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Changing Dimensions of Academic Librarianship from Ancient to Digital Era

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Abstract

There are evidences of existence of libraries as treasure house of knowledge in ancient history, earliest reference being The Great Alexandrian Library. A continuous transition in the libraries has happened in a phased manner over the years to get into the present "Digital Era". Containers of information have changed stage by stage from parchment to papyrus to paper to digital media. Librarianship had its evolution in 19th century. Functions and responsibilities of librarians have also changed drastically. From being mere custodians of the past, librarians of today have become policy advocates. The change is more vivid in academic librarianship because of the very fact that the services revolve around scholarship. Electronic information resources and the digitization recommend academic librarians to become – an intermediary, a gate keeper and a service designer. This paper attempts to encapsulate changing dimensions of academic librarianship with respect to collection, storage media and library services. Particularly, the influence of internet and ICT in designing newer library services is discussed.

Keywords: Institutional Repository; Web Portals.

1. Introduction

"Change is the essence of life; be willing to surrender what you are for what you could become." — Reinhold Niebuhr

Above is the famous saying of an American theologian and an atheist, who associates change with life. If there is no change, life becomes stagnate. Change brings in challenges in life. We have observed this in all our lives. Everything around us in the universe, including nature keeps changing. We as human beings should adapt to these changes and only then life becomes meaningful and purposeful. Librarianship as a profession has also seen very many changes from its inception. The way we practice is not the same as it used to be. Profession has come a long way from card catalogue to Online Public Access Catalogue; printed media of information resources to electronic media; reprographic service to document delivery service etc. We have learnt many

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things which were not taught three decades ago in library schools. Here is an attempt to refresh our memory and to look back how we have changed and progressed professionally to give better and better services to our users.

2. Transitions in libraries

There have been various historical evidences for the existence of libraries in the world for more than 25 centuries. The Great Alexandrian Library, which had flourished two hundred years before the birth of Christ, is one such evidence. The media of storing information then was papyrus rolls. Since then libraries around the world have seen two stages of transition. The first stage of transition was during invention of movable type printing press by Guttenberg in 1439. This invention accelerated the growth in printing leading to the production of multiple copies of books and thereby making them universally available. This universal availability of books, led to the establishment of various libraries encouraging and facilitating the reading habits of human beings. This is the first stage of transition in the history of libraries, which enabled information access to common man.

After the first stage, the art of library keeping has taken different shapes over the years leading to the design and development of sophisticated library services. In the mean time, the field, 'Librarianship' had its evolution. Due to the efforts of various people like Dewey and others, the art of practicing librarianship blossomed as 'Science'.

The Second stage of transition in the library profession is taking a definite shape in 21st century. Availability of digital information seamlessly in the last 2 to 3 decades leading to digital era is the main force in bringing about a lot of changes in libraries, information content, media (containers) and the profession itself.

3. Transition of information containers

Information content is the basic building blocks of libraries. Containers of information have evolved from clay tablets to the present digital format. The range of containers is listed below chronologically.

- Clay Tablets – Ancient method of storing information;
- Papyrus rolls - 2560–2550 BCE;
- Parchment – 5th Century BC;
- Paper – 2nd Century AD;
- Microfilm – 1851;
- Microfiche - 1950;
- Magnetic tapes - 1928;
- Computer hard disc – 1953 (Emergence of digital media);
- Floppy discs – 1971;
- Internet and WWW – Early 1970's;
- CD/DVD's – Mid 1990's;

- Pen drives – 2000.

From the above enumeration, it is clear that 'Paper' ruled as container of information for a large period. Libraries around the world were storehouses of printed material in the form of books and journals. Although microfilm and other storage media were invented in 19th century, paper remained the choice for information producers and seekers as well, until the emergence of digital media in the middle of 20th century. Electronic information resources and their advantages are slowly trying to replace paper media into digital media in most of the libraries across the globe.

4. Transition in users

Academic library users have drastically changed their information seeking behavior. They are no more passive in their approach. The digital era has empowered them and made them dynamic in the information seeking process. They are demanding and decisive. Users are different, their expectations are different. Scholarly communication pattern is also different. "Preprints" and "Reprints" are no more in the dictionary of scholarly communication. All the communication amongst peers happens through emails, instant messaging etc. Academicians and scholars across the globe are better connected. So, their perception of library services is also changing as we are moving away from print to digital media.

Open access initiative is another factor adding its share to the changing dimensions of academic librarianship with respect to user community. Open access, Open data, Open course, Open source have become the buzz words of scholarly communication.

The transition observed in libraries as institutions of learning from ancient to the present and the associated evolution in information media/content and the observed changeover of the user requirements has brought in "Changing dimensions of academic librarianship". When change is happening in all directions, this could even be considered as paradigm shift in academic librarianship.

5. Changing dimensions of academic librarianship

Librarians in academic institutions in early print environment were considered as mere custodians, who took care of the information resources preferably keeping everything under lock and key. This scenario changed slowly with the advent of Guttenberg printing press and the changing mindset of elite to share knowledge with have nots. As a result, librarians in the 19th and middle of 20th century became intermediary to promote the use of libraries. During the latter half, they became facilitators by designing a variety of services to help readers to get the right information. Academic librarianship was the first to adapt to this and subsequently they became promoters of information users.

In addition to the above, digital era in academia, has brought in many more dimensions to librarianship. The profession has changed drastically with the advent of Internet and WWW. Volume and veracity of digital information has made modern librarian – a Consumer, Aggregator, Publisher, Educator and Policy Advocate. As a result, librarians of these days have to shoulder higher responsibility. How do they calibrate their knowledge and services to the modern day requirement is the question. Following paragraphs discusses these issues associated with changing dimensions of academic librarianship in digital era.

6. Factors vital to digital librarianship

- Changing values;
- Globalization;
- Work force make up;
- Information revolution;
- Increased customer focus.

7. Digitization recommends librarian to become

An intermediary:

- Collect and organize information regardless of format;
- Manage databases and electronic resources;
- Analyze needs (reactively and proactively);
- Evaluate information resources.

A gatekeeper:

- Monitor resources;
- Provide information for known needs;
- Analyze and repackage information.

A service designer:

- Web portals;
- Digital gateways;
- Digital repositories/institutional repositories.

8. Changing dimensions of library services in academia

In the print era, library services were confined to circulation service, reference service, reprographic service and interlibrary loan service. The scenario has changed in this digital age. The advent of Web 2.0 has enabled variety of dynamic services in the academic libraries. Digital content and web based information retrieval services has brought in new services like:

- Web portals;
- Subject Gate Ways;
- Digital repositories/institutional repositories.

What are web portals?

- Web portals are internet based applications enabling access to different information sources through a single interface;

- Personalization, single sign-on and content aggregation are the attributes of web portals;

- Web portals are aimed at quickly navigating users to find the information they require for operational and strategic purposes and for decision-making.

What are subject gateways?

- Subject gateways are internet services, which apply a rich set of quality measures to support systematic resource discovery;

- They are designed to locate high quality information that is available on the internet;

- A large amount of digital content such as e-books, e-journals, bibliographic and full text databases and variety of other information in a specific subject area are made publicly available through subject gateways from internet;

- Subject gateways act as alternatives to the internet search engines and web directories, by taking the position equivalent to an academic or special library.

Digital /institutional repositories

- Digital/Institutional repository is an organized collection of selected digital resources created to support scholarship, research and teaching;

- Through the use of appropriate technological standards, a repository is created to facilitate permanent access to and resource discovery of selected digital resources;

- An institutional repository can be viewed as a set of services that an academic or research institute offers to members of its community for the management and dissemination of digital materials created by the institution and its community members.

9. Other services that are part of changing dimensions are :

- Social media like Blogs, Facebook, Twitter etc. can act as complimentary services with digital content;

- Federated search for resource discovery is another important facet of library services in digital era;

- Mobile library app being developed and marketed in the recent past is a value addition to academic library services.

10. Conclusion

Library services and their formats have been changing drastically ever since digital content along with Internet has crept into the library domain. ICT tools have enabled the modern day librarian to design better, user friendly and also personalized services in addition to the conventional services. Web portals and subject gateways play a major role in channelizing the otherwise cohesive information spread across the WWW to the right users at the right time.

Advantages of institutional digital repositories are undisputable. Librarians of modern genre are expected to develop a platform to enhance the visibility of research carried out in the institute by showcasing them through institutional repositories and such other mechanisms. Sohair F. Wastawy, Chief librarian of Bibliotheca Alexandrina has said "Anytime, anywhere, on any platform, via multiple conduits". By adding "Any information", we can make this phrase more meaningful in this digital era. This will be the reality soon with the new generation of communication through mobile apps.

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