Library Professionals in Digital Environment: A Challenging Task

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Discusses the changing horizon of modern librarianship. State the digital technology influences the entire librarianship. The Web and Internet revolutionizes the librarianship requiring the necessary development to develop human resources to fit in the new environment. The present trend demands more from the traditional library professional.

Keywords: Information Manager, Information Broker, Dublin Core, Digital Environment

1. Introduction

Librarians have always been expected to possess specific knowledge of information resources and tools to address the information needs of their clientele. Librarians often serve as "Sense givers" to information users in the physical and now in the digital library. To perform the role of "Sense giver" librarians must combine the following:

- Technical expertise in computing and telecommunication,
- Commitment to solving organizations' and individuals' information needs,
- S Knowledge of information seeking and information use and
- Commitment to information access and dissemination.

The role of the librarian has changed tremendously in recent years, and the information and communication environment in which these services are offered continue to stretch beyond the walls of the physical library necessaciating exploration of "Digital Library".

2. Role of Library Professional in Digital Era

Librarians now face difficulties and challenges due to new trends in information access.

In the present electronic/digital 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 out the strategies that lead to produce, manage, maintain and service the information. Information professional has to work as librarian, record manager, archivist, information manager, information adviser/instructor, information broker, and system & networking. The multifarious roles of the modern librarians are as follows -

- 2.1 Librarian In addition to being library manager, they also act as technical processors and so on, taking care of information quality.
- **2.2 Information Manager -** To meet information need of the user they should know how to man age and deliver appropriate information services.
- 2.3 Information instructor/adviser Ensure that user/staff know how to access relevant sources of information.
- 2.4 Information Broker Collecting information from different sources and repackaging the same in the required format as per the requirement of information seekers.

3. Basic Functions of Libraries and Archives

Mainly the basic functions of a modern library are acquisition, processing (arrangement, classification, description, and housing), reference & access, preservation and management.

- **3.1** Acquisition How to acquire publications and records from creators' custody as well as those lying scattered in different places. This has become major problem to the information professionals. For example, archivists used to use boxes and kept the records in original order; but a modern records manager has to survey file cabinets, and identify records in computer file systems before putting it in the storage system.
- 3.2 Processing Preparation of digital materials for long-term storage is another problem faced by the archivists. Librarians usually used to put call marks on books to associate with the physical item with its storage location. Archivists used to pull staples, perfect order, refolder, and stabilize fragile materials. What is the digital equivalent of these activities? In the paper era, archivists wrote finding aids with folder lists; librarians cataloged the materials using AACR and MARC. Today, they may need to think in terms of Dublin Core, full-text search engines, and SQL queries. They worried about temperature and humidity; what do they need is to know about digital storage and its processing procedure.
- 3.3 Reference and Access The library and information professionals needs to know not only the acquisition and processing but learn new skills, they need to help patrons understand how to use digital materials. They bring documents or boxes to residing rooms, but now-a-days some patrons may access content directly through the web without the help from information professionals. They conducted reference queries, but digital-era patrons prefer self service though they are ignorant about the different digital resources. The library and records professionals' role may be evolving from gatekeeper to guidance.

- **3.4** Preservation In the past, many reformatting projects were one-time efforts to protect fragile materials by moving them to a stable media such as microfilm. Now in the digital era, where there is no stable medium, librarians and records professionals may need to develop ongoing programs to counter recurring technical obsolescence.
- **3.5 Management -** Not all library and records professionals work directly with holdings. Managers need to know enough to ensure that the work is being done well. When repositories contract work to information technology specialists, it is essential to know how to manage those projects so that the work is robust and fits into a larger program.

4. Skills, Knowledge, Competencies 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. Information professional involved in information gathering, storage, retrieval and dissemination on one hand and on the other hand the computer specialists who supports the 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 regard.

4.1 Knowledge & Skills

Information professionals need to know understand -

- **⇒** Knowledge resources (books, periodicals, i.e. internet etc.)
- → Technological facilities and resources (computer, online catalogues, websites, LANs file servers etc.)

Financial resources (budget) and its management, human resources (skills for manpower training) and its development.

4.2 Competencies Expected from LIS Professional

- Acceptance of change.
- S Knowledge of user interaction with knowledge resources.
- Provide quality mend service.
- ⇒ Adoptive, flexible and resistant.

- 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.

4.3 Need of Technical Knowledge

- Operating systems Windows, UNIX, LINUX.
- Word 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 Tool (GSDL, D-Space, KOHA, E-Print, etc.)

5. Building Effective Digital Library Community

It is necessary to realize the principles set up for Digital Library Initiatives (DLI) through more concrete action plan. In order to establish and develop a significant corpus of digital collections that are relevant to the target community, several activities are essential for keeping in mind, some of them are:

- Developing guidelines for the selection of analog collections to be converted and existing digital resources;
- Educating community of DLI standards and best practices;
- Establishing management structure based on broad community participation with active links to state and national efforts:
- Removing barriers of policy and practice that may inhibit full citizen access to and use of the digital library;
- ⇒ A collaborative management approach that encourages broad contribution to and use of the DLs will be the key to the success of the whole digital library enterprise.
- Long term planning, collaboration and ongoing assessment will be key principles for ensuring success;
- ➤ Fund raising for building the infrastructure and for starting digitizing projects;
- Manpower development in a holistic way;

- Adopt and promote common standards and best practices to create interoperability within cooperating entities and outside other digital libraries to:
 - Ensure universal accessibility and protection of user rights,
 - Optimize retrieval and navigation for a diverse spectrum of users while maximizing the amount and quality of the information that is captured in the system; and
 - Assure archiving and enduring access.
 - Attention to both the selection of standards and practices will be critical to the success of the library.
 - Monitor the digital library community for emerging and stabilizing standards and practices, and induce new standards as appropriate.
 - Establish a comprehensive assessment program that involves on going feedback and wide dissemination of key findings.

Conclusion

The ICT world is changing in a fast speed. To cope up with it the LIS professionals have to move in right direction with a farsighted. They have to vision the traditional ways to adapt to social and technological changes, but they can't replace. While libraries are distinct from the internet cafes, librarians are the only suited professionals to guide scholars and citizens towards an appropriate evaluation of online resources to provide accurate information to the needy scholars.

The digital or virtual library uses technology and networks to link people to resources with a goal of providing universal access to these libraries. Normally the linkages between other digital libraries and information services are transparent. In summary, digital libraries are a systematic means to collect, store, organize, and distribute information and knowledge in digital form. For the most part they are an efficient medium to deliver information to all sectors of society.

The librarian must attempt to bridge gaps of understanding, or sense making, as the user meanders in and out of online information.

Today's librarians encounter sense making environment as they attempt to "make sense" of their experience or the experience of a networked-information user.

In short libraries and librarians are extremely important for the preservation of our culture to ensure the study and research of our glorious past for the posterity. To achieve the above we should have digital libraries manned by digital librarians.

References

- 1. Kanjal, Uma (2004) Education and training for digital libraries: model for web enhanced continuing education programme *IN* International Conferences on Digital Libraries, New Delhi, Feb. 24-27, 2004, p629-635
- 2. New skills for digital era: a colloquium exploring the skills librarians, archivists, and records managers need to flourish in the digital era, The National Archives, New York, 2006
- 3. Sharma, P. L. (2006) Changing role of libraries in digital library era and need of professional skills, efficiency &competency, NHPC, Haryana
- 4. Sridhar, M. S (2007) Information management in digital environment: a librarian, s perspectives, DESIDOC Bulletin of Information Technology, 27 (4), p 45-50.
- 5. Witten, Jan H. et. Al (2001) Greenstone: open-source digital library software, D-Lib Magazine, 7(10)

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