

ABILITIES AND SOFT SKILLS REQUIRED OF LIBRARY PROFESSIONALS IN THE ERA OF COMPUTATIONAL INTELLIGENCE

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Abstract: *The Borderless Library represents a technologically advanced, internet-based library system that offers services to its clientele via computer networks. In light of the transformations occurring within the library landscape, library and information science practitioners must become proficient in a diverse array of competencies. This manuscript endeavors to elucidate certain essential skills necessary for library and information professionals operating in an information technology context and emphasizes various programs aimed at fostering these competencies among such professionals.*

Keywords: *Library Professionals, Skills, Computer Network, ICT, Library*

Introduction:

Modern librarianship is fundamentally predicated upon Information and Communication Technology (ICT) as a result of the proliferation of the internet, enhanced bandwidth capabilities, sophisticated search engines, diminished costs associated with cutting-edge computing devices, web-based tools, freely accessible open-source library automation software, content management systems, social media platforms, mobile applications, a heightened availability of complimentary electronic resources, open archives, online sharing of e-resources, and a substantial escalation in diverse electronic publications. The primary objective of contemporary library professionals is to integrate information technology-based infrastructure, tools, and services by the exigencies of modern librarianship. It is imperative for them to engage in ongoing enhancement and to embrace web-based technologies within the library context. This research has examined the extant condition of information technology competencies among library professionals within technical institutions across our nation. It is imperative to have a highly qualified library authority possessing substantial expertise in library and information science, coupled with adeptness in information technology skills, to effectively organize and manage IT-based services as necessitated by contemporary users. A proficient library professional is capable of overseeing IT infrastructure and services in an enhanced manner. To embrace IT infrastructures and address the challenges of the modern era, the present evaluation of library professionals

reveals that they are equipped with essential information technology skills, software applications, library automation, and digitization techniques, database management proficiencies, website development, and design capabilities, knowledge of web markup languages, and the ability to utilize content management software.

Objectives of study:

1. The objective is to delineate the multifaceted components of the current competencies possessed by Library and Information Science (LIS) professionals, while concurrently discerning the domains that require enhancement within the modern information systems landscape.
2. In order to cultivate a more profound comprehension of the practical ramifications associated with this domain.
3. to determine where LIS workers lack certain skills.
4. to research the issues and difficulties facing librarians in the new digital world.

Methodology:

The research is predicated on an extensive analysis of pertinent literature, as well as an investigation of online resources.

Skills required for LIS professionals:

1. Digital Literacy:

Every day, information and communication technologies advance, impacting how services are provided across all societal sectors. With the development of numerous IT-related services, which have improved the library's overall operations and traditional services, it is not left behind. These abilities, sometimes known as digital literacy skills, are essential for librarians to be functional in the modern era. It is crucial to educate librarians about the importance of having these digital literacy abilities in order to guarantee better service delivery and more involvement in the field of information communication technology. Through the use of these digital literacy abilities, librarians will become proficient in navigating the information landscape and ensuring the efficient construction and full utilization of information resources.

Digital Preservation: Digital preservation is a continuous, expensive endeavor. Without a strong and ongoing commitment to preservation from the parent institution, libraries, archives, and museums cannot decide to adopt digitization with long-term preservation and storage of research collections. An organizational commitment is required for the financial and technological resources needed to preserve digital content and transfer it to future generations. Failure to address the clearly stated issues and techniques related to digital preservation could lead to the loss of important digital data as well as cultural and intellectual loss that, if it can be recovered at all, would incur enormous expenditures. In order to support digital information preservation, librarians must take on the academic problem of resolving the urgency between the creation context and the use context.

2. Information Technology Skills:

Integrated Library System (ILS): The extensive implementation of computing and communication systems in the recent historical context has significantly enabled the conceptualization and execution of 'integrated library (information) systems.' Dr. Ralph Halsted Parker, a seminal figure in the realm of library mechanization, introduced the term 'Library Information Systems (LIS)' circa 1968, conceptualizing LIS not solely as a means of 'automating' pre-existing library operations, such as circulation and cataloging, but also as a mechanism for facilitating access to electronically held materials from diverse libraries and information centers globally. At present, systems librarians are actively engaged in the development of 'Integrated Library Systems' (ILS), by establishing a technological framework that bolsters and enriches end-user access to digitally archived document surrogates and content. The analytical and design processes associated with an LIS are directed toward augmenting patron satisfaction by ensuring timely access to pertinent information.

Data Management: Data management constitutes a systematic methodology for the proficient collection, preservation, organization, and application of data to fulfill organizational goals. This process necessitates the establishment of protocols and standards to guarantee the accuracy, uniformity, and security of data throughout its entire lifecycle. The domain of data management includes a multitude of activities, notably data governance, which formulates policies governing data utilization and ensures adherence to regulatory requirements. The efficacy of data management also entails the judicious selection of suitable storage solutions, such as relational databases or cloud-based storage, alongside the implementation of backup and recovery strategies to mitigate the risks associated with data loss. Furthermore, initiatives aimed at data integration promote the seamless exchange of information across systems, thereby enhancing collaborative efforts and informed decision-making.

Cybersecurity Awareness: The influence of the Internet on library services encompasses various domains including technical processing, collection development, interlibrary loan, reference services, information services, information retrieval, user education, marketing of library services, and the safeguarding of library resources and services. The protection of library resources is an indispensable prerequisite, as Internet users and institutions exhibit susceptibility to cybercrime, threats, and assaults; thus, the sole remedy lies in the implementation of cybersecurity measures to shield resources from unauthorized access and malicious attackers. In order to maintain effective cybersecurity protocols within the library context, librarians must possess comprehensive understanding of the diverse manifestations of cybercrimes that impact library information resources.

3. Research and Information Retrieval:

The proliferation of literature manifested through micro documents juxtaposed with the increasing demand from users for more specialized literature and information

has compelled information scientists to devise efficient information retrieval systems that are predicated upon advancements in technology and their associated methodologies. The establishment of databases for library resources, coupled with advancements in indexing methodologies, has significantly alleviated the challenges associated with the storage and management of extensive data volumes. At its optimal level, this evolution has augmented the retrieval efficacy of various items. Consequently, the primary emphasis of information scientists over the past several decades has been directed towards the design and development of increasingly robust information search and retrieval systems.

4. Data Analysis and Interpretation:

Libraries and information centers engage in the systematic collection, processing, and dissemination of information. Consequently, these activities result in the generation of substantial volumes of data. Such data can be leveraged to enhance library services for patrons and to substantiate the organization's significance to its governing body. The proliferation of data and information is occurring at an unprecedented pace. The velocity of information growth is so substantial that data scientists must routinely develop new metrics to quantify the volume of data or information. In this context, the responsibilities of information managers are significantly amplified; thus, libraries and information centers must formulate strategies to effectively manage this vast influx of data and information. Furthermore, even at the organizational level, the volume of data produced by users, staff, and collections is exceedingly large. If this data is not utilized efficiently, it will merely constitute an inconsequential accumulation of waste.

5. Knowledge of Emerging Technologies:

The progression of technological advancements has increasingly influenced library user services over time. The advent of technology has provided numerous solutions for libraries, with the preceding decade serving as a testament to the integration of cutting-edge technologies within these institutions. The transition from Library 1.0 to Library 2.0 and subsequently to Library 3.0 has fundamentally transformed libraries from conventional to contemporary service models. Envisioning the trends associated with Library 4.0 technologies establishes a framework for the future evolution of libraries and their user services. The emergence of new technologies facilitates the enhancement of quality offerings and services among libraries and their professionals. Therefore, in order to implement and embrace the latest trends in libraries and among library professionals, it is imperative to possess a comprehensive understanding of technology.

6. Cultural Competence:

The field of library and information science is characterized as a mediating discipline, one that facilitates the research and advancement of numerous academic disciplines while also serving the public interest. The rapid evolution of technology, significant demographic changes, and various other socioeconomic dynamics have compelled our profession to swiftly adapt to these formidable challenges.

Notwithstanding our efforts thus far, which can be deemed minimal, the profession lags in addressing the fundamental issues of systemic racism and disparities within library and information science research, as well as library services aimed at multicultural populations. The establishment of cultural competency standards throughout the domain of library and information science would significantly enhance its environment for diversity, confront the existing lack of representation, improve retention rates, and ultimately elevate service outcomes.

7. Advocacy and Marketing:

Libraries are established to fulfill the fundamental informational requirements of their users through the acquisition and systematic organization of informational resources, the creation of a conducive environment, and the provision of comprehensive services to patrons. Upon the identification of users' needs, anticipated trends, and the resources that are accessible, the librarian is positioned to formulate marketing objectives, determine the resources that will be utilized, select the appropriate locations and timelines for the initiative, and devise the necessary strategies for their successful implementation. Consequently, it is imperative for information professionals to recognize the necessity of actively promoting and marketing their services. The advocacy and marketing of library services are of paramount importance for any information professional seeking to disseminate knowledge about their library. They must emphasize the significance of their library, its offerings, its impact on the community, as well as the contributions of its administration, staff, and users.

8. Ethical and Legal Knowledge:

Library service provision encompasses individuals who harbor anticipations regarding the conduct and interactions of library and information science practitioners towards users, peers, their respective organizations, and the broader community. A discernible manifestation of the contemporary shifts in information service is that, on a daily basis, advancements in both professional practices and technology engender more significant challenges and prospects for library and information professionals to leverage. These challenges have compelled a profound transformation in the acquisition of legal knowledge and ethical competencies for both veteran and newly appointed librarians, thereby enhancing their professional capacities. It is imperative for library and information science professionals to adapt to, embrace, and effectively navigate the ongoing changes; failure to do so may result in obsolescence. Consequently, the expectation for these professionals to uphold an elevated standard of care, if not sufficiently coupled with requisite skills, introduces considerable difficulties in the realm of information service delivery.

Conclusion:

The spectrum of technological trends has emerged, thereby rendering these trends advantageous for the implementation of innovative technological library services. As the

21st century advances, the roles that libraries fulfill in connecting communities and users with knowledge and knowledge creators are becoming increasingly significant. Information is becoming more digitized and ubiquitous; advancements in technology exert a profound influence on the skills requisite for library professionals to deliver user services that provide value in contrast to traditional library services. A considerable number of virtual libraries operate devoid of physical space, and there has been substantial technological development that can significantly enhance the user experience. The primary objective of libraries is to deliver exemplary library services and ensure equitable access to information for all users through digital engagement and the integration of emerging technologies.

The increasing prevalence of electronic resource access, such as e-books and digital libraries, is transforming traditional libraries into digital hubs equipped with computer and Wi-Fi access. Technological trends possess the potential to impact higher education and can be effectively utilized in primary, secondary, and higher education contexts.

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