# TRANSFORMATION OF ROLE OF LIBRARIAN IN THE WEB ENVIRONMENT

R B Gaddagimath

Suresh Jange

B R Gadagin

#### Abstract

The basic foundation of a Librarian's work lies in pursuit of his duties in accordance with the known expectations of society in general and needs of library users in particular especially in the information conscious society. This paper describes the profound changes occurring in a large multidisciplinary Library and Information Science discipline due to the emergence of virtual world in the web environment in response to the growing electronic collection, distributed learning and multi and extra disciplinary research environment and the changing behaviour of users. The new modes of library service necessitate professional development in order to meet quality outcomes, particularly as Librarians assume roles in which they collaborate with faculty in realizing key educational outcomes. The approaches to Librarians' skills development and the challenges are presented and discussed.

Keywords: Librarian - Changing Roles, Internet Librarian, Search Intermediary

#### 1. Introduction

The information age we are in now is in the process of rapidly replacing the industrial era. Alvin Toffler in his famous book "Third Wave" rightly observed that the civilization has witnessed three great revolutions "Agricultural Revolution" "Industrial Revolution" and "Information Revolution". The digital age has provided new opportunities for higher education and research and the libraries in institutions of higher learning are to face new challenges. In this new phase of information and new technologies, the science and knowledge are becoming critical factors of the so-called "Value Added Economy".

Key issues raised by the faculty and administrators in institutions of higher education have been the future funding of research, grants, scholarly research with increasingly specialization, imbalance between rewards for research vs teaching, facilities, government reporting, accountability and so on. Concern has been on impact of more fundamental forces like financial imperatives; societal needs; technology drivers; multidisciplinary research and the libraries at the digital convergence that are driving towards change. Many of these relate to the emerging digital technology.

Developments in Information and Communication Technology's (ICTs), the libraries have been integrated at the electronic frontier to facilitate rapid transfer of information on a global scale. Advances in computer storage and telecommunication methods, online access to databases, electronic journals, electronic knowledge banks, direct document delivery, teletext, teleconferences, bulletin boards, CD-ROMs, networks etc., have been the revolutionary developments in the last two/three decades that have brought a great change in communication, storing and handling of information. The digital or electronic resources are dynamic in nature to share information globally and there has been an increased scope for automated delivery mechanism. Libraries today are termed as Digital Libraries and Hybrid Libraries. Knowledge preservation and dissemination have rapidly changed. Unlike simply providing access to holdings in print format, the electronic resources are procured to meet the information needs of the clientele.In the light of Information Bill 2002, it must be the fundamental professional concern of the Librarians to endeavor to predict, grasp, analyze and materialize such expectations and needs.

Librarianship is caught in the midst sea of dynamic changes with respect to collection, preservation, control and dissemination of recorded knowledge appear to be at risk in a world where uncertainty, contingency and the transforming nature of Information technology impact especially electronic media and Internet are increasingly dominant. As a result, the Library managers are encountered with twin challenges of managing print collections and simultaneously developing digital resources and network based Information Services.

#### 2. Transformation of Roles and Mission of Libraries

There has been a paradigm shift in the library services and the roles of information professionals. Some of the changes that have been observed in the academic libraries are:

- Librarians' role has been changed from information provider to facilitator of information.
- There has been a transition from print to electronic media.
- The users have become more 'Active Users' than 'Passive Users'.
- Emphasis in the libraries has been on 'Access' to 'Acquisition'.
- Libraries which were confined to solitary environ have moved to networked environment.
- Emphasis has been on team work rather than individual contribution.
- There has been an increased demand for accountability.

In this situation, the mission of modern libraries also has been changed on some of the following lines.

- Develop information/knowledge resources focused on patron's needs.
- Develop a co-operative user centered culture.
- Organize information resources in print and non-print considering the changing needs.
- Provide Human and technologically mediated access to information.
- Provide continuing education and training to its users.

# 3. Metamorphosis of Librarians Role

#### 3.1 As an Information Therapist

Librarians as expert consultants aware of information sources, the Library user expects the Librarian to have adequate knowledge of the materials he proffers. The stronger the demand for library materials, the bigger the expectation as to professional knowledge is concerned. Moreover, it is necessary to recognize that professional knowledge will be constantly under test in collecting and proffering materials that will satisfy all reasonable demands, including those of present non-users. With the constant eye on the latest availability of information resources and its user perspectives, the Librarian as information therapist should act as a doctor treating the users with information.

### 3.2 As an Educator

Creating awareness of information literacy has been the prime role of librarian in the society to mould into information rich society. Librarians' skills in the areas of technology, educational design and teaching

techniques are crucial in their new re-educational role. Teaching skills are key in today's environment where Librarians are taking an active role in forming partnerships with faculty in achieving key information literacy outcomes and therefore the Librarians are recognized as Teachers. The philosophy of user education propounded for 'Education for life' and 'Life long learning' are the most crucial role the libraries are to play now as an educator.

## 3.3 As Content Manager

The librarian can play a dynamic role in easy accessing of computer-held digital information including abstracts, indexes, full-text databases, sound and video recording in digital formats. In the context of Content Manager (CM) Librarians are required to:

- Organize digital information;
- Disseminate digital information from the computer-held digital content;
- Provide digital reference services and electronic information services:
- Handle the tasks of massive digitization, digital storage process, and digital preservation;
- Provide universal access and retrieval of digital content;
- Catalogue and classify digital documents;
- Maintain the intranet, managing new inputs, user access control, etc.

The competency of a Librarian in Content Management is represented by different sets of skills, attitudes and values to explore the skills of Internet technology in retrieving and accessing required digital documents in time; archiving, publishing and digital preservation. Further to develop digital and online information systems and establish network technology.

# 3.4 As a Positive Attitude Librarian

- A Librarian should devote him/herself to maintaining a standard of unrestricted, impartial and
  active service in the provision of library materials, and should not discriminate between or against
  library users on account of nationality, race, creed, sex, age, etc and respect the confidentiality of
  each library user.
- Honor the Freedom of Libraries in collecting, preserving, and proffering library materials
- A Librarian should apply himself/herself to necessary professional training, both as an individual and as a member of a group. In order to satisfy the requirements attendant upon the status of a professional person, a Librarian should study and acquire knowledge regarding Library users, Library materials, and techniques for organizing and proffering library materials, and relating such materials to library users in appropriate ways.
- Actively participate in the formulation of policy in the operation and service program of his library and Librarian should cooperate with other Librarians in efforts to develop group professional competencies
- Librarians should make due efforts, in association with others, to stimulate the development of the cultural environment in society and the community which they serve, by cooperating with local residents and with members of appropriate groups and organizations.

#### 3.5 As a Leader

Perhaps one of the biggest challenges in the library profession is lack of leadership among head of Librarians to work in team spirit, who tend to hold on to traditional practice of Librarianship. As there is shift in professional identity and requires the library managers to play active role as leaders for effective change management in achieving successful results. According to Kouze and Pozner (2002) summarize them as five essential practices:

- Challenge the process
- Inspire a shared vision
- Enable others to act
- Model the way
- Encourage the heart

## 3.6 As an Innovator in Service Excellence

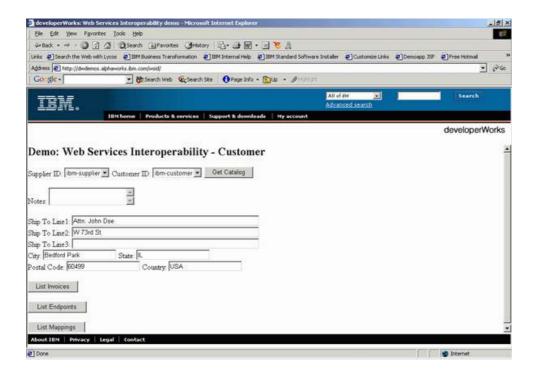
Each of the Librarians supports a specific subject area by managing print and digital collections, by providing teaching support and web based material development. Reducing the Librarians' desk service requirement from current 9 –12 hours per week will allow them to do better what has become one of the crucial activities in today's academic library. Liaison and outreach and getting more involved with information literacy programs to make themselves, and ultimately the library service relevant to the academic community is essentially required.

Crowley (2001) states: "The threat of being seen as peripheral, invisible, and not inconsequential should encourage academic Librarians to design and sustain service programs that appeal to those who have the power to alter or sustain value definitions in their particular academic contexts. Moreover, it should be a strong incentive to initiate or continue both short- and long-range efforts to ensure that the librarian, in any academic environment, is seen as central, visible and consequential". Further Crowley articulates that Moving the academic librarian from the reference desks to brick and electronic classrooms, combined with a context-relevant alliance with researchers grounded in shared credentials and interests, may well be the answer to the academic version of the question, If your customers know as much as you do, why do they need you?"

# 4. Web Services Interoperability and Library Managers

Web services technology can help to achieve higher degrees of automation and integration between heterogeneous platforms and applications especially when most of the information services are now web enabled. To ensure that the Web services offer created work well together; the standards for creating, access and exchange of information calls for documentation of rules and guidelines. This will make it easier to implement new service processes without having to create additional layers of integration software. The Web Services Interoperability organization plays a crucial role in this respect that can act as a basis for including new technologies and specifications as they evolve into products over time. The Web Services Interoperability organization (WS-I) was initiated to document criteria and test tools that ensure interoperability of web services across the globe and using the application software's, the web based information services can run on the same machine or on different machines, with different implementations, showing the value of Web services technology in a heterogeneous environment of Library and Information Science. In this context the Library Managers have to acquire skills in Web Interoperability to provide effective services to the users.

The figure 1 shows Web Services Interoperability of customer in IBM



(IBM. Available at http://www.ibm.com/developerworks/webservices/)

## 5. Conclusion

Effective leadership practices, change management, communication, and continuing dialogue with Librarians are the key in order to fully realize the role of Librarian as educator. The final outcomes of becoming aware of and recognize opportunities for liaison still need to be realized. While some Librarians are naturally more suitable for and comfortable with this role, others need active encouragement, positive experiences and a supportive Environment to realize their full potential.

## 6. References

- 1. Crowley, B. (2001). Tacit knowledge, tacit ignorance, and the future of academic Librarianship, College & Research Libraries, 62(6): 565-584.
- IBM. Available at http://www.ibm.com/developerworks/webservices/ (Accessed on 13<sup>th</sup> December 2005)
- 3. Kouze, J. M and Pozner, B. Z. (2002). The leadership challenge. San Francisco, CA: Jossey-Bass.
- 4. Saiful, Amin (2002). Role of Librarian in Content Management. Available at <a href="http://drtc.isibang.ac.in/">http://drtc.isibang.ac.in/</a> ~saiful/colloq/content.htm (Accessed on 26th May 2005)