

## ICT Skills and Competencies for LIS Professionals in Digital Environment

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**Abstract:** *The rapid development of technology, digitalization of information, availability of e-resources and increasing demand of users has changed the scenario of libraries in present era. Now a day's libraries have reached beyond the four walls of building & have converted into digital or virtual libraries. The information and communication technology has also brought the drastic change in traditional method of information storage, retrieval and dissemination, which posed challenges for LIS professionals to move from traditional role of librarian to information or technology manager. Today's librarian needs to update and upgrade themselves with the latest technology so that they can survive in technology driven era. The present paper deliberates the changing role of librarian in the digital era.*

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**Keywords:** *Information professionals, Changing role, ICT, Digital libraries, etc.*

### I.

### INTRODUCTION

At once libraries were just regarded as storehouse of books whereas librarians were merely as custodian of these books. With the advent of technology the scenario of libraries has changed. The rapid change in technology has become the major cause of revolution in the field of library and information science. The development of ICT changed the mode of delivery of services from traditional information sources to e-resources, online databases and online information storage and retrieval etc. Today's computers are not only being used in libraries to process, store, and retrieve information, but also for communicate information from one place to another through networks. These drastically changes, if managed properly can be used effectively and efficiently to provide the right information to the right user at right time. The Information and communication technology not only affected the complex house-keeping operations of libraries, but also facilitates communication through networks for collection, storage and dissemination of information and has become vast ocean of internet-based services.

The ICT has made tremendous impact on every profession including librarianship. The LIS professional have to cope up with the proliferation of information as well as high expectation of user. The ICT has changed the societal needs as well as working styles of library and information professional. The technology is changing rapidly, so library professionals' needs to update and upgrade their knowledge to handle the innovative technologies and vast amount of digital resources only then they can provide best possible services to their target users.

## II. FACTORS DEMANDING FOR ADOPTION OF DIGITAL ENVIRONMENT

Today era is age of information. In this era information has become power and play very important role in the socio-economic development of society. But on other side information is growing rapidly and it is very important to handle this vast amount of information for its effective use and it can be possible with help of technology. So we need to understand information infrastructure, dimension, impact and implication of information technology to handle this vast amount of information. There are so many challenges in digital era which are faced by LIS professional in new era:

Information explosion Dwindling Library budgets

Escalating cost of printed documents Changing demands of users

Changes in digital environment

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

Need of new generation users

Strategic alliances, partnership and collaborations Interactive virtual learning environment Competency based information training.

Open source movement.

Integrated and widespread ICT applications

**Advantages of technologies in library** Faster access to holding of libraries. Accessed at any time, 24\*7.

No physical boundaries.

Optimize utilization of resources.

Help in preservation of rare and special collection. Online learning environment.

Save the time of users as well as library staff.

**Factors that make hurdle in use of technologies in libraries** Cost of hardware and software is generally very high. Shortage of trained manpower.

Problems related to networking. Security.

Problem regarding data creation and publication. Firewalls.

The scope of coverage and available archives is often limited; Problem in downloading or printing;

Access to required information.

### **Changing role of LIS professional**

Rapid advancement in technology has changed the role of LIS professional from traditional librarian to e-librarian. Today's librarians are playing important role in storing, managing and retrieving the information electronically. They are playing multiple roles in present era as an information expert, information facilitators, knowledge managers and technology expert etc. In the present era, the LIS professional are building e-resources and adopting different strategies to store, maintain and produce information effectively and efficiently. So they must accept the change and adapt new technology for the benefit of professional as well as users. They are playing a role of information specialist in order to: Meet and understand the concrete information required by users.

Mange and deliver appropriate information services to the right user at the right time in a right form.  
Ensure how users can access required information from the collection.

Information based practitioner who use research as a foundation for their own professional development.

### **Why professional need of skills & competencies in digital environment**

The need for competencies felt because as at the turn of century characterised by radical changes. The traditional libraries are shifted to information centres which not only provide the documents but all type of information to its target users. By adopting new technologies, the professional can face the challenges of new era. They must train themselves according to new technological innovation to achieve the desired objectives. The librarians need to lay the foundation to serve the users of tomorrow. They need to plug into the information superhighway and exploit the technology to achieve the maximum benefit for the organization and for the users. So they must update and upgrade their knowledge and skills so as to work in today's changing information world.

## **III. SKILLS & COMPETENCIES REQUIRED FOR LIS PROFESSIONALS**

To meet the changing needs of library users in ICT environment, librarians are expected to continuously enhance their competencies and skills in age of technological era in order to improve productivity and efficiency. If they don't change with the passage of time, they always lag behind. Competencies defined as knowledge, understanding, skills and attitude essential to achieve set objectives. Skills are required for doing a job effectively and are aspect of human behaviour that are learnt and improve with practice. So, every LIS professionals should have the following skills or competencies to perform their duties effectively:

- **Communication skills:** Communication skills are most important and necessary at all levels of management. Through the communication, librarians can bridge the gap, stay in touch, build trust,

monitor performance and attain the concerted visitor. Proper communications help in controlling, misunderstanding conflicts and improving co-ordination in the groups. So the LIS professionals should have this competency to talk with their supporting staff.

- **Technical skills:** Technical skill implies an understanding and proficiency in a specific kind of activity. It involves specialized knowledge, analytical ability and speciality in use of various tools and techniques. A librarian must have technical skills to perform his/her job effectively and efficiently.

- **Leadership skills:** Leadership is a process of inspiring individuals to give their best to achieve the set goals. Leadership considered as personal qualities, behaviour styles and decisions of leaders. It is about

getting people to move in right direction and motivating them to achieve desired results. It is most important skill required for a librarian to achieve the objectives.

- **Time management skills:** The fourth law of library science by Dr. S.R. Ranganathan also indicates about time management for the library professionals as well as for the users. The library professionals should make proper planning of all services provided by the library so that time of both, professionals or users can be saved.

- **User-orientation skills:** For the smooth working of library, the user orientation is very necessary. It helps the user to make use of library and its resources and services in a user friendly manner. So, the information professional should be competent for using wide variety of method to aware the users regarding library.

- **Collection development skills:** collection development is very challenging in the modern ICT era, because librarians have to manage both physical document as well as e-resources. So the librarian should have through knowledge of both print and non-print resources and he/she must keep them update themselves regarding the best resources, the current needs of library users can be fulfilled.

- **Managerial skills:** A librarian should have managerial skill like planning, directing, designing, supporting and implementing for the smooth working of library. He should have knowledge of total quality management as well as human resource management for achieving the set objective.

- **Interpersonal skills:** A librarian should have interpersonal or interactive skill to build and maintain the relationship with one another in order to achieve the objectives of library. He/she must encourage their supporting staff to give their best to achieve the target. Interpersonal skill is most effective tool of professional for achieve the desired results.

- **ICT skills:** Information and communication technology is developing day by day in all type of libraries. So a Librarian should have proper knowledge or enough skill to handle the technology which is being used in libraries to perform various operations of library like housekeeping operations, networking and internet use.

- **Motivating skills:** Motivating means to move the people in the direction in which you want to go to achieve the goal. Motivation can be described as goal-directed behaviour. Motivational skills are also important managerial skills to get the desired results by motivating the employees to give their best to achieve the desired objectives.

On basis on above points, it seems that there is an abundance of potential roles for the librarian in digital era. To take up these roles, they require careful and timely preparation so that they can enable themselves to handle the technologies to provide best services to its target users. All these above mention survival skills could enable the librarian to:

Carry out environmental scanning and rapid decision-making. Critically analyze the professional domain.

Employ time management to keep librarians from putting off preparing for new roles. Manage change.

Work collaboratively (it is impossible to monitor new developments alone) Study independently.

Think creatively & positively.

Assess one's strengths, weaknesses and progress in continuing learning. Create enthusiasm for life-long learning and new roles

### **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. 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 survive in the 21<sup>st</sup> Century. After adopting Various competencies, LIS professional will able to:

Effective utilization technology Create online learning environment

Managing digital information resources Development of institutional repositories Offering digital/virtual reference service Help in information literacy skills

Promote access to open access

Promote marketing of library resources and Services

#### IV. CONCLUSION

Information and communication technology has become essential part of 21<sup>st</sup> century's libraries. ICT has made drastic change in the field of libraries, the libraries has transformed from traditional role to Digital libraries or Virtual libraries. The librarians must bring to this technological environment to make sense of a multiplicity of digital collections and e-resources. They must identify strategies to provide access to wide range of networks and information resources. For this purpose they need new skills and competencies to manage and create many information sources and services. The competencies and skills are required for survival and growth of professional in new technological era. So in the fast changing environment, the library professional must possess multi-tasking abilities and competencies in their area of work.

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