### ROLE OF LIS PROFESSIONALS IN TODAY'S DIGITAL ERA

Dr. Madansing D. Golwal	Mr.Datta T. Kalbande	Dr. Subhash P. Chavan
Librarian	SRF	Librarian
Nya.Tatyasaheb Athalye	Central University	Shri Asaramji Bhandwaldar
Arts, Ved.S.R.Sapre	Library,	Arts Commerce & Science,
Commerce & Vid.D.Pitre	Mahatma Phule Krishi	College, Deogaon ( Rangari ),
Science College	Vidyapeeth,	Tal : Kannad, Dist :
Devrukh Dist. Ratnagiri	Rahuri. Dist.Ahamadnagar	Aurangabad

#### Abstract

We are living in the information age. Information is the basic requirement for every human activity and it is important as food, air and water. Information in itself has no value, but its value lies in its communication and use. Information is the life blood of democracy and it is considered as the vital sources of power. Library & Information Science [LIS] professionals need to play an important role in the education process by making people aware of a need and motivating the use of information a new knowledge and a new ability. The paper discussed the concept of Digital Library, the role of LIS professionals and changing face of traditional library to digital libraries.

Keywords: LIS Professionals, Traditional Library, Electronic Library, Library Resources, Internet, Digital Library and Digital Information.

#### 1. INTRODUCTION

Today the emergence of digital technology and computer networks has provided a means whereby information can be stored, retrieved, disseminated and duplicated in a fast and efficient manner. On a global level, digital libraries (DLs) have made considerable advances both in technology and its application. With the advances in information and communication technologies the libraries are now changing to what may be called virtual or digital libraries. It has affected significantly the nature of delivery of library resources and services.

The traditional concepts of organization, bibliographic description and dissemination of information are to be fine-tuned to the new environment by the library and information professionals. So the LIS professionals working in the environment have to face challenges. Hence it becomes important for the patrons/clients also to develop skill in information literacy so that they can identify, evaluate and use the relevant information effectively. The emergence of a vast storehouse of information on the Internet poses a different kind of conundrum Librarians, the traditional gatekeepers of knowledge are in danger of being bypassed, their skills are ignored, their advice unsought. Search engines send user straight to the information they require – or users may think – without any need for an intermediary to classify, catalogue, cross-reference, advice on sources.

The location and provision of information services has dramatically changed over the last ten years. There is no need to leave the home or office to locate and access information which is now readily available on-line via digital gateways furnished by a wide variety of information providers (e.g. libraries, electronic publisher, businesses, organizations, individuals). Information is electronically accessible from a wide variety of globally distributed information repositories.

Information is no longer simply text and pictures. It is electronically in a wide variety of formats, many of which are large, complex (i.e. video & audio) and often integrated (i.e. multimedia). In Digital era, information in the digital from is rapidly replacing the traditional printed counter parts, resulting in increased computer skills, processing tools and fast communication network connectivity. Digital information or e-information is more abstract dynamic in comparison to printed form. Hence understanding of how to enhance its value and its interaction becomes an important prerequisite for the users in the information society.

#### 2. CHANGING FACE OF LIBRARY

Libraries are changing i.e. from traditional to electronic library. They face changes in the context of Types of information, ways of information provision, services, and users.

# 2.1 Traditional Library:

Libraries are where the access points such as, library catalogues as well as library collections are print based and their management is by and large manual.

# 2.2 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.

#### 2.3 DIGITAL LIBRARY [DL]

DL 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. While the method of access provides convenient information retrieval for a wide range of global user. Essentially a DL deals with organization and access of a large information repository. In all probability, digital libraries are likely to augment traditional libraries, such as an on-line card catalogue augments, rather than strictly replacing, a book collection. The reason for this could be than the digital medium tends to be better for searching and the physical medium better for reading. Let's us know about DL and the skills required to build up digital collection

According to Wiederhold "A DL 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. DL is a combined technology and information resources to allow remote access, breaking down the physical barrier between resources".

Winensky viewed that DL will be a collection of distributed information services, producers will make it available, and consumers will find it through the automated agents.

DL is a "Collection of digital object (text, video, audio) along with method for access and retrieval, [as far as users are concerned] and also for selection, organization, and maintenance (from the point of view of librarian). Ian Whitten.

DL is not merely equivalent to a digitized collection with information management tools. It is also a series of activities that brings together collections, services and people in support of the full life cycle of creation, dissemination, use and presentation of date, information and knowledge.

DL is organized collections of digital information. They combine the structure and gathering of information, which libraries and archives have always done with the digital representation that computers have made possible. The major difference will be that a DL will consist of machine readable data. This implies that the traditional concept of a collection must be revised to accommodate materials that are accessible electronically.

A source of confusion in this area has been use of terminologies like 'virtual', 'digital' and electronic libraries. One persons DL is often another's virtual library. Some useful distinctions have recently been made:

2.3.1 Electronic Library

A library that provides collections and / or services in electronic form.

2.3.2 Digital Library

A library that provides collections and / or services in digital form.

### 2.3.3 Virtual Library

A library that does not physically exist, most often used to denote a library with distributed collections or services that appear and act as one.

## 2.4 NEED OF DIGITAL LIBRARY

Dr. A. P. J. Abdul Kalam described the role as DL is where the past meets

the present and create a future. A DL provides equitable access to knowledge to all the people, irrespective of place, caste, creed, color or economic status. DL unites rather than divide. Therefore there is a need of time to develop DL.

The DL offers significant and unparallel improvement and value addition to library services while providing workable solution to problems traditionally associated with the management of print based collection in traditional libraries. Advances in online storage technologies enabling storage of large amount of contents at increasingly affordable cost. Key components of digital libraries are therefore:

- Geographically distributed digital information collections and users
- > Information represented by a variety of digital objects
- Large and diverse collections
- ➢ 'Seamless' access

# 2.5 ADVANTAGE OF DIGITAL LIBRARY:

DL has certain characteristics, which make them different from traditional library. It has expansive and accurate system of searching with large volumes of text, image and audiovideo resources. Digital libraries do not need physical space to build collection and it can be accessed from anywhere, any time. Different people can access same source at the same time.

The advantages of digital libraries are mentioned herein below:

- Preserve the valuable documents, rare and special collections of libraries, archives and museums.
- Provide faster access to the holding of libraries world wide through automated catalogues.
- Help to locate both physical and digitized versions of scholarly articles and books through single interface.
- Search optimization, simultaneous searches of the Internet make possible, preparing commercial databases and library collections.

- Offering online learning environment.
- Making short the chain from author to user.
- Save preparation / conservation cost, space and money.
- Digital technology affords multiple, simultaneous user from a single original which are not possible for materials stored in any other forms

# 2.6 DISADVANTAGE OF DIGITAL LIBRARY:

New technology has brought many advantages but simultaneously it also has certain disadvantage

- ➢ Costly affair
- Technology obsolescence (Hardware & Software)
- Storage media relate
- Dominance of data creators and publishers
- Trained manpower
- User education and training
- Security against hacking & sabotage

# 2.7 LIBRARY RESOURCES IN DIGITAL ERA

The resources provided by the digital libraries can be classified into in-house resources and external resources. In-house resources are those resources that are stored in the web server locally and made accessible through the network. E-books, course notes, and application notes etc. are examples of the in-house resources. The external resources are those materials that are not stored in the web server. External resources include online journals, online databases, online e-books etc. External resources are provided by different publishers - ASME, ACM, IEEE, Oxford University Press Journal (OUP) and many more are there. The publisher provides access to their full text materials by two methods:

- Username and password
- Internet Protocol (IP) address based Access Control Method

# 3. ROLE OF LIS PROFESSIONAL IN DIGITAL ERA:

The ready availability of information on the Internet, and its widespread use, really presents Librarians with an opportunity, not a threat. Technology Savvy users realize they need help, which Librarians can provide. Librarians now face difficulties and complicity challenges due to new trends in information access.

In the present technological/Internet era the professionals have to change themselves as the information profession is being changed. Now information specialists have to work as e-information resources in which various professional groups are expected to map a strategy that leads to produce, manage, maintain and service the information. Information professional has to work as:

2.8.1 Librarian- In addition to being library manager, they also act as collection development, technical processors and so on, taking care of information quality.

2.8.2 Information Manager- To meet information need of the user they should know how to manage and deliver appropriate information services.

2.8.3 Information adviser/instructor- Ensure that user/staff know how to access relevant sources of information (literacy).

2.8.4 System & Networking- For delivery of information to their users in an appropriate manner develop and design appropriate systems.

2.8.5 Skills required for LIS Professionals:

The basic goal of library and information profession has always been to provide access to information to those who need it. The activities realizing this goal have evolved and transformed over the years. This includes - Available technology, and need of an evolving information society. Information activities have been guided by the developments in the field of storages, presentation and archiving of knowledge, collection development and organization of knowledge, information explosion and computers in information retrieval. Librarian and information professional involved in information gathering, storage, retrieval and dissemination on one hand and on the other hand the computer specialists who supports the library and informational professionals in this endeavor. For successful implementation of Digital Library, it is essential that LIS professionals are well trained and possess requisite knowledge and skills in this respect.

a) Knowledge & Skills

Librarians need to know understand -

- Knowledge of resources (books, journals, i.e. resources, Internet)
- Teleological facilities and resources (computer, online catalogues, websites, LANs file servers etc.)
- Financial resources (Budget) Human resources (Skills for manpower training)
- b) Competencies that required to possess in LIS professional:
  - Acceptance of change.

- ➤ Knowledge of user interaction with knowledge resources.
- Provide quality service.
- ➢ Be adoptive, flexible and resistant.
- ➢ Be resourceful
- Possess excellent communication skills; constantly update personal knowledge base by keeping in touch with the latest development
- Create awareness among the users, make them accept the changes
- > Be an information management strategist, etc.
- c) Technical Knowledge required :
  - > Operating systems Windows, UNIX, LINUX.
  - ▶ World processing, Graphics, Spread sheet & Presentations.
  - Database Management Systems including the skills in Bibliographic Database Management Systems.
  - General purpose programming, Networking
  - Web page Development and Content Management
  - ▶ Information Retrieval software for online, CD-ROM and Internet.
  - Library software packages, acquaintances with Digital Library Tools.

# 4. CONCLUSION:

Building a digital library is expensive and resource-intensive. Before embarking on such a venture, it is important to consider some basic principles underlying the design, implementation, and maintenance of any digital library. Finally, we need to strive for continued open access to all knowledge. There is no better time to start than now and no better place to start than with our own valuable collections.

It concludes that, the world of information is undergoing rapid change. An information age is a great turning point in the history of civilization. The day has arrived when it is most important to learn to access, analyze apply and evaluate such information. As traditional custodians of information, librarians need to be aware of the implications of these changes and develop technological and managerial skills, which will enable them to make effective use of information and to meet their organizations changing information need.

### REFERENCES

- Borgman, C. (2000). Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World. MIT Press, Cambridge.
- Budhu M. and Coleman A. (2002). The Design and Evaluation of interactivities in a Digital Library. <u>D-Lib Magazine</u>. <u>8(11)</u>. 1-19.
- Kalam A. P. J. Abdul (2007). Indomitable Sprit. Rajpal & Sons, Delhi. 177-179.
- Kanjilal, Uma (2004). Education and training for digital libraries: Model for web enhanced continuing education programme IN International Conferences on Digital Libraries. New Delhi 24027 February, 2004. p. 629-635
- Kenney, A. and Rieger, O. (2000). Moving Theory into Practice: Digital Imaging for Libraries and Archives. <u>Research Libraries Group</u>, Mountain View, CA, 2000.
- Lesk, M. (1997). <u>Practical Digital Libraries: Books, Bytes, and Bucks</u>. Morgan Kaufman Publishers, San Francisco.
- Levy, D. M., & Marshall, C. C. (1995). Going digital: a look at the assumptions underlying digital libraries. Communications of the ACM, 38(4), 77±84.
- Lucier, R. E. (1995). Building a digital library for the health sciences: information space complementing information place. Bulletin of the Medical Library Association, 83(3), 346±350.
- Lyman, P. (1996). What is a digital library? Technology, intellectual property, and the public interest. In Books, bricks, and bytes. Daedalus, Journal of the American Academy of Arts and Sciences; Proceedings of the American
- Malviya Rama Nand (2008). <u>Digital Library and Academic Society in India</u>. Asian Books, New Delhi. 3-25.
- Marchionin, Gary and Maurer, Hermann (1995). The role of Digital Library in teaching and learning. Communication of the ACM, 38(4).
- National Information Standards Organization. The Dublin Core Metadata Element Set: Draft Standard Z39.85; see <u>www.niso.org/Z3985.html</u>.
- Nyamboga, Constantine Matoke, Asundi, AY, Kemparajee TD and Pawinun, Pratap (2004). Required skills of Information technologies for Library & Information professionals: A case of University Libraries in Kenya-Africa. IN International Conferences on Digital Libraries. New Delhi 24027 February, 2004. p. 629-635

- Oppenheim C. and Smithson D. (1999). What is the Hybrid Library? Journal of Information Science. 25(2). 97-112.
- Sharma P. L. (2005). Changing Role of Librarians in Digital Library Era and Need of Professional Skills, Efficiency and Competency.
- Wiederhold, Gio (1995). Digital Libraries: Value and Productivity. Communication of the ACM, 38(4).
- Wilensky, Robert (1995). U C Berkley's Digital Library Project. Communication of the ACM, 38(4).
- Witten, Ian H. (2001). Greenstone: Open-Source digital Library Software. D-Lib Magazine, 7(10).
- Zhao, D. G., and Ramsden, A. (1995). Report on the ELINOR electronic library pilot. Information Services and Use, 15, 199-212.

