
THE CHANGING ROLE OF LIBRARIAN IN A CHALLENGING DYNAMIC WEB ENVIRONMENT

P Venkata Ramana

Abstract

Library and Information Service profession is one of the most challenging professions in the knowledge society. Librarians face complex challenges posed by recent trends in Information and Communication Technology. The role of the Library professional has become more dynamic and challenging in the modern world. This paper covers the role of library and library information service professionals that have undergone a large degree of change in recent years. This paper outlines and discusses the professional skills and technological competencies necessary for library professionals and considers how these are acquired and developed to survive in a ever changing technological environment and to meet the future challenges of the 21st century.

Keywords: Library Professionals, Professional Competencies, Web Environment, Information & Communication Technology, Continuing Professional Development.

1. Introduction

Information Technology is rapidly changing the whole world creating new challenges and opportunities. Library and Information Service (LIS) profession is one of the most challenging professions in the knowledge society, combining expertise in information management with the Information and Communication Technology (ICT) competencies. ICT has tremendous impact on library operation, resources, services, staff and users. LIS Professionals are confronting challenging dynamic technological environment demanding the extensive and effective utilization of ICT in order to survive and meet the changing complex information needs of user community. The change is the law of nature. ICT is a driving force for change in library. Change is inevitable for the survival and success of any library in the changing technological world. LIS Professionals must develop expert technological competencies required to make best use of the opportunities, the ICT offers in order to provide a gateway access to wide range and variety of information resources and services.

2. New Challenges for Library and Information Service Professionals

We live in a dynamic turbulent world and the turbulence is set to increase its pace in the future. In a fast changing, expanding diverse global digital information environment, libraries are facing a variety of complex challenges from multiple sectors of the knowledge society in the 21st Century. The major challenges are:

- Information Explosion
- Information and Communication Technology (ICT) revolution
- Explosive growth and usage of web resources

-
- Dwindling Library budgets
 - Escalating cost of printed documents
 - Intensive use of digital resources
 - Heightened level of users' expectations
 - Interactive virtual learning environment
 - Evolution of virtual educational Institutions
 - Changing nature and number of information resources
 - New patterns of scholarly publishing and communication
 - Development of digital, Virtual and Hybrid Libraries
 - Online Bookshops & Information Services

These challenges have called for reorientation, reengineering, transformation and great changes in the information environment, library functions and the roles of library and information service professionals.

3. Web Based Information System

In recent years, the Internet and especially the web has brought a communication revolution enabling us to access, retrieve and send information anywhere easily, instantaneously and inexpensively. The web has transformed the way of libraries functioning and providing library information services to the user community.

The web contains huge volume of global information on wide range of subjects. It has made a profound contribution to all the spheres of modern life. Web appears to be almost totally free. Information access is now so freely available through web. The web based services offer high quality, easy to use methods for finding global information at the users desktop. Today, the web has hundreds of millions of users. Internet usage is doubling almost in less than a year

The Internet has exposed the limitations of library information service available at physical building, with limited opening hours. More fundamentally, Internet users simply expect to be able to access any information they want, from anywhere in the world, at any time [2].

4. Changing Technology Landscape

Technology is highly dynamic and changing at a very fast pace. What is latest today will become outdated tomorrow. Rapid advances in ICT is constantly changing so fast that it is becoming increasingly difficult for LIS Professionals to keep track and pace with the emerging technologies.

Information technologies today are characterized by their very dynamic development and increasing complexity. The new technologies allow completely new solutions to old problems, and consequently old services are displaced by new services. In the current turbulent phase of information technological development, this process of displacement of old solutions by new ones is particularly difficult to steer [3].

Technological changes have been of such magnitude that it is difficult for individuals and often institutions to follow them. In several technological sectors such as the information sector, more changes have occurred in the last few decades than in the previous few thousand years[4].

The following are some of important items of new technologies on which LIS professionals need to seriously think about improving their competencies for their effective utilization to deliver need based high quality information services to the user community.

- ICT Trends
- Metadata Standards
- Web Technology
- Search Technology
- Digital Information Resources
- Subject Gateways
- Information Portals and vortals
- E-learning (online learning)
- Online information services
- Digital rights management
- Wi-Fi and RFID Technology

5. Changing Information Environment

Today, information has been recognised as a powerful key resource by all sectors in knowledge based society. Information Management has gained an immense interest and importance stimulated by new technology. ICT has changed the whole nature of publication, storage, transmission, delivery and use of information. The web was utterly transformed the information access behavior of users.

The main characteristics of the information society have been defined as: ...changed perceptions of the importance of the role of information; the growth in the amount of information now available and the wide variety of formats; the size and continued growth of the information sector in modern economies; and the rate of technological change and the impact of technology [5].

LIS Professionals are facing many major paradigm shifts creating a new information environment, which really dictates the increased importance of professional competencies.

- Technology applications in library operations & services
- Transition from paper based resources to digital and multimedia resources
- Shift from acquisition to accessing the resources
- Emphasis on information rather than the documents
- User demands information access facilities at their desktops.

6. Changing Libraries

Rapid revolutionary advances in ICT have now transformed the way information is gathered, processed, organised, accessed and disseminated to the user community.

Today, the libraries are increasingly viewed as outdated and under rated with the use of modern web-based services. The pressure on libraries to modernise the way of delivering their services is now intense and more demanding. The user expectations on libraries to deliver high quality, comprehensive, user-friendly new generation services have grown tremendously in recent years. The survival demands change, updation and modernisation. Libraries need to change quite dramatically to modernise almost every aspect of their operations, information resources and services in order to meet the rising users expectations of the modern world. As the world advances, the library must also evolve and redesign their activities in order to deliver highly quality, need based, value added services according to the expectations of today's library users [6].

The concept of library has been described by several different terms such as automated library, computerised library, electronic library, digital library, cybrary, virtual library, library without walls, transformed library, complex library, hybrid library, internet library, future library and so on.

7. The Functions of Modern Library include

- Application of wide range of new relevant technologies in libraries
- Computerization and networking of all library operations, resources and services
- Build appropriate combination of both print and electronic information resources
- Providing a gateway access to the content of local and global resources and services from users' offices and homes
- Provide guidance and training in the usage of digital resources
- Provide responsive products and services to meet the user needs and expectations

8. Changing Role of Library & Information Service Professionals

In the Modern World, the role of the LIS professionals is adapting to changing technologies, information environment and customers expectations. Library professionals are increasingly responsible not only to provide traditional library information services but also to deliver online information services according to the actual user needs. Librarians need to keep up with their users' expectations to survive and service them. Librarians need to become information knowledge navigators who distill data into usable information.

In the 21st century, everyone is going through many occupational changes to face the future challenges. Information and Communication Technology has transformed the role of not only libraries but also library professionals in the changing environment in which they now work. Library professionals are functioning under great pressure to become more efficient to deliver more effective services to the users. As the role of LIS professionals is changing to face the new challenges posed by ICT, they must be keen to stay at the forefront of innovation in the library world. LIS professionals need to be confident and competent that they can prepare for new challenges, deal with emerging technologies, manage change effectively and claim new professional roles. A well-informed competent and creative LIS professional shall play multiple evolving roles in the 21st century.

As the information industry has changed, the expectations of information users have soared and librarians have come to fear for their positions and profession. As we race into the future, librarians should begin to think about the position of the library in the new environment. LIS professionals are functioning under great pressure to keep pace with the constantly changing technological environment.

Today, Librarians have to play multiple evolving and expanding roles to face many new challenges in the dynamic technological environment. A librarian must be a professional expert, techno literate, web usability expert, knowledge manager, navigator, trainer, educator, marketer, service provider and many more.

9. Core Professional Competencies for Librarians

Continuing Professional Development is an essential part of the modern library information professional's successful career planning & prospects. The LIS Professionals with better personal, professional and technological competencies have great opportunities and bright future in the modern libraries. Application of new ICT in to the libraries immediately requires improvement of different kinds of skills and knowledge in library information science professionals. Continuous staff training on emerging technologies is essential to learn, improve and develop various kinds of professional skills, knowledge and competencies.

Professional competencies can be thought of as flexible knowledge and skills that allow the librarian to function in a variety of environments and to produce a continuum of value-added, customized information services that cannot be easily duplicated by others. They relate to the librarian's knowledge in the areas of information resources, information access, technology, management and research, and the ability to use these areas of knowledge as a basis for providing library and information services. (7)

The technology is complex and librarians have not developed the skills to understand it, exploit it or create it. Those few who do have such skills find they have a very marketable commodity and can make a better living else where (8)

There is an urgent necessity to learn a great variety of professional competencies to accomplish the role of professional librarian in the constantly changing challenging web environment. Professional competences enable librarians to respond effectively and efficiently to the constant development of new technologies. Some of the unique competencies of the LIS Professionals are discussed in the following sections.

9.1 Managerial skills

- Demonstrate the knowledge of vision, commitment and leadership
- Encourage teamwork and involvement by all staff
- Strive for cost effective utilization of all resources of the library.
- Communicates the value of library and information services to decision makers
- Act as active and effective member of the senior management team and a consultant to the organization on information management issues.
- Understands and uses effective team process skills to realize the objectives, mission, and vision of the library
- Develops and implements policies and procedures for the efficient and effective operation of library functions
- Continually adjusts programs and services to respond to societal changes and service opportunities [9]

8.2 Knowledge of Policies, Procedures, Issues and Standards

- Maintains current awareness of professional issues impacting libraries
- Demonstrates knowledge of library policies, procedures and service standards

8.3 Knowledge of Information Sources & services

- Develop specialised subject knowledge about the purpose of the organization
- Identify materials appropriate to customers' requirements and their abilities
- Expert knowledge in the content of information resources and ability to critically evaluate and filter them
- Develop and deliver convenient, easily accessible and cost effective information services to the users (CCFR)

8.4 Technology Skills

- Scans the environment emerging and forecast the future technologies that are relevant to library services
- Use appropriate latest relevant technology to manage and deliver information services
- Continually develops skills in using latest relevant technologies
- Use technology to generate value-added products, such as bibliographies, databases etc.,
- Function creatively and innovatively in a Web-based environment. [10]

8.5 Professional search skills

- Adequate knowledge about search process, search strategies, search techniques, search engines and search technology.
- Capable of finding and evaluating the information resources best suited to user needs
- Expert knowledge in searching catalogs, databases and web sources

8.6 Communication skills

- Communicates the value of library service to decision makers, staff and users.
- Communicates clearly and respectfully with customers and colleagues.
- Demonstrates active listening skills with customers and colleagues.
- Effectively negotiate with publishers, customers, management & vendors

8.7 Presentation Skills

- Develops and practices readers' advisory skills to promote reading habit among all levels of users
- Increase awareness of the role of libraries and librarians in promoting information literacy.

-
-
- Comfortably presents information to users
 - Use variety of presentation techniques to convey information to users with different learning styles.
 - Demonstrate effective presentations skills to support LIS users

8.8 Customer Service

- Demonstrate a sincere commitment to customer service
- Understand customer needs and preferences for information
- Instruct in information gathering, literacy, research and technical skills
- Continually design and improve user oriented information products & services
- Deliver perfect customer service with confidence & competence

8.9 Commitment to Life-Long Learning

- Take responsibility for the development of one's own professional career
- Remain knowledgeable in current events and Technologies
- Pursues learning opportunities, personally or through formal training
- Flexible in adapting to new situations, systems, tools, environments
- Anticipates accepts, adapts and manages change effectively.

8.10 Evaluation and Assessment Skills

- Continually analyzes, investigates and assesses the information service needs of the users
- Continually Designs and deliver specialized value added information products and services
- Evaluates the outcomes of the use of library and information resources and services
- Conducts research to find solutions to the identified information management problems

Other Skills

- Marketing and Promotion of Library Service
- Project Management skills
- Time Management Skills
- Digital rights management.
- Knowledge management skills.

9. Sources for Professional Competencies Development

LIS Professionals have a wide range of channels and ways to develop their professional competencies and manage changing technologies effectively. The important methods/ways for improving professional competences are:

-
- Acquiring formal qualifications
 - Pursuing doctoral research
 - Distance and E-learning courses
 - Reading professional literature
 - Tours and visits to well managed libraries
 - Affiliation to professional bodies
 - Attending professionals meetings. Conferences & Seminars
 - Presenting papers in conferences and seminars
 - Writing papers in periodicals and books
 - Participation in specialist groups
 - Personal interactions with expert fellow professionals
 - Attending workplace programs
 - Attending Induction Programs
 - Attending staff training and development courses
 - Undertaking research and development projects.
 - Web resources

10. Future of Library Professionals

Information Technology is rapidly changing the whole world, creating new challenges and opportunities. Library professionals have to face many complex challenges, make use of the technological opportunities and respond to all these changes positively. LIS professionals with latest technological competencies are in great demand. They have great opportunities and bright career prospects as long as they improve their professional and technological competencies and grab them. Otherwise, it becomes even difficult to survive in the modern libraries. Those professionals that anticipate and embrace change constructively, creatively and intelligently will be the ones, who are most likely to survive, prosper, develop and succeed rather than decline and suffer in the future. LIS professionals need vision for modern professional skills and technological competencies in order to have bright future in the 21st Century.

11. Conclusion

LIS professionals face complex challenges posed by rapid revolutionary advances in ICT. Libraries have to redesign their positions to meet evolving needs. Librarians need to implement new practices and new technologies, manage change, and improve performance and competencies to face future challenges of knowledge society. They need to develop professional competencies to adapt changing technologies in order to deliver timely, value added quality content and world-class services to the users from their desktop.

Library information professionals have to recognize the expanding nature of the technological changes and professional challenges that they face in the modern world and realize to improve the range of

professional competencies required to adapt and manage the changing technology successfully. The challenges represented by these competencies must be seized and acted upon today in order to ensure that librarians have a better future in the twenty-first century. LIS professionals must strive, struggle and improve new skills and knowledge about new technologies that will be needed to provide responsive Library Information Services to the users in the twenty-first century.

12. References

1. Tennant, R (1998) Strategies for building 21st century libraries and librarians. In Robots of Knowledge: the wider automation agenda. Proceedings of the Victorian Association for Library Automation 9th Biennial Conference, January 28-30 1998, VALA, p.503-507.
2. Chad, Ken, Paul Miller. "Do Libraries Matter? The rise of Library 2.0". A white paper. P. 1-11. Nov 2005. www.talis.com. Accessed on 20.12.2005.
3. Hofmann, Ulrich. Developing a strategic planning framework for information technologies for libraries. OCLC systems and services V.11, N.4, (1995), p.22-32.
4. Pritchett, Price (1994) New Habits for a Radically Changing World. Dallas: Pritchett & Associates.
5. Mullins, V., Ferguson, S. and Houghton, J.(2000) INF 100. The Information Society and Future of Library and Information Services: Study guide, Charles Sturt University, Wagga Wagga. p.5.
6. Chad, Ken. Ibid.
7. Shashi Nath, S. Professional Competencies for Special Librarians of the 21st Century. <http://144.16.72.189/is206/assign-2002/shashi-competency-professional.doc>
8. Brophy, Peter. The library in the twenty-first century: New services for the information age. London, Library Association Publishing, 2001. P.11.
9. Core Competencies for librarians. NJLA Professional Development Committee Core Competencies Ad Hoc Committee 8/99, Adopted by the NJLA Executive Board October 19, 1999. <http://www.njla.org/resources/competencies.html>
10. King Country Library system: Competences for excellence. P. 1-3. <http://Faculty.Washington.edu/jurnal/521/kccomp.htm>. Accessed on 22.12.2005.
11. Cooper, Lind ray. Modern Library management: the changing role of the Library Information Science. A white paper. Talis.com assessed on 22.12.05.
12. Federal librarians in the 21st century: Changing Roles in the Electronic Age: Summary Report on Conference Proceeding: September 15, 1993. Library of Congress. <http://WWW.Loc.gov/falices/21cent.html>. Accessed on 22/12/05.

About Author

Dr. P Venkata Ramana is working as Asst. Professor in Dept. of Lib. Inf. Science, JNTU, School of Planning & Architecture, Hyderabad.

E-Mail : pvramana9@rediffmail.com