



## E-Environment and new Challenges for Academic Libraries & Librarians

DR. AJAYKUMAR M. RAVAL

Librarian,

B. K. Mer. Bank Law College,  
Palanpur, Gujarat (India)

### Abstract:

*This paper tangibly reflects paradigm shift emerging from technological developments required for effective and efficient services by the academic libraries of 21<sup>st</sup> Century. The open information culture has shifted focus from subject experts and limited modes to common man's participative domain where inputs can be simultaneously added and accessed and new modes of wikis, blogs, Web 2.0, information commons, instant messaging are in vogue, where academic libraries has great onus of quenching the quests of information seekers by incorporating the revolutionary technological changes to provide state of the art services. The challenges associated with acquiring, organizing, making available, and preserving the information. The remarkable growth of Internet has made significant revolution in all the areas of science and technology. Libraries and librarians have to be change otherwise it is difficult to provide good service to students and researcher.*

---

**Keywords:** *Academic libraries, Challenges, E-Environment, E-learning, Librarian*

---

### 1. Introduction

At the present era we can see developments in computers, microelectronics, and communication technologies have radically changed the library and information environment. The information atmosphere around the world is changing every minute and growing at a tremendous speed due to the emergence of the web based Information and Communication Technologies (ICT), globalization of networks and Internet.

The information and communication revolution in the last decade have created many new scenarios for academic institutions to ponder. E-learning, open learning, digital libraries, collaborations and strategic alliances are some of the buzzwords we hear today.

### 2. Changing role of academic libraries

Academic libraries are changing dramatically by adopting new means of technology in all activities of print to e-environment like printed library card catalogues have been replaced by computerized OPAC system with a variety of web-based graphical user interface (GUI) functions, availability of numerous e-databases, e-journals, information resources, services for users. To face the new information explosion, academic libraries will have to meet even more challenges and opportunities to serve students, faculty, staff, scholars and other users, all with

many expectations and many more demands triggered by the growth of emerging and cutting edge technologies in academic learning environments. Libraries are also changing in terms of their collection, facilities and services owing to constant changing scenario of information on account of Information and Communication Technology [ICT] applications and information seeking behavior of clientele. Libraries are no longer considered as store house of knowledge rather they now act as Learning Resource Centre. Information and communication technology (ICT) has made a deep impact on all types of libraries. Today we are talking about digital and virtual libraries. At the same time we are very much worried about the future of libraries in general and academic libraries in particular. But we would like to emphasize that the future of academic libraries is dependent both on external and internal changes. The ICT is providing the library and information professionals with both opportunities and challenges.

*The new role of academic libraries, we can see at present environment as:*

### **2.1 Hybrid library**

E-environment created hybrid library. The hybrid library is a term used to describe libraries containing a mix of traditional print library resources and the growing number of electronic resources. Hybrid libraries are mixes of printed books and magazines, as well as electronic materials such as downloadable audio books, electronic journals, e-books, etc. Hybrid libraries are the new norm in most public and academic liberties

### **2.2 Automated library**

Library automation may be defined as the application of computers to perform traditional library housekeeping activities such as acquisition, circulation, cataloguing, reference and serials control. Automation is used to reduce the amount of staff time devoted to repetitive (and often less challenging) activities that must be done in any properly functioning library. It is to remember that, various library operations are automated, not the library as such.

Automating an academic library is the process which restructures its functions and reinvents its services. By keeping a database as the basis, automation converge new technologies of information storage and retrieval with traditional housekeeping operations. An automated academic library can serve the teaching and learning community more effectively. A reduction in the time needed for routine operations can be utilized to give customized services to the users.

### **2.3 Digital library**

Digital library is a library in which a significant proportion of the resources are available in machine-readable format (as opposed to print or microform), accessible by means of computers. Now engaged in different sector as content developer, knowledge manager, cyberarian and so on. This is due to the sea change in the Info-world. The Information world is now undergoing through a transitional period. Now the world is shifting from a Library-centered to an information- centered society. Resources are shifting from paper-based documents to predominantly digital documents, which are, using search engines, online databases, data mining, etc.

### **2.4 Library 2.0**

Library 2.0 is not to replace traditional philosophy and service whatever library has, but it's about enhancing and extending its services into new areas. For being everywhere, library has to push their genuinely valuable content, services, staff expertise from the self defined boundaries to where user might stand to take benefit from them. Library can take the advantage of Web 2.0 technologies and implement them in the different services to meet the expectations of new generation of users. In this changing environment, the marriage of web 2.0 with academic library create a new buzz word 'Academic Libraries 2.0' or A-Lib 2.0, which the new generation librarians see as a great survivor. As changing role of libraries, other side role of librarians is also being changed.

### **3. Role of Librarian**

In the present electronic environment, academic librarians are required to work independently or as a team to deliver service-oriented and user-centered applications, instructions, programmes, projects and services. In addition to general qualification and requirements, a commitment to excellent user centered services, effective oral and written communications, as well as team collaborator must also possess additional capabilities, experience, knowledge and skills such as:

- (1) Expertise in the use of innovative emerging technologies to design and develop web-based applications, programmes and services.
- (2) Assist users to locate access, store and transform electronic information resources, services and instructions across multiple applications, databases, networks, platforms and systems through an academic library's information commons.
- (3) Having knowledge of designing, developing, launching and maintaining of digital content management and assess, evaluate, recommend and test various methodologies, policies, and standards for utilizing computer software in the process of creating and preserving digital collections and resources.
- (4) Assess, understand, think and adopt changes fit to the requirements rather become blind follower of versatile technological developments.

### **4. Challenges**

Libraries are supplementing and replacing print resources with electronic resources at a fast pace and almost all of the electronic resources are now available on the web. One of the advantages of web environment as compared to print environment is that you can link from one document to another logically related document very easily. For example, it is very important for researchers to be able to link directly from a citation or abstract to the full-text of the article and from a reference at the end of a full-text article to the referenced full-text article without any navigation. As more information resources become available electronically on the web, linking becomes even more important to researchers. Retrieval methodology on the web has developed within this open and unstructured environment, where tools have purposely developed to provide simple and easy to understand interfaces based on word searching and simple directories. This is an environment where retrieval services can produce results irrespective of the skills of the client, where the medium itself, hypertext linking, can provide the retrieval method and deliver the actual results, and where the provision of intuitive options and visual cues are critical to the effectiveness of retrieval tools. The need to accommodate user behavior is made more challenging because users do not necessarily exhibit a single approach when adopting retrieval

strategies on the web. Instead it must be assumed that users may act differently when searching for different types of content, or when assuming contextual persona. Their behaviours will reflect different states of knowledge in a given subject area, different assumptions about content, and the different social and emotional contexts that generate specific user needs. The solution to this issue is to provide a variety of discovery tools and to design the web site so as to present them all as equally accessible alternatives. The libraries all over the world are now responding with adaptability, creativity and flexibility. Indian librarians of today serve in a society which is actually in flux, torn by the technological revolution and rapid political changes. Librarians and information professionals in India are now experiencing both excitement and anxiety as a result of the sweeping societal changes.

*The major challenges faced by present college librarians are:*

- Complexity in locating and analyzing and linking of Information;
- Overloading and redundancy of information;
- Lack of Standardization of hardware and software ;
- Financial investment for setting and maintaining the technology;
- Interpretability of Intermediary and end users;
- The existing technology may be insufficient to accommodate the tremendous growth of information on Internet.

## **5. Conclusion**

Changes are inevitable thus, ignoring the change leads to failure and acceptance trails to success. The challenges associated with acquiring, organizing, making available, and preserving the information. The remarkable growth of Internet has made significant revolution in all the areas of science and technology. Library staff must be capable of working effectively in partnership with faculty members to enhance the strength of teaching and research. The information and communication revolution in the last decade have created many new scenarios for universities to ponder. E-learning, open learning, virtual libraries, digital libraries, co laboratories and strategic alliances are some of the buzzwords we hear today. If we cannot or will not do this, our campuses will invest in other priorities and the libraries will slowly, but surely, atrophy and become a little used museum of the book.

## **References**

1. Akeroyd, John. (2005). Information Management and E-learning: some perspectives. Aslib Proceedings: New Information Perspective. 57(2): 157-167.
2. Arant, Wendi and Benefiel, Candace R. (2003). The image and role of the Librarian. Howorth Press.
3. Barton, Jane. (2005). Digital Librarians: Boundary Riders on the Storm. Library Review. 55(2): 85-90.
4. Griffiths, (JR) and Craven, (J) ed. Access, delivery, performance: the future of libraries without walls. Facet Publishing, London.
5. <http://en.wikipedia.org/wiki/wiki> accessed on 25th August 2012.