



Navigating the Digital Edge: the Evolving Role and Responsibilities of Library Professionals

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Abstract

In the current era of digitalization, we strive to acquire comprehensive knowledge through the utilization of Internet technology. Global internet connectivity is widely accessible. The majority of the library resources will undergo migration to the Internet platform. The process of digitizing library collections, using automation in the acquisition, circulation, cataloging, and reference technologies as well as utilizing open-source software can liberate library professional's time and library space, allowing them to focus on new initiatives. The majority of these services are accessible through open-source software that are making the initial investment cost manageable for libraries. As a result, migration is occurring rapidly. Library personnel are currently recognized as individuals who give information or act as custodians of knowledge. In order to effectively provide high-quality information services to the users' community, they must enhance their competencies and acquire knowledge in Information Communication Technology (ICT). This article discusses the influence of the dissemination of knowledge through Information and Communication Technology (ICT) and web technologies on libraries, information centers, and individuals seeking access to information.

Keywords: ICT, Digital Era, Library, Role of Library Professionals, Resource Sharing, Library Automation.

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B. Rautaray et al. (eds.), *Proceedings of the International Conference on Marching Beyond the Libraries (ICMBL): Leadership, Creativity, and Innovation (ICMBL 2024)*, Advances in Economics, Business and Management Research 326,

https://doi.org/10.2991/978-94-6463-712-0_13

1. Introduction

The advent of the technological era coupled with its electronic infrastructure has presented numerous obstacles across all domains of developments and operations. Librarianship is a venerable and esteemed service profession. It combines essential specialized knowledge in three domains: information, information technology, and users. Librarianship encompasses all three of these domains, while other fields such as computer science and communications technology cover certain aspects of them. The effectiveness of information retrieval services relies on a specialized combination of knowledge in areas such as information, users, and information technology. The advent of the World Wide Web has profoundly transformed the information landscape in an unforeseeable manner (Kamble and Wankhade, 2021). The effectiveness of information retrieval services relies on a specialized combination of knowledge in areas such as information, users, and information technology. The advent of the World Wide Web has profoundly transformed the information landscape in an efficient manner. Consequently, the job of a librarian has changed to become that of a knowledge manager or information supplier, applying modern techniques to locate materials in line with user needs and technological advancement. The work of librarians nowadays is characterized by a scarcity of resources, frequent changes, and the necessity for adaptability, as well as the importance of efficient communication (Murugan, Ravi and Surianarayanan. 2009).

ICT (Information Communication Technology) is creating a significant impact in today's society, particularly in academic libraries. It has influenced various aspects of library activities, including collection development, automated library, digitization, electronic resource sharing, and communication with other peers. Information and Communication Technology (ICT) has brought significant and revolutionary changes to academic library services. These changes include the implementation of the Online Public Access Catalogue (OPAC), Current Awareness Services, Information accurate, interlibrary loans for digital information, and audiovisual services. ICT has improved the convenience, timeliness, cost-effectiveness, and dissemination of up-to-date information to end users. It has also increased end users' involvement in the library and information service process.

In the era of digitization, the responsibilities of librarians have expanded beyond the traditional tasks of acquiring, organizing, retrieving, and distributing information. The library professionals of modern digital libraries have transitioned from utilizing early typewriters to using the internet in the present day. As we step into the digital library era, library personnel must adapt to evolving technologies in order to offer optimal access and service to their clients (Kumari, 2017).

A digital library is a systematically curated collection of multimedia and other various types of resources that are accessible in a computer-readable format. The process of acquiring, storing,

preserving, and retrieving information is facilitated by the utilization of digital technology. The complete collection can be accessed worldwide, either directly or indirectly via a network.

2. Objective of the Study

The primary objectives of this study are :

- To define and explain the concept of the digital library environment,
- To identify the key responsibilities of library professionals,
- Assess the skills and competencies of library professionals, and
- To understand how library professionals are evolving and how they can effectively adapt to meet the demands of the digital age.

3. Current Trend of Libraries

Information and Communication Technology (ICT) is significantly influencing the reorganization of libraries in the current digital age. Currently, the library is endeavoring to acquire all types of information resources, encompassing both print and electronic formats (Partap, 2021). According to the format of information resources and the historical context, various types of libraries have emerged in society, including:

3.1. Automated Library

An automated library denotes a library system that uses technology to optimize and improve various activities, such as cataloging, circulation, and information retrieval. Library automation generally entails the utilization of integrated library systems (ILS), enabling the administration of library resources and services via software applications. Automated libraries can augment efficiency, facilitate superior access to knowledge, and elevate the user experience (Raju, 2015).

3.2. Digitization and Resource Sharing

The printed document will be scanned and transformed into a standard format (such as HTML or XML), utilizing Optical Character Recognition (OCR) to extract text for searchability. Ultimately, utilizing metadata and cataloging information, the current document will be transformed into a digital format.

Resource allocation The terms 'give' and 'take' signify that the library should be ready to permit other libraries to utilize its resources, and conversely, it can access its resources. Libraries, regardless of their extensive resources, cannot achieve self-sufficiency. Ultimately, it will rely on other libraries to fulfill the informational needs of its readers. The requirements of readers have evolved over the years. A professional does not solely operate within their expertise; rather, due to

the interdisciplinary nature of study or teaching, they must incorporate content from other fields as well.

3.3. Networking

Computers are considered inter-connected when they can exchange information. Contemporary technology has broadened the scope of individual libraries to include resources on a national level, facilitated by the rapid advancement of telecommunications and computer systems. Computer networking has enabled the sharing of bibliographic systems and library databases.

3.4. Digital Resource Management

As digital media proliferates, libraries are required to oversee both physical collections and electronic resources, including e-books, databases, and multimedia. The digital resource management module interfaces with learning management systems (LMS) and enables users to access digital content both on-premises and remotely. This module manages licensing agreements, ensuring libraries adhere to usage limitations for digital content.

3.5. Remote Access and Mobile Accessibility of Library

Remote access to library materials is crucial as digital learning becomes more prevalent. Nowadays, a lot of libraries provide mobile apps that let users use their cell phones to access their accounts, look up catalogs, and check out e-books or other digital materials. For educational institutions, where staff and students can want access to resources from off-campus locations, this functionality is highly important.

4. The Changing Role of Library Professionals

In order to meet user requirements and keep up with emerging technologies, library personnel are evolving in their duties. Some of the duties and responsibilities are mentioned below:

4.1. The transformation of librarianship in reaction to the digital era

The advent of the digital era has brought about a significant change in the responsibilities of librarians and other library professionals, requiring them to transition from traditional to technologically proficient and knowledgeable professionals. In the past, librarians had the primary duty of categorizing and arranging physical collections. Nevertheless, they have played a crucial role in overseeing, organizing, and enabling access to extensive digital resources in response to the digital era. The transition to digital collections, e-books, online databases, and digital archives has fundamentally transformed the nature of librarianship. Modern librarians serve as skilled information navigators, assisting consumers in navigating the complex web of online information and adapting to ever-changing technological environments.

4.2. Emerging Demands on Librarians

In the era of digitalization, librarians must possess a specific set of skills and abilities in order to thrive in their positions. The traditional tasks of cataloging and shelving have been enhanced by the requirement for proficiency in digital resource management and information literacy (Cox, 2013). Librarians must possess advanced skills in employing and instructing a diverse range of digital tools and platforms. Information retrieval abilities today comprise not only the physical walls of the library but also databases, search engines, and developing technology. In addition, librarians are increasingly expected to serve as proponents for unrestricted access to information and defenders of intellectual property rights (Dempsey, 2011). Librarians must possess collaborative and multidisciplinary abilities in order to effectively interact with a wide range of user communities and collaborate with educators, researchers, and information specialists.

4.3. Role of Leadership and Managerial Skills

One crucial responsibility of custodians is to provide leadership and expertise in the design, development, and ethical management of knowledge-based information systems in order to fulfill the information needs and obligations of the users. S/he should enhance his managerial skills in organizing, monitoring, and distributing e-education to users.

4.4. IT Skills as Digital Information Provider

When providing data assets to benefactors, regardless of the network, it is crucial to have a high-quality virtual administrator. S/he should possess the ability to satisfy a diverse variety of users, notably study researchers and the younger generation who frequently utilize the internet for the latest information updates. S/he should possess the ability to create his website as a more straightforward method to share with others the knowledge they have.

The advancement of electronic storage (e-hold) systems demonstrates the ability to adapt to new technologies and provide services more efficiently, including the implementation of the Z39.50 standard to aid users in simultaneously searching many data resources. Accurately evaluating the appropriate data at the optimal moment is the most crucial element of a Virtual Library. A distinction should be drawn between digital sources of information that are easily and quickly accessible and information that is limited in usefulness, unpredictable, and constantly changing.

4.5. Staff Development Programme

Rapidly changing circumstances both within and outside the library, employee enhancement initiatives, and data retrieval are the most conspicuous skills demonstrated by a librarian to the public. Highly skilled personnel should be carefully chosen to fulfill the growing demands of the information society, which is crucial for the ongoing success of the organization.

4.6. Information Literacy Programme

Administrators must modify their role in the e-learning environment by actively participating in e-learning research and becoming involved in university e-learning centers. Sarasvathy, Nambratha, and Giddaiah, who are highly knowledgeable individuals, need to demonstrate their expertise in data in order to instruct future specialists in learning, either through traditional methods or through online instructional modules.

4.7. E-Resource Manager

Scholastic and research libraries play a significant role in ensuring that they and their home institutions remain essential contributors in the evolving field of information and education. Personnel may lack awareness of copyright concerns and have a limited understanding of the electronic materials available or permitted by the library. Virtual learning frameworks can be linked to library frameworks by integrating library frameworks into the backend via technological components, as well as involving library workers in the development of virtual learning environments.

Librarians and other library professionals play a crucial role in the digital era by collecting, organizing, and promoting digital resources to make it easier for users to access information and improve the process of discovering knowledge. Digital curation encompasses the process of carefully choosing, safeguarding, and overseeing digital content to guarantee its continued availability and usefulness over an extended period of time (Kahle, 2006). Librarians oversee and manage digital collections, organize metadata, and utilize taxonomy to improve the ease of finding and accessing information. They play an active role in developing digital libraries, digital displays, and institutional repositories to promote access to distinctive digital content (Arms, 2009). In addition, librarians play a leading role in promoting digital literacy by providing users with the necessary skills to assess online material. It recognizes trustworthy sources from the universe of knowledge and uses digital tools for learning and research in an efficient manner (Doyle, 2019). In an information-rich digital world, librarians have evolved into knowledge traders, dependable e-mentors, and advocates for equitable and unfettered access to digital resources. Their expanding roles transcend the boundaries of libraries, influencing education, research, and society. Librarians, as custodians of information and enablers of digital access, have a crucial role in utilizing the possibilities of the digital era to enhance the spread and exploration of knowledge.

5. Challenges and Opportunities

Library and library professionals are facing some challenges while adapting to the digital library age. The challenges are listed below:

5.1. Information Overload

A primary obstacle that librarians face in the digital era is the immense quantity of information that is accessible. The internet and digital archives have significantly augmented the volume of data and sources that people can access. The abundance of information can result in information overload, which can hinder users in identifying pertinent, precise, and reliable sources (Wilson, 2019). Librarians must address this challenge by instructing users in information literacy skills, assisting them in improving their search tactics and curating reliable digital resources.

5.2. Changing User Expectations

The advent of the digital age has introduced a new era of user demands and anticipations. Users are increasingly expecting immediate access to information, customized services, and smooth digital experiences. Libraries are expected to provide round-the-clock online access to resources and professional support through virtual reference services (Connaway and Dickey, 2010). Librarians need to adjust to these changing expectations by adopting digital platforms, creating user-friendly interfaces, and offering responsive and user-centric services.

5.3. Privacy and Security Concerns

Libraries witness increased worries about user privacy and data security as they incorporate digital technologies. Protecting user data and enabling secure access to digital resources is of utmost importance (Jones and Pack, 2018). Librarians are required to stay updated on privacy rules and technologies in order to safeguard user information while upholding ethical standards of confidentiality and data protection.

6. Opportunities for Libraries

Libraries are transforming in the digital era, offering various chances to improve their functions and services within communities. The following are some significant opportunities:

6.1. Digital Resource Management and Discovery: Librarians in the digital age have an exceptional opportunity to oversee and organize extensive digital collections efficiently. Librarians can improve the discoverability and accessibility of digital resources by utilizing digital asset management systems and adhering to metadata standards (Lee, 2013). Librarians can use digital tools to effectively arrange, categorize, and preserve these resources, guaranteeing their long-term usability.

6.2. Virtual Reference and Online Learning: Technology enables librarians to expand their services beyond the physical boundaries of the library. Librarians can offer prompt support and teach information literacy skills in virtual settings using virtual reference services, chatbots, and video courses (Ellis, 2019). Librarians can work together with educators to integrate information literacy into online learning platforms, improving digital literacy abilities and fostering critical thinking among users (Radcliff and Radcliff, 2019).

6.3. Open Access and Digital Scholarship: Librarians can advocate for open access efforts, which aim to promote the free and unfettered distribution of scholarly literature (Suber, 2015). Libraries play a crucial role in facilitating digital scholarship by aiding researchers in the organization and dissemination of their digital work, promoting cooperation, and safeguarding research data (Borgman, 2015). These endeavors contribute to the progress of knowledge and the dissemination of information. To summarize, the digital era poses considerable difficulties for librarians, but it also provides numerous chances for professional advancement and improved service provision. Librarians may confidently traverse the digital landscape and maintain their role as essential guardians of knowledge and information by embracing technology, remaining aware of changing user needs and respecting principles of information access and privacy.

7. The Future Library in the Digital Era

As we contemplate the future of librarianship in the digital world, a number of trends and advancements become apparent:

7.1. Digital Inclusivity

Librarians will have a vital role in guaranteeing digital inclusion. Their objective is to reduce the digital divide by ensuring equal access to digital resources and technology for all individuals in their communities.

7.2. Data Management and Preservation

Librarians will play a crucial role in data management, preservation, and curation as the use of data in research and decision-making increases. By doing this, they can protect priceless digital datasets for coming generations.

7.3. A.I. and Machine Learning

Librarians will use artificial intelligence and machine learning as these technologies develop to improve information search, automate repetitive processes, and offer customized services.

Virtual and Augmented Reality: In order to develop immersive learning environments and turn traditional libraries into hubs of interactive digital experiences, librarians will investigate the possibilities of virtual and augmented reality.

Digital Ethics and Privacy: Navigating the changing terrain of privacy rules and ethical considerations in the digital environment, librarians will persist in their advocacy for digital ethics and user privacy.

8. Conclusion

The advent of the digital era has thrust librarianship into a new period marked by changing opportunities, problems, and duties. As librarians embrace their digital destinies as information curators, tech gurus, and champions for equal access, this research has shown incredible adaptability and innovation within the profession. It looks like librarianship will have a fascinating and demanding future. Librarians must continue to be adaptable, creative, and dedicated to their primary goals of facilitating knowledge access and advancing information literacy as they navigate the ever-changing digital ecosystem. The research findings show that librarians have not only adapted to the digital age, but have flourished in it, which addresses the main research question, "How have librarians adapted to the digital age, and what are the implications of these adaptations for the profession?". Their changes have significant ramifications for the field, emphasizing the vital role librarians play in promoting information ethics, supporting digital inclusiveness, and conserving digital knowledge. Organizers who are highly skilled in acquiring, organizing, retrieving, and disseminating information must adapt and safeguard new skills required in the digital era. The virtual library does not provide a comprehensive solution for everyone's data requirements. It is merely a further advancement in a fluid and evolving process. The traditional print library and conventional library services will not disappear. As curators, we must recognize and adapt to the introduction of novel techniques and frameworks. We must recognize the immense potential of the virtual library, acknowledge the challenges involved in its development, and take a leadership role in integrating these new systems and services into our libraries for our own benefit and the advantage of our users.

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