

## CHANGING SCENARIO OF ACADEMIC LIBRARIANS AND LIBRARIES: ISSUES AND CHALLENGES

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### Abstract

*The rapid development in communication system and recent innovation in technology have witnessed as challenges and changing emphasis in the role of information and its management. The new technologies have facilitated the transformation of data into digital format. Libraries and librarians have to use the changing technology to provide the best access and service to their patrons. This paper analyses the challenges and changing role of the library and library professionals in digital information environment..*

### KEYWORDS :

LIS Professionals; Challenges in LIS; Transformation of libraries; Changing Role.

### INTRODUCTION:

Presently libraries are deeply engaged to modernize their operations and activities to provide fast, integrated, interactive and comprehensive services to their stakeholders. Rapid advances in information processing, storage and communication technologies have revolutionised the role of worldwide libraries in disseminating information services to their users. The librarian acts as guardian of the information superhighway/the universal digital library or the global digital library. This paper tries to highlight the roles and functions of Librarian who is improved to suit the modern library in information retrieval, content delivery, navigation, and browsing. The present generation of library requires the librarians to be essentially a type of specialist librarian who has to manage and organize the library would be suited the current environment. And handling the specialized tasks of massive digitization, storage, access, digital knowledge about mining, electronic reference services, electronic information services, search co-ordination, and manage the archive and its access. We are observing that computer and communication technologies have drastically and directly affected the human activities including library and information science practices. Currently, the concept of librarianship and its practices have also considerably changed

As a result, libraries are facing new challenges; new competitors, new demands, new expectations and a variety of information services from users tailored to their wants and needs. The new technologies have facilitated the transformation of data into digital format. In the same direction with IT thrust, the concept of digital library has emerged globally. Various universities and institutions of higher learning have initiated to have digital libraries in their respective environments. Over the last few years' information has been produced digitally and libraries have become major providers of information in digital format.

- 1.Today's environmental pressures are forcing libraries to focus on accelerating technology, innovation, technical complexities, social and legal issues, cost, risk, competence, skills of staff and technology itself.
- 2.Since the dawn of 21st Century, libraries are facing serious transition
- 3.Therefore, the library professionals have to act in a proactive manner to support the twenty-first century educational change.
- 4.Professionals working in such libraries need continuous grooming by acquiring core competencies and new skills so that they never become obsolete in this fast changing environment.

## CHALLENGES FACED BY LIBRARIANS

### **Budget Allocation in Academic libraries:**

Many libraries faced stagnant or reduced operating and materials budgets every year, and the near future will likely bring additional budget pressures. Issues in higher education will require that librarians possess diverse skill sets: As technological Issues continue to impact not only the way libraries are used but also the nature of collections, librarians need to broaden their portfolio of skills to provide services to users. Academic librarians will need ongoing formal training to continue in the profession. We may see an increasing number of non library professionals in academic libraries with the skills needed to work in this changing environment

### **Accountability and Assessment of User Needs:**

The academic libraries are required to demonstrate the value they provide to their clientele and institutions. This trend is part of a broader accountability movement within higher education, resulting from demands from central and state governments, accrediting bodies, employers, parents, and taxpayers for institutions to show the value of higher education and results of student learning.

### **Preservation and Digitization of library Materials:**

Digitization projects make hidden and underused special collections available to researchers worldwide. As Clifford Lynch (Coalition for Networked Information) has said, "special collections are a nexus where technology and content are meeting to advance scholarship in extraordinary new ways. Therefore, digitization and make availability of the contents is a challenging one for libraries.

### **Growth and Development of Technological devices and applications towards new services:**

Smart phones, e-book readers, iPads, and other handheld devices will drive user demands and expectations. Vendors offer mobile interfaces to electronic resources, mobile applications for OPACs increase, and more libraries offer reference services via text messaging and mobile interfaces to their own digital collections. Librarians will need to think creatively about developing services for users of mobile devices and take into account both user needs and preferences and the relationship of services to the academic program of their institution.

### **Expand the role of the library within the institution and beyond:**

Library professionals to provide access to their data sets, project notes, papers, etc. in.. virtual research environments and digital repositories; collaborating with information technology experts to develop online tutorials and user-friendly interfaces to local digital collections; collaborating with student support services to provide integrated services to students; and collaborating with librarians at other institutions to improve open source software, share resources, purchase materials, and preserve collections.

### **To develop scholarly communication services:**

Academic libraries have recognized the importance of scholarly communication and intellectual property issues for many years. Recent developments illustrate a trend toward proactive efforts to educate faculty and students about authors' rights and open access publishing options and to recruit content for institutional repositories (IRs).

**CHANGES IN LIBRARY SERVICES TO ADOPT TECHNOLOGY:**

Cloud computing, augmented and virtual reality, discovery tools, open content, open source software, and new social networking tools are some of the most important technological issues affecting academic libraries. As with mobile applications, these developments will affect nearly all library operations. Librarians also will be monitoring the success of open source integrated library systems software and Resource Description and Access standard.

**The change as physical space is repurposed:**

Most academic libraries provide access to a more resources than ever before. However, the number of physical items in many libraries is declining, as libraries withdraw journal runs to which they have permanent online archival access and/or move lesser-used materials to off-site or shared storage facilities, thus freeing up areas that are repurposed to provide space for individual student and collaborative work.

**GLOBAL CHANGES AND CHALLENGES**

The libraries and librarians globally as well as locally are facing various challenges due to the implementation of ICT, unprecedented growth in printed and electronic resources, recent trends and developments in teaching learning process. Librarians need to face various challenges for providing efficient, effective and personalized value added services and products to the stakeholders. Some of the major challenges faced by librarians are listed below

1. Expanding Electronic Information Environment
2. Development of Information Infrastructure
3. Need for Web based Services
4. Resource Generation
5. Explosive growth of Information
6. Resource Sharing and Collaboration
7. Industrial Interaction
8. Need for Quality based Services
9. Marketing of Library & Information Products
10. E-Collections Building
11. Digital Rights Management
12. Digital Preservation

**TRANSFORATION TO ELECTRONIC LIBRARIES**

As discussed the above said points, most of the countries have already realized the importance of electronic libraries. Accordingly, efforts are made on to create more and more electronic libraries. Some of the transforming factors for building electronic libraries are listed below:

- Provide interactive access to the collections
- Instant access to multimedia based information
- Fully automated indexing & intelligent retrieval
- Users are more eager to do R&D remotely
- Storage of large volume of data
- Access @anytime @anyplace by anyone
- Faster addition & gap reduction
- Effective tool for bridging the information gap
- Distributed learning environment
- Promote paperless office environment
- Promotes e-learning

### **Traditional Environment Vs Electronic Environment**

<b>Sl.No.</b>	<b>Traditional Environment</b>	<b>Electronic Environment</b>
1.	Reading	Browsing
2.	Ordering, Billing, Invoicing	E-Commerce
3.	Writing	Web Publishing
4.	Document Delivery	E-Prints, Attachment, Scanned Images
5	Inter Library Loan	Consortia
6.	Literature Search	CD-ROM and Internet Search
7.	Resource Sharing	Networking
8.	Classification	Subject Directories, Subject Gateways
9.	Indexing System	Search Strategies

### **PARADIGM SHIFT**

The rapid development in computer technology as well as economic changes has made it clear that the role of the 21st century Librarian as information intermediaries must undergo immense change. The changes are occurring at such a fast pace that each day new skills and approaches are required to handle information and unfurl the new ideas. The changing perception of users and the technological advancement have forced the library and information professionals to enhance their knowledge and acquire new competencies, skills and develop themselves in accordance to the new environment to avoid becoming obsolete and outdated. Thus, it has transition or paradigm shift in traditional to ICT skills and environment.

### **Transformation of libraries**

Libraries	Networks
Custodian of Books	Service oriented Information Providers
Print	Digital
Ownership	Access
Order in Libraries	chaos on the web
One Medium	Multimedia
Media	Hypermedia
Copyright	copy left
Own Collection	Library without walls
Homogeneity	Diversity (heterogeneity)
In Good time	Just in Time
Top Down System	Bottom down system
Real	Virtual
Tangible	Intangible

Monopoly	Equity
Library	Web Library
Intra-action	Inter-action
Teaching	Learning
Local reach	Global reach
We go to the Library	Library comes to you
Book preservation	Bit preservation

### Changes in Nomenclature of Libraries and Librarians

LIBRARIES	LIBRARIAN
Library	Librarian
Information Centre	Information Officer
Documentation Centre	Documentation Officer
Electronic Library	Information Scientist
Hitech Library	Manager (Information)
Open Library	
Virtual Library	Director (Information)
Digital Library	Digital Librarian
Cyberlibrary, Cybrary	Cybrarian
Elibrary	E-Librarian
Hybrid library	Director (Library)

### CHANGES IN LIBRARY SERVICES:

Collection - online access to subscribed databases, including bibliographic records, full- text articles, e-books and so on; library web sites leading to selective online documents and resources  
 Catalogue - online catalog with web-interface and remote accessibility  
 Circulation - online access to e-books; online renewal of checked-out materials  
 Reserve - online accessible electronic reserve  
 Instruction - online instruction; in-person instruction with online components  
 Interlibrary loan & document delivery - online ILL request, and articles delivery via e-mail in addition to traditional delivery  
 Reference - online reference including simple e-mail reference and real-time virtual reference.



Transition of Library to Modern Library

### **CHANGING ROLE OF LIBRARIANS:**

Change is the law of nature. The professional or the institution, which does not alter with the passage of time, always lags behind and goes into oblivion after some time. The modern society is information society. The progress and development of any society is directly dependent upon the extent of adoption to a changing environment. The modern world is of information technology where we cannot find any area untouched with its effect. The library and information science field is no exception to this. Recent development in information technology forced a tradition to new method of operation for Libraries. Earlier the library professions were considered as the custodian of books. Today library professionals are known as information personnel. Present rapid development in communication system and recent innovation in technology witnessed a changing emphasis in the role of information age and its management.

#### **The changed roles of librarians pose challenges such as**

reduction in traditional face to face teaching in the library, replaced by virtual learning environment  
 lack of control over access to information  
 print has lost its monopoly as a format for information storage  
 increased access in technology has altered the way the students study  
 spectrum of e information resources increasing the resource base Librarians need to change the way they plan and reach out through IL education

### **CHANGING ROLE OF LIBRARIANS IN PRESENT SCENARIO**

The followings are the changing the role of librarian in the digital library environment.

Multi-Media User – comfortable with a wide range of formats  
 Intermediary – with a good knowledge of sources and user requirements  
 Enabler – proactively connecting users with information they require  
 Metadata Producer – creating records of information sources in a variety of schemas  
 Communicator – formally and informally connected with users  
 Team Player – working with colleagues in library, IT services and academics  
 Trainer / Educator – taking on a formal role to teach information skills  
 Evaluator - for resources on behalf of users  
 Negotiator – dealing with publishers and suppliers  
 Project Manager – leading on development projects to enhance the services  
 Innovator – looking at improved ways to deliver the services  
 Knowledge mediator- Resource discovery; Resource Provision; Resource delivery  
 Information Architect- who creates the structure or map of information that allows others to find their personal paths to knowledge  
 Hybrid Librarian- to explore and provide integration of services and systems using the available appropriate resources to achieve the user's information desire  
 Knowledge Preserver- to take forward policies and strategies to ensure digital preservation

#### **Add on Collections and Services**

Collection	Services
Books and Printed Journals & Magazines	Circulation Services
Added CD-ROMs and Computers	Computer based Services
Online Journals with multimedia computers	Online Access and E-Alert Services
IR, DL,OAJ	On/Off Campus accessing the content of the library resources

The changes in the library collections are increasing by adding new type of materials and simultaneously the services of the library are also providing lending resources to online access through internet.

### **CHANGING DIMENSIONS TO THE FUTURE LIBRARY PROFESSIONALS**

Libraries and librarians have to use the changing technology to provide the best access and service to their patrons. Electronic information creates challenges for the library community at its very foundation, moving it away from the traditional paper-and-print format to an ethereal world of circuits and connectivity. The library is no longer defined simply as a building or a physical repository that houses information. So the essential future vision of the academic library professional to achieve the necessary information transformation and to face the digital information needs of the user should concentrate on the following:

The vision of the next generation library professional must be to create a World Class Networked Global Library and Information Centre to provide web based quality information service to the user in time in the e-learning environment.

The librarians must change the library environment as pathways to high quality information in a variety of electronic media and information sources.

Library professional must assert their evolving roles in more pro-active ways, both in the context of their academic institutions and in the context of increasing competitive markets for information dissemination and retrieval.

Concept of librarianship has changed with the change of time. The early recognition of the librarian is as a caretaker or custodian of books. Nowadays librarians equipped themselves with the skill of handling the new technologies. Electronic media such as CD-ROMs, DVD, and Floppy Disc etc is replacing physical form of books and journals. Libraries and library professionals as a discipline also therefore undergoing change therefore information literacy is necessary. The information professionals working in electronic information environment requires balance combination knowledge, skills.

The new trends using the Free Open Source Software are for developing digital library and institutional repositories locally. There are many tools freely available over the Internet. There are many workshops, tutorials and seminars conducted by the experts in the library field for updating the technically and technologically to the library professionals.

### **CONCLUSION**

All the academic libraries and librarians need to improve new skills using the new technology and it requires reorientation of traditional skill of librarianship, information professional and librarians must acquire the new skills as networking and web based technologies, on line searching of electronic database CD-ROM Products e-journals etc. The role of librarians is multifaceted in nature to maintain the library both collection wise and service point of view.

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