

Academic Libraries under the Influence of ICT: An Indian Perspective

Manish Garg

Department of Library & Information Science
Kurukshetra University, Kurukshetra

***Abstract:** Rapid developments in Microelectronics, Information and Communication Technology and advent of Internet have radically changed the library and information environment. As a result the information handling and seeking habits of both Academic libraries and its users have changes substantially. This paper endeavorsto detail the impact of technological advancement on the Academic Libraries and its services. Here, an attempt has been made to describe different features of a modern Academic Library along with the challenges it faces.*

Key Words: Academic Libraries in India, Transformation of Academic Libraries, Library 2.0, Wiki, Blog, Challenges for Academic Libraries in India.

Introduction

The progress of any nation largely depends on its education system along with the quality of the libraries it holds. Without a well resourced modern Academic Library, it is impossible to cater good education at any level. Academic Libraries are the repositories of knowledge and performs as an integral part of the education system holding the solemn responsibility of producing good citizens.

With the introduction of Information and Communication Technology (ICT) to libraries, the nature and concept of libraries have changed dramatically. It has provided libraries with new opportunities to improve their resources and range of services, which is almost impossible to provide otherwise manually. The impact of ICT has been so tremendous on libraries that it has transformed the concept of libraries from a store house of books to an intellectual information dissemination centre open for all. Further, the advancements in internet technologies provided a unique architecture for information management which proved to be a boon to modern libraries. It enabled the libraries to cross the geographical limits and cater the global information available anywhere in the global village. Libraries have now metamorphosed into digital institutions. A library cannot be judged by its quantitative resources. Today, libraries are surrounded by networked data that is connected to a vast ocean of Internet-based service. Moreover, electronic resources relevant to the professions are developing at an unprecedented pace.

Academic Libraries are considered to be the nerve centers of academic institutions and must support teaching, research, and other academic programs. The situation in Academic Libraries of India is the same as that of Academic Libraries the world over; however, Indian libraries are constrained to provide

maximum information with limited resources. In other words, the Academic Libraries are the hub around which the scholarship revolves.

Academic libraries in India at a glance

India has a large education system. There are 667 Universities, 35525 colleges and 11565 Stand Alone Institutions out of which 94% universities/colleges and 98% stand alone institutions possess library facility (ASIHE: 2012-13). There were 78.1% govt. schools with any sort of libraries in 2014 (ASER:2014)

Academic Library Redefined

Developments in ICTs have offered academic libraries very exciting and challenging opportunities that requires them to respond positively in all facets of their services and functions if they are to remain relevant in the 21st century. It is a mandatory condition for Academic Library to implement/up-grade the ICT equipments and software in order to cater the innovative services to its users. The Academic libraries have advanced more over the last few decades then in its entire previous history of development. The factors affecting change may be divided into four categories: economics, technology, higher education and organization. Although, it must be remembered that it is the particular combination of factors that is causing the major impact on libraries, for reasons of clarity each category will be examined individually. There are also two types of drivers that affect the environment of academic library such as external drivers (i.e. patrons requirement and market competition etc.) and internal drivers (improving operational efficiency, need to improve the quality of products and services, process improvement etc.) (Midda et.al.:2009). The above factors have increased the capacities of Academic Libraries enormously.

Gone are days of standalone libraries, now Academic Libraries are part of network(s) and consortia capable to access huge store of electronic resources. Moreover, the range of the services has increased and ways of housekeeping have improved substantially.

Senthilkumar, M. has tried to highlight this shift of Libraries because of ICT as under:

- Traditional libraries to digital libraries,
- Print on paper to digital information,
- Card catalogs to Web OPACs,
- Chains to RFID tags,
- Print journals to online or electronic journals,
- Ownership to access,
- In library access to remote and desktop access.
- Information availability at libraries – 9 a.m. – 5 p.m. to 24X7.
- Photocopies to digital copies,
- DDS being provided through E-mail instead of post or fax.
- standalone libraries to Information networks
- Real to virtual libraries.

In addition to above, the following changes can also be identified:

- Typing data to scanning data.
- Shelving documents to maintaining digital documents.
- Manual circulation to RFID based automatic circulation.
- Browsing information on shelves to searching databases online.
- Printed text to hyper text.

Features of Modern Academic Libraries

Academic Libraries have transformed its services to a great extent. With the help to ICT, the existing services have been improved and several new innovative services have been developed. These improvements have empowered the Academic Libraries to play a major role in the education system. The new roles of a modern Academic Library are discussed as under:

Information Access point: An Academic Library plays a major role of Information Access point for students, teachers and researcher. They all reach the Academic Library to get whatever information they may need for their learning, teaching or any academic activity such as research, presentations, lectures, projects and reports etc.

Digital Resources: The libraries can never be considered as a growing organism any longer. The Academic Libraries are storing and catering information in digital form much. The whole information stored in a library housed in a multistoried building has come on the screen of a computer ready to be accessed on a single click of the mouse. It not only provides all the traditional services of a library but also some innovative

services with the help of computers, data bases, networks, consortia, multimedia equipments, electronic information storage and retrieval, scanning of data and electronic delivery of information etc.

Web log: A web log (commonly known as Blog) is a web page generally maintained by an individual. It is the place where the participants share their views, opinions, experiences and comments etc. The blogs are increasingly being utilized by libraries for general announcements, promotional activities for any new service, notices, alters for users, supports, advices and information on new arrivals etc. It has also become a useful marketing tool.

Wiki: It is a website, webpage or database developed by the entire community. It allows any visitor/user to modify or add to the content. It uses simplified markup language (commonly known as “wiki markup”) and often edits with help of a rich text editor. A wiki is run using wiki software, also known as a wiki engine. Hence, the Wikis are generally utilized to create collaborative websites, to power community websites, for note making and developing collaborative encyclopedia. These sources are not authenticated or validated but still the ease of use and comprehensiveness of wikis have made it an integral part of reference service of the Academic Libraries. One of such very frequently used wiki is ‘Wikipedia’.

Libraries can use Wikis as a communication tool to enable social interaction among librarians and patrons. Users can share information, ask and answer questions, and librarians can do the same within a Wiki. Moreover, a record of these transactions can be achieved for perpetuity. Transcripts of such question-answer sessions would serve as resources for the library to provide as reference. A Wiki like platform created for the librarians to work collaboratively and concurrently on providing answers to the user enquiries. This allows any staff to tap on the collective wisdom of the communities of subject librarians and provide quality answers to their queries. (Kumar: 2009). In general wikis can also be considered as an effective tool for the Knowledge Management.

Library 2.0: The term ‘Library 2.0’ was coined by Michael Casey in September 2005. The term was exposed to a wider audience when Michael Stephens discussed Library 2.0 on the ALA’s Techsource Blog. In general terms the application of Web 2.0 in libraries is known as Library 2.0. Library 2.0 is a concept that operates to meet the rising and changing expectations of users. It envisions that the libraries should be available at the point of need and integrated with services from beyond the library, for example through portals and within virtual learning environments. It seeks to ensure that library services and resources are

accessible to one and all with no hassle or restrictions (Chad & Miller, 2005).

The Internet has made a massive impact on modern life. It is free in many places and offers easy to use services that are available on an anywhere anytime basis to those not separated by the digital divide. Some companies, like Google and Amazon, have exposed the downside of library services available in a physical building for limited hours. The users find retrieving information from the Internet easier than visiting a library. The overwhelming success of Internet services indicates that libraries have to evolve and change to meet the needs of modern users. The application of Web 2.0 tools can easily help libraries to survive and flourish in the Internet age. (Miller, 2005; Notess, 2006). It is a concept that has personified new generation of library services to meet the present day users' needs and expectations.

On-line Reference Service: With the help of internet, Libraries are offering instant Reference Services to its clientele on-line. It is live communication between the librarian and the user where text, images and hyper media files can be delivered to the user in electronic form. Many of the Academic Libraries are providing this service 24x7x365.

Disseminator of Information Literacy

ALA defined information literacy is "recognizing when information is needed, and having the ability to locate, evaluate and use effectively this needed information." ALA evolved this definition and set information literacy standards for student learning, strives that it is essential for higher education institutions, students and staff be provided with opportunities to learn not only how to access information sources but also how to evaluate, manage and use them effectively. Information literacy forms the basis for lifelong learning and enables learners to master content and extent their investigations to become more self- directed, thus assuming greater control over their own learning. This leads information literate individuals to address:

- Assess the extent of information needed.
- Access the desired information effectively and efficiently.
- Use information effectively.
- Evaluate information and its resources critically; and
- Incorporate selected information into their knowledge base. (Nyamboga, 2004).

Challenges

The survival of libraries has never been easy. The history is evident that the libraries have had to face numerous challenges to prove their worth in the society. The Academic Libraries also have its own issues, elaborated asunder:

- High expectations of users: The Academic Libraries are utilizing different technologies at an optimum level to enhance the service capabilities. However, as the libraries are advancing in terms of new services, the expectations of the users are also increasing. It poses a huge challenge to the Academic Libraries to meet to the ever increasing expectations so that it may justify its worth in the education system.
- Scarcity of funds: Academic Libraries need high funds on regular succession to modernize, implement/install and maintain the ICT devices/software.
- Technology advancing too frequently: A technology discovered at dawn becomes obsolete at dusk. Hence, continuous up-gradation of ICT tools is mandatory which requires regular expense and becomes very tough for institutions like libraries that are in scarcity of funds always.
- Requirement of tech savvy library staff so that the modern libraries can be fully exploited and further furnished with new innovative services.
- Regular training of library staff to cope up with the frequently upgrading technology.
- Frequently changing role of libraries leading to enormous pressure on it to update accordingly.
- Essential requirement for users' education on use of ICT based library which put extra load on the librarians.
- Volume of information available in electronic form is so high that a user always finds him overloaded.

All the modern Academic Libraries are bound to face many of the above challenges. However, when these challenges are taken in a generous manner, keeping the users' interest in the foremost position, these challenges become opportunities for libraries of grow and flourish till eternity.

Conclusion

The incredibly fast progress in technological advancements have transformed the information handling and seeking habits of both Academic libraries and its users. However, continuous efforts are essentially required to offer more and more sophisticated services to its users. The Academic Libraries pressed under the burden to meet the mounted expectations of users and rapidly changing education system, have to respond to the challenges in order to justify its need in the education system.

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