

Changing Role of Librarians in the Digital Environment in the Perspective of Academic Libraries:

Issues and Solutions

By

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Abstract

In this digital age of civilization, humans are making their way toward the technically intense environment. Libraries, having a significant role in academics and human life, are also changing their appearance externally and internally. The librarians and the staff involved in library functioning face challenges in tackling the huge amount of information available in various formats concerned with acquiring, storing, processing, managing, and disseminating. In this article, the author tried to identify the issues the Library professionals are facing and recommended probable solutions for the challenges.

Introduction

Libraries are changing in this digital terrain. Dr. S.R. Ranganathan's fifth law states, "Library is a growing organism." And the library is growing in every aspect. People always depend upon Libraries for their overall growth and development since nonage. The demands vary concerning the metamorphosis in surroundings and conditions. To continue with the traditional form of services in the libraries also is a stake because they're failing to satisfy the streamlined patrons. In this situation, the librarian is a person who can helm the boat and incorporate the necessary conduct to accommodate the conditions of the present. As technology continues to advance at phenomenal speed, library professionals have to play a speedy and dynamic part to keep themselves up to date and learn new sets of chops to keep pace with technological developments. The explosive growth and wide operations of web coffers have made it imperative for library professionals to equip new chops in using bottommost ways and tools to manage new generation libraries. The fast-shadowing pace of new technological developments and the development of digital reference services demand different types of professional, directorial, and communication capabilities and tone assessment classes. Multitudinous technological trends impact the job of library professionals. The robotization of the library, the use of CD-ROM, and the Internet have dramatically changed the role of library professionals, making their jobs more demanding.

The present paper highlights the part of library professionals in the period of change. An attempt has been made to observe the impact of ICT on librarians. States how the librarians manage with the advanced technology by acquiring different types of capabilities. It also throws light on the challenging part of librarians in the E-Learning age. The digital revolution has brought significant changeovers to the world of libraries. With the appearance of advanced technologies and the proliferation of digital resources, the part of librarians has expanded beyond traditional boundaries. In the moment's digital terrain, librarians play a vital and evolving part in easing access to information, guiding patrons in navigating digital resources, promoting digital knowledge, and curating applicable and reliable content. This composition explores the multifaceted arrears and arising places of librarians in the digital age, pressing their impact on information operation, user services, community engagement, and the preservation of knowledge.

Objectives

The main objectives of this composition are,

1. To know the changes in the academic library terrain.
2. To identify the areas of library systems where technologies are taking place.
3. To understand the challenges faced by librarians in managing the sources, systems, services, and library customers.
4. To suggest measures for managing challenges.

Literature Review and Methodology

To understand the current script, former exploration reports in this area were studied. Some of them are furnished then-

The metamorphosis of academic libraries in the digital age has led to a significant shift in the places and liabilities of librarians. Experimenters have explored colorful aspects of this evolving geography.

“The digital librarian's part will be decreasingly towards offering consultancy to the druggies in their sweats in furnishing digital reference services, electronic information services, navigating, searching, and reclamation of digitized information through Web documents that gauge the Universal Digital Library or the Global Digital Library.” (Hashim & Mokhtar, 2012)

“Technology will continue to change, and libraries and library professionals have to use the changing technology to give stylish access to coffers and services to their drugs. Surely, the electronic information terrain creates challenges for the library community and moves it down from the traditional paper-and-print format to an insubstantial world of circuits and connectivity.” (Verma, 2015)

“In the digital terrain, there's still a significant need for mortal intervention and mortal-to-mortal communication in the accession of deducible, problem-solving, and critical thinking chops. Digital technology is unfit to outperform mortal beings in terms of logical thinking, critical interpretation of information, and contextual operation. Technology cannot reuse information and connect the generalities using knowledge and experience like a mortal brain.” (Bandyopadhyay & Boyd-Byrnes, 2016)

Librarians' places have expanded from curating physical collections to curating and managing digital depositories, fastening on conserving and furnishing access to electronic coffers (Smith, 2018).

This study aims to exhaustively understand the changing role of librarians in the digital terrain from the perspective of academic libraries. Data will be gathered using a mixed-methods approach.

Changes in the global terrain for digitalization

Since the dawn of the 20th century, the world has been shifting from the digital world to the electronic world, where the utmost conditioning is done digitally. The trip from analog to digital wasn't so fast but the path to digitization is veritably rapid-fire for institutions like libraries. Most of the customers attached to academic libraries belong to Generation Z (born between 1995 and 2009) and Generation Nascence (born between 2010 and 2024). These scholars are largely tech experts and want to learn further effects by spending the last time. Due to the advanced technologies and fast development in the exploration fields, the coffers are generated impetuously. Libraries with traditional and old structures are facing difficulties in dealing with resource operation as well as stoner operation. So on demand, the libraries are shifting to digital format by conforming several means to go to the inflow.

“A digital terrain is an intertwined dispatch terrain where digital bias communicates and manages the content and conditioning within it” (Wikipedia). The digital terrain has become an integral part of everyday life,

percolating colorful aspects of society, communication, and business. It was a time when technology had advanced significantly, and the internet had converted into a sprawling network connecting people, information, and bias from all corners of the globe. Social media platforms have reached unknown situations of fashionability, allowing individuals to connect, partake in events, and express themselves online. The digital geography was dominated by titans like Facebook, Twitter, Instagram, and YouTube, where people could post prints, videos, and studies and engage in conversations with musketeers, family, and indeed non-natives. Digital communication has evolved with the frequency of messaging apps and videotape conferencing tools. WhatsApp, Messenger, Skype, and drones allowed people to stay connected with motorcycle families and associates across distances. Videotape calls and online meetings became a vital part of work and social relations. In educational geography, e-learning platforms gained instigation, offering online courses and coffers for learners of all periods. Scholars could pierce lectures, tutorials, and study accommodations ever, making education more accessible and flexible. The proliferation of smartphones and mobile apps further shaped the digital geography. Mobile bias handed instant access to a multitude of services, ranging from banking to health monitoring, all at the swipe of a cutlet.

Academic Library

Libraries are attached to academic institutions called academic libraries. The main people attached to these libraries are the scholars, preceptors, exploration scholars, and the staff of the institution to which the library is attached. As the world is changing to a technologically streamlined interpretation, all the effects that count on a library are also changing. Similar to the shape and form of documents, coffers, and demands of drugs. so, principally, the structure of an academic library has been changed grounded on the ultramodern script and the demand of time. The librarians are facing hurdles to manage the coffers, which are evolving nowadays. Traditional library services are becoming obsolete because of the new forms of conditions coming to them.

Role of Librarian in Traditional Academic Libraries

Librarians in a traditional academic library used to give services to the users in a very traditional way, either on demand or in anticipation. Lending, reading, reprographics, CAS, SDI, reference service, etc. are the main services given to the users in an academic library. The library professionals try to serve the users with all their possible efforts to meet their demands. To manage the library system, the professionals use the knowledge they acquire from their library professional courses before joining the library job. The basic activities of a library, like budgeting, book purchasing, accessioning, classification, cataloging, filing, etc., are all done by the staff of the library manually.

Shifting to digitization

The era we are living in is called the digital era, as our environment is becoming digital. From business to education, health to entertainment, all the fields are experimenting with the newest technologies and innovating every day. People are already in the grip of highly technical gadgets, using AI (artificial intelligence) tools for various purposes. The users of academic Libraries of Higher Educational Institutes are the most technologically awakened persons in society. So the demands of these users on the libraries are very much empirically influenced.

Based on global change and the demands of contemporary users, libraries are shifting to digitization. Mostly they are trying to convert the print documents into digital format so that the documents (specifically rare documents) can be preserved for a long time and can be served to remotest and bigger audiences. Various state and central governments are also taking initiatives for people to make them aware of and used to these technologies. Personal interests are also seen in learning new things on e-learning platforms through online courses.

Major Changes in the Academic Libraries

The major changes in the areas of academic libraries have been experienced by the library personnel are as follows-

1. Types and formats of Library collection
2. Procurement of sources
3. Processing techniques of materials
4. Stacking of resources
5. Forms of services to be given to the users
6. Timing of the library
7. Inclusion of ICT
8. Internet
9. LMSs
10. Access to resources
11. Quality of users
12. Quantity of users
13. User orientation program contents
14. User's requirements
15. Library Infrastructure
16. Library budget
17. Library staff quantity in terms of posts for different jobs
18. Library staff quality in terms of education and skill
19. Attitude of the library users
20. Accountability of the library personnel, etc.

The changes are seen from different perspectives, described here in a tabular format.

Sl No	Area	Traditional Library	Library in Digital Environment
1	Information Sources	Books, Journals, magazines, databases	E-books, E-journals, E-magazines, repositories, Wikipedia, WWW, etc.
2	Library management system	Manual	Electronic, digital, and Virtual using various LMSs
3	Users	Generation X, Y	Tech-savvy Generation Z, Alpha
4	Service	Traditional manual services using registers, cards, etc.	e-services using software and various applications like e-mail, direct messaging, SNSs, etc.
5	Library hour	Specific time duration as per rules of the institute	24x7 for 365 days
6	Access	Limited access	Unlimited access, sometimes with a subscription
7	Physical presence	Mandatory to access library resources	Not necessary; resources are available online in the remotest places also

The Changing Role of Librarians in a Digital Environment

As we see, many things have changed in the academic library system; the types and periphery of the work of a librarian have to be transformed to emulate the main evolution of digitalization. To be prompt in service and to manage digital information sources, librarians are facing endless challenges. A successful library system depends very much upon its leadership, who looks after all the minute and huge matters of the department and

here the leader is the Librarian. This person has to take responsibility for the total library system and the performance of the library. To accomplish the pursuit, the librarian has to play different characters, such as

1. Digital Content Curator
2. Technology facilitators
3. Consortia manager
4. Repository manager
5. Information manager
6. Knowledge manager
7. Digital librarian
8. Consultant
9. Web designer
10. Blogger
11. Digital information manager
12. Data analyst
13. ICT professional
14. System librarian, etc.

Challenges in meeting the modern-day demands

Most library professionals attached to different academic libraries are accommodated with the old and traditional library systems. And they are observing multifarious labyrinths to become efficient in their performance. The challenges they are facing in

1. Procurement of digital resources
2. Processing of digital resources
3. Preservation of digital resources
4. Serving the users on time
5. Giving users accurate data as per demand
6. Handling the ICT tools
7. Managing the LMSs
8. Digital Collection development
9. Conducting a User Orientation program in an effective manner
10. Conducting user surveys
11. User management
12. Engaging the users in the library;
13. Making users updated;
14. Making the library collection updated
15. Handling digital collections as well as physical collections
16. Handling different online databases and repositories
17. Subscribing different online journals and digital collections with relevance
18. Using social media platforms
19. Website designing and managing
20. Blogging
21. Handling Internet, Wi-Fi
22. Handling Electricity issues
23. Increasing user base
24. Reaching to the remote audiences
25. Convincing the authority for budget, manpower, training, and infrastructure
26. Copyright issues and many more.

How to resolve the challenges?

To cope with these modern-day challenges, librarians should keep them updated not only to meet the demands of the users but to save their existence in the future. A skilled person is a far better performer than a theoretically educated person. Hands-on learning are necessary to be a valuable part of the library system in this era of digitalization.

Only the skills are not enough if there is no accountability and personal realization for the betterment of the academic library system and the quality of information and services to be given to the patrons of the library.

Academic librarians are facing various challenges in the era of digitalization. Here are detailed solutions to address these challenges:

1. Managing Digital Resources

Solution: Invest in robust library management systems (ILS) and digital asset management platforms. Implement metadata standards for consistent cataloging. Offer training to librarians to effectively manage and curate digital collections.

2. Information overload

Solution: Provide information literacy workshops to help students and faculty navigate digital resources efficiently. Offer personalized research assistance and collaborate with faculty to integrate information literacy into the curriculum.

3. Access and authentication

Solution: Implement Single Sign-On (SSO) solutions for seamless access to digital resources. Work with IT departments to ensure reliable authentication and access for both on-campus and remote users.

4. Copyright and Licensing

Solution: Develop clear copyright policies and guidelines. Educate faculty and students about fair use and copyright compliance. Negotiate licenses for electronic resources and stay updated on copyright law changes.

5. Digital Preservation

Solution: Establish a digital preservation strategy that includes regular data backups, format migration, and adherence to digital preservation standards. Collaborate with consortia for shared preservation efforts.

6. User Engagement

Solution: Offer user-centric services like virtual reference, online tutorials, and chat support. Use social media to connect with users. Solicit feedback and conduct surveys to understand user needs.

7. Changing roles

Solution: Adapt librarian roles to focus on information literacy instruction, research support, and technology integration. Provide professional development opportunities for librarians to acquire new skills.

8. Budget constraints

Solution: Advocate for increased library budgets and demonstrate the value of digital resources through usage statistics and impact studies. Explore open-access options and engage in resource sharing.

9. Technological upgrades

Solution: Stay informed about emerging technologies and trends. Collaborate with IT departments to ensure library systems and software are up to date. Provide technology training for librarians and users.

10. Data privacy and security

Solution: Implement data privacy measures, including secure access controls and encryption for user data. Stay compliant with data protection regulations (e.g., GDPR) and educate users about privacy settings.

11. Collaboration and Outreach

Solution: Partner with faculty, researchers, and other campus departments to integrate library resources into teaching and research. Collaborate with other libraries and consortiums for resource sharing and joint projects.

12. Continuous learning

Solution: Foster a culture of continuous learning among librarians. Encourage participation in conferences, webinars, and workshops to stay updated on best practices and innovations.

By implementing these solutions, academic librarians can effectively navigate the challenges posed by digitalization and continue to provide valuable support and resources to their users in the digital age.

Conclusion

In conclusion, the changing role of librarians in the digital environment has brought about a transformative shift in the landscape of academic libraries. As institutions increasingly transition to digital formats, librarians have evolved from traditional gatekeepers of physical collections to dynamic navigators of the vast and intricate digital realm. In this digital age, librarians serve as technology-savvy guides, assisting users in navigating a sea of information, deciphering complex databases, and harnessing the power of digital tools for research and learning.

The perspective of academic libraries underscores the critical importance of librarians in bridging the gap between technology and education. Librarians now curate digital collections, ensure the integrity and accessibility of electronic resources, and educate users on digital literacy and copyright compliance. The evolving role of librarians extends beyond the confines of library walls, as they collaborate with faculty, researchers, and IT professionals to integrate digital resources seamlessly into the academic curriculum.

While the digital environment has brought its challenges, from managing vast amounts of data to addressing copyright concerns, librarians have risen to the occasion, acquiring a blend of technical communication and information management skills. Their commitment to fostering user-centered experiences, data security, and lifelong learning has redefined their significance as indispensable pillars of academic success in the digital age.

In essence, the changing role of librarians in the digital environment illuminates their adaptability, resilience, and dedication to supporting knowledge dissemination and advancement. As academic libraries continue to navigate the currents of technological evolution, librarians emerge as dynamic custodians of intellectual growth, embodying the ethos of innovation, collaboration, and empowerment that defines the modern academic landscape.

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