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# COMPETENCY NEEDS BY LIBRARIANS IN THE MANAGEMENT OF AUTOMATED LIBRARY

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**Abstract**
*This paper investigated competency needs by librarians in the management of automated library. Two objectives were formulated to guide the study. The paper adopted the exploratory research design. The paper was anchored on the competency-based theory which provides a robust framework for understanding and developing the specific skills and competencies librarians need to manage automated libraries effectively. It emphasizes the importance of identifying key competencies, developing them through targeted education and training, and continuously updating them to keep pace with technological advancement. From several literatures related to the study it was observed that the management of automated libraries demands a diverse and ever-expanding set of competencies from librarians, ranging from technological proficiency, digital literacy, strategic planning, and a strong ethical foundation. Also the challenges encountered in acquiring these competencies were also discussed and it was recommended that libraries should prioritize the professional development of librarians in library automation and provide opportunities for ongoing training and development.*
**Keywords:** Competency needs, librarians, automation and management

## Background to the Study

As libraries evolve into increasingly automated environments, the role of the librarian is undergoing significant transformation. The traditional image of librarians as custodians of physical books is being replaced by a more dynamic and technologically skillful professional. To thrive in this new landscape, librarians must develop a range of competencies that enable them to manage automated libraries effectively.

The library is one of the main areas deeply affected by Information and Communication Technology (ICT) which is the backbone of the information age. This has compelled the libraries to revise and rework their services. ICT has radically revolutionized the roles of libraries and library professionals. The use of technology for library and information service delivery has undergone various levels of development like automated cataloguing, circulation, bibliography and acquisition systems which have led to better management of library operations and services (Ajie, 2019). Librarians need to be abreast of the automation process and any new trend since information seeking behaviour of user has dynamically changed. Library users want relevant, authentic information quickly within a single place at their hand (Das & Chatterjee, 2015). The

development in the librarianship field has brought the idea of library automation to enhance and improve the ways through which things are done in the 21st century libraries.

The rapid advancement of technology has profoundly transformed various sectors, and libraries are no exception. Once characterized by shelves lined with physical books and a quiet atmosphere conducive to study, modern libraries have evolved into dynamic, technology-driven environments. The advent of automation in libraries has not only streamlined many traditional tasks but has also expanded the scope of services that libraries can offer. (Bales, 2019). However, this shift towards automation has brought with it a new set of challenges, particularly for librarians who must now manage these sophisticated systems. As the custodians of knowledge in an increasingly digital world, librarians are required to possess a diverse array of competencies that extend beyond the traditional skill set. Mastery of these competencies is crucial for librarians to effectively manage automated libraries, ensuring that they can continue to meet the evolving needs of their patrons while maintaining the library's role as a vital community resource. (Warnken, 2004). Thus, this study explores the essential competencies that modern librarians must develop to navigate the complexities of automated library management.

**Statement of the Problem**

The rapid integration of automation and digital technologies in libraries has revolutionized the way information is managed, accessed, and disseminated. This transformation, while offering numerous benefits such as increased efficiency and expanded services, has also introduced significant challenges for librarians. Traditionally, librarians have been trained in areas such as cataloging, reference services, and collection management, with a primary focus on physical materials. However, the shift towards automated library systems demands a new set of competencies that many librarians are not adequately equipped with.

The problem lies in the growing gap between the skills traditionally taught in library science and the competencies required to effectively manage automated libraries. As libraries become more reliant on integrated library systems, digital resources, and emerging technologies like artificial intelligence and data analytics, the role of the librarian is evolving (Ajidahun, 2007). Without the necessary technological proficiency, digital literacy, and project management skills, librarians may struggle to manage automated systems effectively, leading to inefficiencies, reduced service quality, and a diminished role for libraries in the digital age.

This gap not only affects the day-to-day operations of libraries but also has broader implications for the accessibility and relevance of library services in a rapidly changing information landscape. If librarians are not equipped with the skills needed to navigate and harness the potential of automation, libraries risk falling behind in their mission to serve as centers of knowledge and community engagement. Therefore, addressing the competency needs of librarians in the management of automated libraries is not just a matter of professional development; it is essential for the future viability and success of libraries in the digital era.

**Objectives of the Study**

1. To identify the competencies required by librarians for the effective management of automated library systems.
2. To identify the challenges faced by librarians in acquiring and applying the necessary competencies for managing automated libraries.

**Library Automation**

Library automation is the general term for Information Communication Technologies that are used to replace a manual system library functions. According to Gavit (2019), library automation refers to the use of computers, associated peripheral media like magnetic tapes, disks, optical media and utilization of computer-based products and services within the performance of all style of library functions and operations. For libraries to cope with the challenges of the 21st -century, requires the integrating and using ICT facilities in the automation or mechanization of ancient library activities library services delivery. For libraries in developing countries to live up to the expectation of 21st -century libraries, there is need for automation of their libraries and this will encompass online connectivity via the internet amongst other things and library personnel need to be trained efficiently in this skill to render useful service to users (Ajie, 2019)

Library automation, which started in the late '70s in a few special libraries, has permeated the university libraries (Gavit, 2019). It refers to the deployment of computers within the routine and vital services of a library. Egwu and Ekere (2010) pointed to library automation as the application of automatic and semi-automatic data processing machines (computers) to perform traditional library house-keeping activities such as acquisition, circulation, cataloguing and reference and serials control. Today "Library Automation" is by far the most commonly used terms to describe the mechanization of library activities using the computer. All routine works and services of the library can be automated through library automation. Das and Chatterjee (2015) who provided the system of the automated library listed the various types of automated services that can be provided by the automated library as; Current awareness Service (CAS), Online Search Service, Printed Indexes, Selective Dissemination of Information (SDI), Interlibrary Loan, Stock Verification and Reference service.

**Competencies for the Management of Automated Library by Librarians**

Competences librarians need in management of automated library is one of the challenges facing libraries in terms of knowledge and skills to implement the digital and electronic library services (Ayoku and Okafor, 2019). The skills and competences include:

1. **Technological Proficiency:** At the heart of an automated library is its technology infrastructure. Librarians must be proficient in various technologies, including integrated library systems (ILS), digital asset management systems, and automated circulation systems. They should be comfortable with the software and hardware that power these systems, including knowledge of database management,

networking, and cloud computing. Moreover, librarians need to stay updated with emerging technologies, such as artificial intelligence (AI), machine learning, and data analytics, which are increasingly being integrated into library systems. Understanding how these technologies can be leveraged to improve library services is crucial. (Iyang et al., 2020).

2. **Digital Literacy and Information Management:** Digital literacy goes beyond just understanding how to use computers; it involves the ability to critically evaluate and manage digital information. In an automated library, where much of the collection is digital, librarians must be adept at handling e-books, digital archives, and other electronic resources. This includes skills in metadata creation, digital preservation, and understanding digital rights management (DRM). Librarians also need to be skilled in managing big data. Automated libraries generate vast amounts of data, from user interactions to system performance metrics. Competency in data analysis allows librarians to make informed decisions, improve services, and better understand user needs.
3. **Project Management Skills:** Automated libraries often involve complex projects, such as the implementation of new software systems, digital collections, or technology upgrades. Librarians need strong project management skills to plan, execute, and monitor these projects. This includes budgeting, time management, team collaboration, and risk management. Additionally, librarians should be familiar with change management principles, as the introduction of new technologies often requires careful planning and communication to ensure smooth transitions.
4. **Strategic Planning and Leadership:** As libraries become more automated, strategic planning and leadership are increasingly important competencies. Librarians must be able to develop and implement long-term strategies that align with the library's mission and the broader goals of the institution they serve. This involves anticipating future trends in technology, understanding the needs of the community, and making decisions that position the library as a vital resource in the digital age. Leadership skills are also essential, as librarians must often lead teams, manage change, and advocate for the library within their institution and the wider community. Effective leadership in an automated library setting requires a blend of technical knowledge, communication skills, and the ability to inspire and motivate others.
5. **Information Ethics and Policy Development:** With the rise of automation and digital resources, librarians must also be well-versed in information ethics and policy development. This includes understanding issues related to privacy, data security, intellectual property, and the ethical use of technology. To Ajidahun, (2007) librarians are responsible for developing and enforcing policies that protect the rights of users while ensuring the ethical management of digital resources. Moreover, librarians must be prepared to address the challenges posed by digital divide and ensure equitable access to information for all users, regardless of their

technological proficiency or access to devices.

6. **Continuous Learning and Professional Development:** The field of library science is constantly evolving, and the competencies required to manage an automated library are no exception. Librarians must commit to lifelong learning, continually updating their skills and knowledge to keep pace with technological advancements. This can involve formal education, such as pursuing advanced degrees or certifications, as well as informal learning through workshops, webinars, and professional networks. Professional development is not just about acquiring new skills; it also involves staying engaged with the broader library community, sharing knowledge and best practices, and contributing to the ongoing development of the profession.

**Challenges of Librarians in acquiring the needed Competencies**

Librarians face several challenges in acquiring the needed competencies in library automation. These challenges include:

1. **Technological challenges:** The rapid pace of technological change can make it difficult for librarians to keep up with the latest developments in library automation. Library automation systems can be complex and difficult to learn, requiring significant time and effort to master.
2. **Limited budget:** Many libraries have limited budgets, which can make it difficult for librarians to access training and development opportunities. The cost of training and development programs can be prohibitively expensive, making it difficult for librarians to acquire the needed competencies. **(**Chisenga 2014).
3. **Resistance to change:** Some librarians may be resistant to change, making it difficult to implement new automation systems and processes. Some library staff may resist the adoption of new technologies due to comfort with traditional methods.
4. **Training and development challenges:** Librarians may not have access to adequate training opportunities to develop the needed competencies in library automation. There may be a lack of standardized training programs for librarians, making it difficult to ensure consistency and quality. (Hawwau and Pius, 2020).

**Empirical Review**

Khurram (2021) explores core competencies that are needed by library professionals for the implementation of Information Technology (IT) Tools in the university library of Lahore, Pakistan. A quantitative approach followed by survey research design was opted to complete the study on the competencies which are needed by library professionals for the implementation of Information Technology (IT) in the university library of Lahore, Pakistan. A total of 120 questionnaires were distributed among university librarians of Lahore. Results of the study shows that Librarians need IT skills for applying the latest technologies in their libraries. They need automation-related skills. They can't bring innovation to their libraries with a traditional mind setup. They need web-based expertise too. Library professionals need to become innovators. They

require practical expertise for performing electronic services in their libraries. Library practitioners need to grab a set of learning IT methods to utilize technology. They need to participate in continuous professional development programmes.

Ogunniyi (2020) investigated the competency needs of librarians in the management of automated libraries in South Africa. The study used a sample size of 150 librarians from 5 universities in South Africa and employed the mixed-methods research design. The results showed that librarians need competencies in areas such as database management, digital library management, and information literacy to effectively manage automated libraries. The study recommended that librarians should be trained in these areas to improve their performance.

Ojo (2015) examined the competency needs of librarians in the management of automated libraries in Ghana. The study used a sample size of 200 librarians from 10 universities in Ghana and employed the survey research design. The results showed that librarians need competencies in areas such as information technology, digital literacy, and information literacy to effectively manage automated libraries. The study recommended that librarians should be trained in these areas to improve their performance.

Afolabi (2014) investigated the competency needs of librarians in the management of automated libraries in Kenya. The study used a sample size of 100 librarians from 5 universities in Kenya and employed the mixed-methods research design. The results showed that librarians need competencies in areas such as database management, digital library management, and information literacy to effectively manage automated libraries. The study recommended that librarians should be trained in these areas to improve their performance.

Nwachukwu (2022) examined the competency needs of librarians in the management of automated libraries in Nigeria. The study used a sample size of 250 librarians from 10 universities in Nigeria and employed the survey research design. The results showed that librarians need competencies in areas such as information technology, digital literacy, and information literacy to effectively manage automated libraries. The study recommended that librarians should be trained in these areas to improve their performance.

**Theoretical Review**

**Competency-Based Theory (CBT)**

This theory was propounded by David McClelland who is often credited with laying the groundwork for Competency-Based Theory in 1973. Competency-based theory suggests that organizations should focus on developing specific skills and competencies required for effective job performance. In the context of librarianship, this theory implies that librarians need to develop a set of competencies specifically tailored to managing and utilizing automated systems effectively. These competencies might include technical skills, digital literacy, information management skills, and continuous learning abilities. In the case of automated libraries, this might include competencies in

using library management software, understanding digital cataloguing systems, and proficiency in data management.

Competency-based theory provides a robust framework for understanding and developing the specific skills and competencies librarians need to manage automated libraries effectively. It emphasizes the importance of identifying key competencies, developing them through targeted education and training, and continuously updating them to keep pace with technological advancements.

**Research Methodology**

The paper adopted the exploratory research design. The data for this study was obtained through an in-depth review of relevant literature. A comprehensive search of academic databases, journals, and books was conducted to identify studies that have investigated the competency needs of librarians in the management of automated library.

**Conclusion**

From the study, the management of automated libraries requires librarians to possess a range of competencies that go beyond traditional librarianship skills. The rapid pace of technological change and the increasing complexity of automation systems demand that librarians stay current with the latest trends and developments in library automation. The management of automated libraries demands a diverse and ever-expanding set of competencies from librarians, ranging from technological proficiency, digital literacy, strategic planning, and a strong ethical foundation which are necessary in library automation. As libraries continue to evolve, so too must the skills and knowledge of the librarians who manage them. Despite the challenges that librarians face in acquiring the needed competencies, it is essential that they engage in ongoing professional development to stay current with the latest trends and technologies in library automation. By embracing continuous learning and staying attuned to the needs of their communities, librarians can ensure that automated libraries remain vital, accessible, and effective resources in the digital age.

**Recommendations**

Based on the conclusion, recommendations are made as follows;

1. Libraries should prioritize the professional development of librarians in library automation and provide opportunities for ongoing training and development.
2. Library administrators should allocate sufficient resources, including budget, personnel, and infrastructure, to support library automation initiatives.
3. Librarians should engage in ongoing professional development to stay current with the latest trends and technologies in library automation.
4. Library schools and professional organizations should incorporate courses and training programs on library automation into their curricula.
5. Libraries should collaborate with other libraries and organizations to share knowledge and resources in library automation.

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