



New Roles of Libraries and Librarians In the Electronic Environment Era in Twenty First Century

Dr. Mothukuri Anjaiah, *Asst.Professor (Sr.)*, University Central Library, Dravidian University, Kuppam-517 426

Abstract: *In the present electronic/digital environment, the libraries are playing an very crucial role in the development of a nation by providing timely information/data, which is playing a pivotal role, to the intellectual community, scientists, academicians and also common people in the present knowledge -based society or economy-based society. In this knowledge era, information communication technologies (ICT) are rapidly changed in all aspects. Now, the digital resources are readily available from many sources and those contents are available by the faculty, research scholars and student community in academic libraries through the internet. In this situation, the librarian will play a key role in procuring, organising, and disseminating the information to the needy people at their desk-top in 24 hours i.e. in 24x7 by using technology in the present global society.*

This paper mainly focused on the future role of libraries and librarians in the knowledge-based society and responsibilities-as information/data creator, data provider, policy-maker, technocrat, database manager, web builder and also as social media manager in disseminating the digital or electronic information and so on.

Key-Words: *Electronic Environment, Digital Age, Knowledge-based society, Database Manager, Web Builder, Navigator, Knowledge-Builder, E-resources,*

Introduction:

Libraries have existed for hundreds of years but in today's digital world, where we have at our fingertips access to an endless collection of information, a new standard of information literacy has emerged. Libraries are collections of books and other information resources gathered for the purposes of reading, study, and reference. A library as a collection or group of collections of books and/or other materials organized and maintained for use. The new role of libraries in the 21st century is to be a learning and knowledge center for their users as well as the intellectual commons for their respective communities where, to borrow the phrase from the Keystone

Principles, people and ideas interact in both the real and virtual environments to expand learning and facilitate the creation of new knowledge. Libraries preserve knowledge so that none is lost, organize knowledge so that none is wasted, and make knowledge available so that no one need be deprived in this information age. Library services have brought a lot of changes to library operations there by making access to knowledge more convenient to user.

The librarians were played an important role as a custodian and information disseminator of all library resources in previous days, but, in the present digital environment, they are playing many different roles and responsibilities such as knowledge

creator, generator, organiser, web builder, database manager, technocrat, social navigator and research data disseminator as per the user`s need.

Role of Libraries and Librarians in the 21st Century:

The 21st century is revolutionized by advances in computing telecommunication technology. It has witnessed a great increase in information management and transmission. The library resources are available in different types along with print resources

such as e- journals, e-books, e-databases, e-conference proceedings, e-newspapers and the library services are available in traditional as well as e-services such as email, SMS, Alert Services, Ask Librarian, Remote Access and also other online services were providing at users` desk-top with the help of ICT for academic fraternity. Librarians have always played an essential role in research and information services, providing scientists with essential information and helping students find what they need.



Fig.1. ICT library in 21 century

In the advanced of the technological revolution, the librarians will play a major role in meeting the expectations, continuing to be in the forefront of helping faculty, students, and scholars gain access to the vast multitudes of information whether digitized, print, or multimedia at a time when intellectual capital is encroaching on physical capital as the driving force in the world economy and order.

Transformation of Traditional Libraries into Digital Formation:

As gateways to knowledge and culture, libraries play a fundamental role in society. The resources and services they offer create opportunities for learning, support literacy and education, and help shape the new ideas and perspectives that are central to a creative and innovative society. They also help ensure an authentic record of knowledge created and accumulated by past generations. In a world without libraries, it would be difficult to advance research and human



knowledge or preserve the world's cumulative knowledge and heritage for future generations.

Libraries are rich repositories of historically and culturally significant collections, many of which are not available anywhere else in the world. Without an appropriate copyright

exception, a library could not preserve or replace a damaged work while it is still covered by copyright. For example, it could not lawfully copy or digitize an old newspaper or a unique sound recording to preserve it. Without appropriate library exceptions, this cultural heritage would be lost to future generations.



Fig.2. Traditional Academic Library

Today, many works are only **"Born Digital"**, such as websites or electronic journals, and are unavailable in print format. Without the legal means to preserve and replace works in a variety of media and formats – including format shifting and migrating electronic content from obsolete storage formats – many of these works will inevitably be lost to future generations of historian,

The **Internet**, which is a powerful knowledge reservoir, has created tremendous opportunities in terms of accessing knowledge. Making the collections of the world's great libraries available to the public through large-scale digitization

From a historical perspective, there have always been precedents and a constant need to reorganize our internal library operations. Some were due to budgetary situations, some due to the advent of cooperation and networking. Since the 1970s, the appearance of cooperative cataloguing and organizations like OCLC, Research Library Group, etc. have precipitated changes in the internal organization and streamlining of processes in libraries. However, most of the internal changes have had very little impact on our users and the ways that they viewed the library. Some online databases already existed, but they were not intuitive and mostly available only within the physical library.

Libraries and Librarians in Transition:

The Internet has changed this. Many entrepreneurs understood the



importance and saw the potential of the Internet. The expansion of the Internet posed great challenges to existing businesses, including the publishing world. Soon it became evident that an Internet presence was a must. The libraries have seen the birth of Print only, Print and Electronic, and Electronic only subscriptions on offer from publishers. The pricing model previously worked out over many years was no longer valid. Publishers are still seeking a new business model and pricing model. The self-empowerment of the Internet was addictive.

With only a computer and Internet connection, you had the world at your fingertips. Thousands of young

people with web skills were suddenly in great demand, making fortunes by creating websites, running online businesses – eBay, etc. The internet bubble was upon us. New generations of entrepreneurs were hired by existing businesses to create web presences for many companies. It was all about discovery and the information. The information found on the Internet was free. While this was happening, other technological advances, i.e. personal computers, fiber optics, etc., aided the rapid expansion and use of the Internet. Apple and Microsoft arrived on the scene. Of course, there were others that made a blip on the horizon and then vanished.



Fig.3 Modern Digital Library in the Knowledge-based Society

Role of Librarian in Traditional Library System:

In the traditional library system, the following functions done by the librarian. They are:

1. **As a Custodian of the Library Resources:** The librarian selects, organises the library resources (print), and provide library services such as lending, reference, referral, Personal (SDI) and also some kind of latest services i.e. CAS to the users.
2. **As A Guide:** The librarian helps to the users as and when need. They

also helps in searching the E-Information such as.. online journals, e-books

3. **As a Public Relation Officer:** The librarian maintains cordial relations with all the departments, administration, faculty, research scholars and student community, other outside libraries and also with publishers, book suppliers to fulfil the objectives of the library.

Role of Librarian in 21st century:



In this digital environment, the library professionals are playing an important role in dissemination the **e-information or electronic information** other than the print resources to the user community time-to-time/minute-to-minute as per the requirements of the users at their time/ **24x7** at their desktop. It is toughest job to the librarian in this modern age.

Academic librarians are at the forefront of providing aspiring academics and professionals with access to digital collections and e-learning courses using mobile information communication and technology devices; the implications of the research discussed in this survey of the current literature discloses a need for diverse skills for the appropriate and continuing effectiveness to support students and academic researchers.

1. **Librarian As Information Provider:** Librarian identify the needs of the campus users, access, retrieves, organises, and then provides the print as well as electronic resources to the needy people to fulfil their objectives.
2. **Librarian Become A Tech Leader:** With enable of ICT, librarian provides IT services to design and evaluate systems that would facilitate e-access.
3. **Librarian Become As A Facilitator:** make access easier, i.e. providers network access, purchases software and e-journal licences.
4. **Librarian As a Educator:** The librarian will acts like a classes-room teacher- training to users on use of internet, searching tools, online databases, web resources, online journals, M-OPAC, WEBOPAC, OCLC, MOOC Programmes and also

online tutorials.etc. So, librarian plays an important role in educating the users by the way of conducting **Information Literacy Programmes** periodically.

5. **Librarian As A Innovator or Web Designer:** Librarian designs the library Home page, Library Portal and searches and evaluates Information resources to be linked with library`s home page, creates an awareness of library services on the web, and if need, he/she manages the organisational website.
6. **Librarian As A Policy Maker:** As we know well, the librarian as a policy maker, always plays a pivotal role in collecting, organising the library resources and services or to evolve a new policy with regard to e-resources or open educational resources (OER).
7. **Librarian As A Database Manager:** Librarian should be a database manager. We know the print bibliographies no longer in use as searching via online database is faster and more sufficient.
8. **Librarian As A Business Manager:** As, we know well, today, the academic libraries are facing with meagre funds. In this electronic environment, all most all the academic or other libraries except public libraries in India are procuring/ purchasing the electronic resources.
9. **Librarian As A Remote Accessing Creator:** The librarian as navigator,

In this situation, the librarian will be act very intelligently with publishers and aggregators in bargaining on e-resources. Librarian negotiates with them advantageous licence agreement for procuring the e-journals and also e-databases.



technocrat creates new library novel services such as the followings at users` fingertip.

- Remote Access to E-Contents
- Open Public Access Catalogue (OPAC)
- E-Alerts
- Citation Analysis
- Subject Gateways
- Open Educational Resources (OER)
- Online Tutorials
- Webinars
- Remote Login Service
- Ask the Librarian Service
- Librarian at 27x7 Service
- Discovery Services; etc.
- Toll Free Service/Helpline Service

10. **Librarian and Social Networking:**

The librarian, uses the social media such as Facebook, Twitter and Linkdin which are most supersonic messengers to reach information to end users within short time, not even in seconds through posting of the current information, content of print and e-journals, web links and any other related information of the user community.

The librarian may get share information with their users on SNS, Facebook that will help to embark their wide knowledge to the student's community outside the classroom. Today's generation of students is very open to voice their preferences, likes, and dislikes. Librarians write blogs, are on Twitter, and the library

needs to have a Face book presence. Libraries and librarians needs to be where the users are.

Need Professional Competencies: Librarian's knowledge in the areas of information sources, information access, technology, management and research plus the ability to apply them in providing library services.

Personal Competencies: The librarian should have the spirit, enthusiasm in developing library resources and services.

1. Commitment to share knowledge and service to excellence
2. Ability to face challenges and to see new opportunities both inside and outside of the library
3. Foresight: sees the Big Picture
4. Strong interest and belief in partnerships and alliances
5. Good team work and coordination among the staff
6. Good Communication skills and dynamic leadership
7. Systematic planning and focus on what is critical.

Librarians Are More In Demand Than Ever In The Digital Age:

1. In this digital age, librarian must be able to create, organise, and also disseminate the library resources in timely and preferred manner.
2. Technology for generating and sharing information is useless, if there is no way to locate filter, organise,



Supporting Academic Disciplines

It is becoming increasingly important that librarians and faculty become colleagues in the research process. Technology is certainly a force for creating a needed climate of collaboration and partnership as both groups strive to attain the institution's educational mission. In many cases librarians themselves will be expected to possess the credentials of a scholar. In the technological age, a terminal degree in the particular subject will increasingly be a necessary requirement for those librarians who will work closely with faculty members in the latter's research. It might be argued that this is unrealistic.

However, it seems that more and more individuals with doctoral degrees are entering librarianship as the difficulty of obtaining faculty positions shows little sign of abating. **Peter G. Christensen** calls for increased hiring of librarians with subject-area doctorates, declaring that this is a reasonable strategy "in a world in which librarian supply exceeds demand and academic job turn-over is minimal."⁹

As a support service, a library's priority must be aligned with the strategic goals of the university. The core

activities are defined as education, research, scholarship and wider engagement. How can libraries and librarians continue to service and enhance any of the core activities? Role in education, research and scholarship The changing needs of the user base, together with changes in teaching methods and changes in the ways information resources are delivered and presented, are creating a need for librarians to discover new ways to support the core activities at the university.

Furthermore, expanding librarians' interaction with the teaching staff regarding linking reading materials in various courses and incorporating them in course management software (Blackboard, Weblearn or others) is another way of supporting education at an institution. Another area where libraries are yet to feel the full impact on readers' services is online education. Online education was previously a somewhat experimental field for old established institutions. Now, more major institutions have moved into this area and libraries need to anticipate that many other institutions will follow. Are libraries ready to assume their supporting role in the online education environment?



Fig.4 New Roles of Librarian in the Knowledge- Based Society



User`s Attitude Towards Libraries in the campus Environment.

Users are seeking a variety of social, collaborative spaces and quiet workspaces. They demand variety to suit their lifestyles of multitasking. They appreciate refreshment areas and multiple vending machines. They have the facility and willingness to change their own behaviour, and adopt new tools and innovative ways to communicate. They are open to try any e-book reader or i-product we offer them. They will even provide us with their feedback. They are flexible and demand the same from libraries and librarians. It is up to us to seize the opportunity and engage with them. Active direct engagement with users is done via surveys and direct focus groups. Today's generation of students is very open to voice their preferences, likes, and dislikes. Librarians write blogs, are on Twitter, and the library needs to have a Facebook presence. Libraries and librarians needs to be where the users are.

Conclusion:

With technological advancements and the changing learning environment, librarians are providing borderless information services. According to Obadare (n.d), digital information is changing the role of librarians radically: No longer are they to wait for students to ask for assistance in finding information in a place called a library. Their new role makes it imperative for them to provide services and instructions regardless of location, time or format. Consequently, the digital age has changed librarians from the custodian of books to thoroughbred information experts who now provide services to users in diverse locations. This transformation is

precipitated by changes in the way clients are accessing, retrieving and using information. As a result, librarians are now providing as well as promoting access, guidance, and training to both and electronic materials housed outside and in an online environment. They ensure that there is an active and efficient flow of information from the generators to the users of information in the digital environment.

With this paradigm shift in librarians' roles, it is evident that the goal post has changed regarding service delivery thus demystifying the "custodian" notion.

Suggestions:

After thoroughly discussing the roles, importance and responsibilities of the libraries from traditional to today`s digital or internet era, and librarians in the 21 century, the following suggestions were made. The birth of ICT actually changed the place of libraries in terms of information acquisition and storage as well as the methods of rendering services.

- 1. From Multiple Locations:** From Anywhere, Any Time, Any One, Users can consult all library holdings from workstation throughout the systematic catalogue, indexing, and abstracting services. Divorcing library services from a physical location provokes a profound difference in what a library service is. So, the librarian need to help them as per they need. For that the librarian should and must be ICT skilled.
- 2. Availability of More Resources:** Technology now allow users to have access to diverse resources i.e. from pure bibliographical records now to



delivery of indexing and abstracting services, course descriptions, class schedule. So, the librarian should be ready to provide all types of digital resources to the users.

3. Making Information Available in Raw Form:

Technology has moved patrons to rawer information or more detailed representation often called enhanced records and has been a key element for those studying information retrieval. Types of information available to users in digital form have continued to grow. In indexing and abstracting; search has moved from providing searchable index terms/descriptors to searchable abstracts, to more recently full-text of articles and books.

4. Diminishing Roles for Intermediaries:

Increase interaction with online system means patron less reliance upon library staff. Patrons can check circulation information without ever contacting the circulation department.

5. New skills and roles

need to be comfortable with changing technologies, interacting with users outside of the library space, and honing their negotiation, public speaking and presentation skills. "Just in Time" has replaced "Just in Case" in acquisitions, collection support and readers' services.

6. Understand the needs and Help to the Digital Library Users:

The librarian should understand the needs of the **New Digital Library Users** and facilitate also ready to provide all the information needs as per their requirements.

Many of today's library users were born during this digital time and have grown up being able to search the Internet independently, either for their personal use or academic work. As 'digital natives' they are accustomed to believe they find everything on the Internet. The composition of this group of users is mixed. Between teaching and research, this group carries the heaviest load on campus. Most of them are '**digital migrants**' with varied skills and preferences on how to use information resources. Although they may have their preferred ways, they are open to consider alternatives providing it will save them time. Time is a very precious commodity. The librarian should be provided all facilities which are the requirements of the users.

To achieve all the above suggestions, the modern digital libraries need to provide all types of library resources such as print as well as the digital information/resources including Open Educational Resources (OERs) and also Open Access Resources (OAR) and the librarian is need to play the various new roles in disseminating the information at users' fingertip in 24x7 as a Information manager, Information architect, Research Data Manage, Knowledge manager, Information broker, Cybrarian, Content analyst, Information Scientist and Information professional in the Knowledge-Based Society in 21 century.

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