday library work and perform various operations of the library. Librarians should have clear knowledge of how new technology is implemented in betterment of library service.

- **Proactive Information Professional Role**

Advancement of Technology has created challenges which entitle for changes in library services also. The fundamental objective of the library and information profession is always to provide the right information to the right user at the right time. In the modern automated library system the role of the librarian shifts from a mediator or in-charge to guiding patrons for suitable information sources. Librarians shift to the direction of a much more proactive specialized position, which includes information analyzing and repackaging.

- **E-Resource Managers**

It becomes a major challenge in the present time of a library and librarian is to provide information in electronic format and manage this diversity of e-resources. Librarians should always be unbiased when selecting content providers or vendors for a particular resource. In the library electronic resources are managed with the help of software. Electronic Resource Management (ERM) includes different steps such as selection, evaluation, acquisition, license agreement and renewing of existing e-resource, making the resource available to patrons that are essential for the better management of e-resources. Librarians have to keep track of newly arrived electronic information resources, especially such as e-journals, e-databases, and e-books which are mainly internet-based resources. It is very important for librarians to keep up-to-date on various changes and developments taking place in the areas of collection development and acquisitions. They should remain up-to-date themselves by attending national and international level seminars and conferences as well as subscribing to related journals, searching the Internet, talking to experts, following discussion lists etc.

- **As a Collection developer**

The adaptation of ICT in libraries, today's LIS professionals or librarians may participate in the collection development as a collection developer as collection is shifting from print media to electronic media. Their expertise, competencies and awareness towards the changing environment helps to handle various complex activities of the library for storage and maintenance of digital information.

- **As a Facilitator**

In the age of innovative information technologies, LIS professionals are trying to gain expertise to cope up with changing systems and software to deal with the information. So that they could act as a facilitator with the effective, pinpointed information to the right user, at the right time in an easy and comfortable way.

- **As a database and site developer**

LIS professionals or librarians now can also act as a website and database developer. They extend their hand to create, decide and maintain library websites as well as databases with international standards format for retrieving information easily and for providing wide-ranging or comprehensive access to information available in databases. Librarians can make decisions about the appearance of library websites on the internet.

Challenges faced by the LIS professionals

In the present e-learning and e-publishing environment, most librarians have to ensure effective, smooth and efficient digital information service delivery in a proactive way to the knowledge society. The following factors are parts of create challenge to digital librarians:

Library users : new generation users are so much familiar with the most up to date information and communication technologies. They are habituated with the use of the internet, social media and different types of search engines. Therefore, to enhance and satisfy the user's demand, the LIS professionals must develop a suitable library system, accordingly.

Organizational structure: Inclusion of technology has broken down the traditional organizational structure, which is an important point in changing the role of library professionals in the knowledge society. Now-a-days, electronic media such as CDs, DVDs, eBooks, e-journals, manuscripts (digital form), and various other documents in electronic form are available as information resources of a library. All these transformation forms of documents demand the library professionals to shift from the traditional library system.

Copyright and plagiarism: Copyright is a flaming issue in the present day. Library is not an outsider of it. Libraries and librarians need to be aware of their user community to maintain awareness about copyright issues. Library has the responsibility to maintain privacy and protect confidential information in database on the internet and intranet also.

Cyber crime: In 1995, American Library Association (ALA) in their code of ethics clearly declared that everyone should have the right to access information. So it is the responsibility of the library to protect their database and server from hacking, very carefully necessary procedures should be maintained. However, in the present information explosion era to protect databases from unauthorized use librarians should establish well-defined access policy.

Conclusion

Information Technology brings changes and affects almost every sector of our life. This innovative change is true in the case of libraries and information centers also. Library services is the compilation of a series of works like acquisition, preparing and organizing of different types of documents and making them available in many formats. libraries and information centers without computers and information technologies can hardly function today. In the present world due to the developments of IT the library and information professions have been changed and are trying to adapt. The traditional ongoing library and traditional library services will not vanish and technology is not the ultimate answer to everyone's information needs. However, as librarians, we must accept and adapt to the introduction of new techniques and systems. Dr. S. R. Ranganathan- The father of library and information science in India stated that, "Librarianship is a noble profession. A librarian derives his joy by seeing the dawn of joy in the face of readers, helped by him to find the right book at the right time." To accomplish this goal, in the present digital library era, it is essential that academic library professionals should be well trained and possesses requisite knowledge and skills in this respect.

Bibliography:

1. **Aharony, N. (2019).** The role of the librarian in the era of open access. In L. Chan & S. Rao (Eds.), *Open Access and Digital Libraries: Social Science Libraries in Action*. Chandos Publishing, p. 13-24.
2. **Ellis, L. (2019).** Virtual reference services: Strategies for creating a successful digital environment. American Library Association.
3. **Hashim, Lailli bin (2012).** Preparing New Era Librarians and Information Professionals: Trends and Issues. *International Journal of Humanities and Social Science* 2 (7) : p.151-156.
4. **Janugade, Ajit Vasantrao (2016).** Changing role of librarians in ICT era: a study. *Knowledge Librarian* 3 (5) : 1-5. URL : <http://www.klibjilis.com/3.5.1.pdf>
5. **John, Kishor, Singh, S P and Tiwari, Sunil, editors (2015).** Future of Library and Information Science. New Delhi : Ess Ess Publications.
6. **Mukhopadhyay, P. (2017)** Introduction to library automation. BLIE- 229, Block 1, Unit 1 IGNOU, 2017. URL : <http://egyankosh.ac.in/handle/123456789/35926>
7. **Nepali, s. & Tamang, R. (2022).** A Review on Emerging Trends and Technologies in Library. *American Journal of Information Science and Technology*, 6(1), <https://doi.org/10.11648/j.ajist.20220601.12>
8. **Shivakumar, G.T. (2017).** Impact of Digital Era on Academic Libraries: It's Play with Library Professionals. *International Journal of Library & Information Science*, 6 (4), p.1-7.
9. **Smith, A. (2021).** Transforming Libraries: A Framework for Integrating AI, Machine Learning, and Block chain. *Journal of Librarianship and Information Science*, 54(1), 45-63.
10. **Turner, H. (2020).** Adapting to Change: The Evolving Role of Librarians in the Digital World. *Journal of Librarianship and Information Science*, 52(2), 447-464.
11. **Yu, Holly and Breivold, Scott (2008).** Electronic resource management in libraries : research and practice. New York : Information Science Reference.