## **International Journal of Research in Library Science (IJRLS)**

ISSN: 2455-104X

DOI: 10.26761/IJRLS.11.2.2025.1877

Volume 11, Issue 2 (April-June) 2025, Page: 105-114, Paper ID: IJRLS-1877 Copyright © 2025 Author(s) retain the copyright of this article. This article is published under the terms of the <u>Creative Commons Attribution License 4.0</u>.

# Automating Libraries: The Role of Library Management Systems in Modern Library Operations Pooja Bagewadi<sup>1</sup>; Danayya Mathapati<sup>2</sup>, Basavaraj Gangur<sup>3</sup>;

Ambaresh Madiwalar<sup>4</sup>; Somanagouda Shankargouda Patil<sup>5</sup>

Student, Department of Library & Information Science, Rani Channamma University, Belagavi<sup>1,2,3,4</sup>; Research Scholar, Department of Library & Information Science, Rani Channamma University, Belagavi, India<sup>5</sup>

pnbagewadi22@gmail.com; danumathapati19@gmail.com; gangurb287@gmail.com; aambi874@gmail.com; somanagoudapatil.sp5@gmail.com

## ABSTRACT

Library Management Systems (LMS) are integral to enhancing the efficiency and effectiveness of library operations. This study examines the significant role of LMS within the context of modern library functionality, emphasizing its influence on operational efficiency through an extensive review of the literature derived from esteemed academic databases, such as Scopus, Web of Science, Taylor & Francis, and Google Scholar. The findings of this research elucidate the various applications of LMS, which encompass cataloging, circulation management, acquisitions, integration of digital resources, and data-driven decision-making. Moreover, the study identifies critical challenges that hinder the effective implementation of LMS, including technical constraints, organizational resistance, and human-related factors, such as insufficient staff training. To mitigate these issues, the research advocates for strategic approaches that incorporate comprehensive needs assessments, continuous professional development initiatives, the selection of flexible technology solutions, adherence to user-centered design principles, robust data security measures, and ongoing evaluation processes. In conclusion, this research underscores the dynamic nature of LMS, influenced by technological advancements such as artificial intelligence (AI), radio-frequency identification (RFID), and big data analytics, which play pivotal roles in shaping the future of knowledge management.

**KEYWORDS:** Library Management Systems, Library Automation, Digital Libraries, Library Technology, Library Software, Data Management.

## **1. INTRODUCTION**

In the contemporary digital environment, the management of information has become increasingly complex, necessitating sophisticated tools to address the growing volume of data. Libraries, as essential stewards of knowledge, have undergone a significant transformation, evolving from traditional repositories into dynamic information hubs. A central element of this evolution is the implementation of Library Management Systems (LMS),

which have fundamentally altered the operational frameworks of libraries, their resource management, and patron service. Library Management Systems are integrated software solutions developed to streamline a wide range of library functions, including cataloging, circulation, acquisitions, and user management (Madhusudhan & Singh, 2016). These systems automate routine tasks, thereby reducing the workload of library personnel and diminishing the likelihood of human error. This automation not only enhances operational efficiency but also improves the accuracy and accessibility of library resources. Historically, libraries relied heavily on manual processes that were labor-intensive and prone to inconsistencies. The advent of LMS such as Koha and Evergreen ILS signifies a paradigm shift, allowing libraries to transition from paper-based records to digital databases (Sarma et al., 2024). Consequently, this transition has facilitated quicker information retrieval, efficient inventory management, and enhanced tracking of borrowed materials.

The incorporation of LMS has significantly improved the user experience. Patrons now possess the ability to search for books, reserve items, and manage their accounts online, thereby increasing convenience and efficiency. Advanced features such as self-checkout kiosks and automated notifications have further streamlined interactions, making library services more accessible and user-friendly (Araya & Mengsteab, 2020). The implications of LMS extend beyond mere operational efficiency; these systems also support data-driven decision-making through enhanced analytics and reporting capabilities. Libraries can monitor usage patterns, assess resource utilization, and strategically plan acquisitions, thereby optimizing their collections and services (Sharma, 2021). Moreover, the adaptability of contemporary LMS allows for integration with other digital tools and platforms, fostering interoperability and scalability. This flexibility is essential as libraries increasingly embrace digital resources, including e-books and online databases alongside traditional materials (Giri, 2012). This review examines the multifaceted role of Library Management Systems in automating library operations. It explores their features, applications, challenges, and broader implications for library management practices. Through a comprehensive analysis, this study aims to elucidate how LMS can be effectively utilized to address the evolving demands of modern libraries.

#### **2. OBJECTIVES**

- $\checkmark$  To assess the key functionalities and modules of modern LMS used in library operations.
- ✓ To explore the role of LMS in automating core library functions such as cataloging, circulation, acquisitions, and user management.
- ✓ To evaluate the benefits of LMS in enhancing user experiences, including accessibility, convenience, and service personalization.
- $\checkmark$  To analyze the impact of LMS on the efficiency and effectiveness of library management processes.
- ✓ To identify the challenges and limitations associated with implementing and using Learning Management Systems (LMS) in various library settings.

## **3. METHODOLOGY**

The methodology employed in this study encompasses a comprehensive review of literature derived from reputable academic databases, including Scopus, Web of Science, Taylor & Francis, and Google Scholar. This review specifically targets peer-reviewed journal articles and scholarly publications published between 2010 and 2025, thus ensuring the incorporation of current and pertinent research findings. A systematic search strategy was applied,

utilizing key terms such as "Library Management Systems," "LMS in Modern Libraries," and "Automation in Library Operations." The selection criteria were designed to prioritize studies that directly address the functionalities, impacts, benefits, challenges, and technological advancements associated with Library Management Systems. Relevance screening was conducted on the literature, followed by critical analysis of the articles to extract key themes, methodologies, findings, and existing research gaps. To achieve thorough coverage of the topic, a combination of both quantitative and qualitative studies was included, and reference lists of selected articles were examined to identify additional sources. This methodological approach facilitates a holistic understanding of the role of Library Management Systems in contemporary library operations, thereby providing a solid foundation for identifying trends, best practices, and potential avenues for future research.

## 4. LIBRARY MANAGEMENT SYSTEMS

LMS have undergone significant evolution from their initial rudimentary forms to sophisticated digital solutions that optimize library operations. Historically, libraries depended on manual card catalogs and ledger books for managing books and tracking loans, a method that was susceptible to errors and inefficiencies. The 1960s marked a pivotal transition with the introduction of computerization, which gave rise to early automated systems capable of performing basic cataloging and circulation tasks (Jayamma & Krishnamurthy, 2017). Advancements in technology during the 1980s and 1990s led to the emergence of integrated library systems (ILS), unifying various functions such as acquisitions, cataloging, circulation, and serials management within a single platform (Wang & Dawes, 2012). The advent of the internet in the late 20th century further revolutionized LMS by facilitating the creation of online public access catalogs (OPACs) and enabling remote resource management. In the 2000s, the transition toward web-based and cloud-based systems permitted enhanced flexibility, scalability, and real-time data access, meeting the increasing demands of digital libraries and electronic resources (Moruf & Abu, 2024). Presently, modern LMS encompass advanced features including automated inventory management, analytics, mobile accessibility, and integration with digital repositories, thereby supporting libraries in their mission to promote knowledge dissemination in a progressively digital world. This historical trajectory underscores the ongoing commitment to enhancing efficiency, accessibility, and innovation within library management.



## **5. ROLE OF LMS IN LIBRARIES**

Figure 1. Koha and Easylib LMS

LMS have assumed a crucial role in libraries, particularly in the digital age, significantly altering the management of library operations and the provision of services to users. LMS streamlines essential library functions such as cataloging, circulation, acquisitions, and inventory management, consequently reducing manual workloads, minimizing errors, and enhancing operational efficiency (Wilson, 2012). It facilitates real-time access to bibliographic data, improving resource discovery and enabling superior management of both physical and digital collections. The integration of digital technologies within Learning Management Systems (LMS) enables libraries to provide seamless access to electronic resources, online catalogs, and remote borrowing services, thereby addressing the growing demand for digital content and enhancing user convenience. Furthermore, LMS supports various library functions, including automated overdue notifications, fine management, and reporting, which liberate staff members to assume more interactive roles such as user engagement and information literacy instruction (Ranavagol et al., 2023). The transformative effects of LMS on library management, enhancing accessibility, resource efficiency, and service quality, are indicative of their essential role within contemporary library systems.

## 6. REQUIREMENTS FOR INTEGRATION OF LMS

The effective integration of LMS within libraries necessitates a comprehensive approach that addresses technical, functional, user, security, operational, compliance, and cost-related considerations. From a technical standpoint, the LMS must demonstrate compatibility with existing hardware, operating systems like Windows, Linux, macOS, and web browsers, supported by stable internet connectivity and secure network protocols to ensure seamless data transmission (Roy & Kumar, 2017). Functionally, the system should facilitate catalog management, circulation processes (check-in/check-out, renewals, reservations), user management, acquisitions, and detailed reporting and analytics, with robust integration capabilities for external systems such as OPACs, RFID, and third-party databases via APIs or plugins. User requirements necessitate an intuitive interface for both staff and patrons, compliance with accessibility standards such as WCAG, and multilingual support to address diverse user populations (Chee & Weaver, 2021). Security measures are critical, requiring data encryption, secure authentication protocols, and rolebased access control, accompanied by regular backups and disaster recovery strategies. Operational requirements include scalability to accommodate increasing data and user volumes, customization to cater to specific library needs, and reliable support and maintenance services. Compliance with legal and regulatory frameworks, including GDPR and copyright laws, in addition to adherence to library-specific standards such as MARC and ISO, is imperative. Lastly, cost considerations encompass initial setup expenditures (licensing, hardware) and recurring costs (subscriptions, training, technical support (Mandal & Das Kumar, 2013). A well-integrated LMS enhances efficiency, user satisfaction, and the library's adaptability to future challenges.

## 7. FEATURES OF LMS

LMS represents advanced software solutions designed to enhance library operations, optimize resource management, and improve user experiences. Key features include cataloging and classification by industry standards such as MARC and the Dewey Decimal System. Circulation management automates essential processes, including check-ins, check-outs, and the tracking of overdue items, while acquisition management oversees the procurement and budgeting processes (Onyebuchi et al., 2015). User management addresses various aspects from registration and borrowing histories to user permissions. An Online Public Access Catalog (OPAC) enables users to conduct searches for resources, place holds, and verify item availability online. Advanced functionalities such as reporting

and analytics provide critical insights into circulation patterns and inventory status, while the inventory management feature ensures accurate tracking of physical items and facilitates periodic audits. Moreover, LMS supports digital libraries by managing e-books, journals, and multimedia content with digital lending capabilities. The Interlibrary Loan (ILL) management feature promotes the sharing of resources among libraries, while robust security measures, including RFID and barcode scanning, safeguard library assets (Patil et al., 2024). Administrative tools allow for system configuration, workflow automation, and role management, along with integration capabilities for external databases and learning management systems. With support for multiple languages and mobile access, LMS enhances accessibility and convenience for all users. User-friendly features include self-service kiosks for independent transactions, automated notifications for due dates and reservations, and advanced search tools with personalized recommendations (Wells, 2022). Collectively, these features render LMS an indispensable resource for contemporary libraries, enhancing efficiency, accessibility, and overall user satisfaction.

#### 8. TYPES OF LMS

LMS can be classified based on their underlying technology, resulting in several distinct categories. Open Source LMS options are available at no cost and offer considerable customization, enabling libraries to tailor the software to their specific requirements. Prominent examples include Koha, recognized for its flexibility and active community support, Evergreen, favored among consortia, and ABCD, a system that provides multilingual capabilities (Macan et al., 2013). Proprietary (Commercial) LMS systems are developed by companies and necessitate the payment of licensing fees. These systems typically provide dedicated technical support and regular updates to ensure reliability. Notable examples include SirsiDynix Symphony, which is celebrated for its robust features and scalability, and Virtua, a system widely adopted by academic institutions due to its advanced analytics and seamless integration capabilities (Khan & Ayesha, 2022). Cloud-based LMS solutions are hosted externally, offering enhanced flexibility, cost efficiency, and the elimination of extensive on-premises infrastructure. Examples of such systems include OCLC WorldShare, which provides comprehensive resource management, and LibraryWorld, a straightforward option suitable for small to medium-sized libraries (Bordeianu & Kohl, 2015). Each type of LMS presents unique advantages, allowing libraries to select solutions aligned with their size, budget, and operational requirements.

#### 9. MODULES OF LMS



Figure 2. Modules of LMS

A module functions as a distinct component designed to execute specific tasks within a broader system. In the context of LMS, these modules are critical for the efficient management of various library activities. The Cataloging Module is essential for organizing and maintaining bibliographic records, while the Circulation Module manages the check-in and check-out processes of library materials. The Acquisition Module focuses on the procurement of new resources, and the User Management Module oversees user accounts and borrowing histories (Singh & Sanaman, 2012). The OPAC Module provides users with a searchable interface for accessing library resources remotely. For data-driven decision-making, the Reporting and Analytics Module generates insights into usage patterns and inventory, facilitating informed choices. The Inventory Management Module tracks the status and location of library items, ensuring record accuracy. Security Modules are crucial in protecting library data and preventing unauthorized access (Rai & Kumar, 2011). The Digital Library Module assists in the management of electronic resources, including e-books and online journals. Administrative and Configuration Modules enable librarians to customize system settings according to institutional requirements. Additionally, the Interlibrary Loan (ILL) Module fosters resource sharing among libraries, while the Integration and API Module enhances connectivity with external systems, promoting interoperability (Madhusudhan & Singh, 2016). Collectively, these modules constitute a robust system that effectively meets the continually evolving needs of modern libraries.

## **10. APPLICATIONS OF LMS**

LMS serves as an essential instrument in contemporary libraries, significantly enhancing operational efficiency and resource management. They facilitate the cataloging and classification of various materials, including books, journals, and digital resources, through established systems such as the Dewey Decimal Classification and the Library of Congress Classification, thereby simplifying item retrieval via comprehensive metadata management (Odeyemi & Musa, 2018). Furthermore, LMS improves circulation management by systematically tracking the borrowing, return, due dates, renewals, and overdue fines associated with library materials. User management functionalities create detailed profiles that encompass membership status and borrowing history while accommodating different user roles with tailored permissions. In terms of acquisitions, LMS facilitates the management of the procurement process, overseeing budgets, purchase orders, and vendor interactions. The management of serials is similarly enhanced through efficient subscription tracking, renewal schedules, and issue monitoring (Ravikumar & Ramanan, 2014). Additionally, the system extends its capabilities to digital resources, enabling straightforward access to e-books, online journals, and digital archives, as well as integration with digital libraries and repositories. Reporting and analytics features yield insights into circulation statistics, user activity, and resource utilization, thereby supporting libraries in making informed operational decisions. For instance, the libraries at the Indian Institutes of Technology in Bombay and Bhubaneswar utilize an Integrated Library System (ILS), which improves cataloging and resource discovery, thereby enabling patrons to access a vast array of collections (Bhawan & Mahawar, 2021). The Online Public Access Catalog (OPAC) further enhances the user experience by providing a searchable catalog for resource discovery, complemented by functionalities for holds, renewals, and reservations. Self-service options, such as kiosks, automated returns, and mobile applications, promote convenience for remote access. Security and access controls are bolstered through RFID or barcode technologies, ensuring effective item tracking and theft prevention (Ranavagol et al., 2024). Moreover, LMS can integrate seamlessly with academic management systems, digital repositories, and interlibrary loan networks, contributing to a cohesive and efficient library ecosystem.

www.ijrls.in

## **11. IMPACT OF LMS**

The implementation of LMS has profoundly transformed library operations, significantly improving efficiency, resource management, and user services. LMS streamlines critical functions such as cataloging, circulation, acquisitions, and interlibrary loans, thereby reducing manual errors and expediting operational processes. This automation empowers libraries to manage extensive datasets with heightened accuracy and effectiveness (Kuri & Patil, 2023). Moruf et al. (2020) underline that automated systems enhance user experiences through features such as self-checkout stations, online public access catalogs (OPACs), and remote access to digital resources, thereby providing increased convenience and accessibility for patrons. Furthermore, LMS supports the integration of digital services, facilitating seamless access to e-books, databases, and multimedia content. LMS enables real-time monitoring of inventory, circulation statistics, and user interactions, which, in turn, supports data-driven decision-making concerning collection development, resource allocation, and performance evaluation (Stilwell & Hoskins, 2013). The incorporation of analytics tools within LMS also assists in identifying usage trends and refining library services. In summary, the impact of LMS on library operations is fundamentally positive, fostering enhanced operational efficiency, greater resource accessibility, and adaptability within the digital landscape.

#### **12. FACTORS HINDERING EFFECTIVE INTEGRATION OF LMS**

Despite the numerous advantages, the effective integration of LMS within libraries encounters several challenges, which can be categorized into technical, organizational, and human factors. On the technical front, barriers such as system incompatibility, insufficient IT infrastructure, and complex data migration processes can impede seamless integration (Bwalya, 2017). Numerous libraries continue to rely on outdated legacy systems, making upgrades difficult without disrupting ongoing services. Organizational challenges encompass resistance to change, ambiguous implementation strategies, and financial constraints. Limited budgets may restrict libraries' capacity to procure the necessary hardware, software, and continuous maintenance support (Singh, 2016). Furthermore, insufficient leadership commitment can negatively affect the prioritization of LMS integration initiatives. Human factors also significantly influence the situation; inadequate training and technical aptitude among library staff often result in the underutilization of LMS features. Staff resistance, driven by concerns over job redundancy or unfamiliarity with new systems, further complicates the integration process (Balaji et al., 2021). User acceptance remains a pivotal issue, as patrons may struggle with new interfaces, particularly if they are accustomed to traditional cataloging methods. Lastly, the rapid pace of technological advancement frequently necessitates system upgrades and adaptations.

## **13. RECOMMENDATIONS**

The effective integration of LMS is imperative for enhancing operational efficiency and improving user satisfaction within libraries. Zaveri & Salve (2018) assert that a comprehensive needs assessment is necessary to ensure that the capabilities of the LMS align with the library's objectives. This assessment facilitates the customization of the system to accommodate specific workflows and services. Furthermore, it is essential to provide training and ongoing professional development for library personnel. Lakpathi (2014) emphasizes that well-trained staff members can more effectively utilize LMS features, which leads to enhanced management and an enriched user experience. The adaptability of LMS to emerging technologies is another critical consideration. Ahmad (2014) argues that intuitive interfaces foster greater user engagement, simplifying access to and management of library resources. Successful

integration of LMS relies on robust collaboration between information technology departments and library management in order to address both technical challenges and operational demands. Continuous evaluation and feedback mechanisms are also paramount for ongoing enhancement. Routine performance audits and the collection of user feedback through surveys could identify potential integration challenges and ensure the effectiveness of the system over time (Kulshreshtha & Bajpai, 2018). Collectively, these strategies, including comprehensive needs assessments, staff training, adaptable technology, user-centered design principles, data security, interdepartmental collaboration, and continuous evaluation, establish a robust framework for successful LMS integration in libraries. This holistic approach not only streamlines library operations but also augments user satisfaction and accessibility to resources.

#### CONCLUSION

LMS have fundamentally transformed library operations by automating essential tasks such as cataloging, circulation, acquisition, and user management. This automation reduces manual errors and enhances service delivery. The integration of advanced technologies, including RFID, artificial intelligence, and cloud computing, has further refined operations, facilitating real-time tracking, personalized user experiences, and seamless access to digital resources. The influence of LMS transcends operational efficiency; it cultivates a more user-centered environment that promotes lifelong learning and research. Looking forward, this study suggests that LMS will continue to advance, incorporating emerging technologies such as machine learning and big data analytics to improve decision-making and resource management. As libraries increasingly prioritize digital transformation, the development of more intuitive, interoperable, and adaptable LMS solutions is expected to progress rapidly. Furthermore, as libraries adopt open-access models and virtual services, LMS will play a pivotal role in bridging the divide between physical and digital spaces, thereby ensuring equitable access to information globally. This study highlights the critical importance of ongoing innovation and strategic investment in LMS to effectively address the evolving needs of contemporary library ecosystems, ultimately shaping the future of knowledge management and dissemination.

## REFERENCES

[1] Ahmad, H. (2014). Library automation in India: A survey of information retrieval system of central libraries of IIT Delhi, IIT Kanpur, and Kashmir University. *International Journal of Digital Library Services*, 4(4), 78–89.

[2] Araya, T. W., & Mengsteab, A. (2020). Designing web-based library management system. *International Journal of Engineering Research & Technology*, 9(10), 272–277.

[3] Balaji, B. P., MS, V., KV, A., Khan, M. R., E, E., & BG, S. (2021). A review of integrated library systems and web-scale discovery services in India. *Library Hi Tech News*, 38(7), 14–18.

[4] Bhawan, R., & Mahawar, K. L. (2021). Adoption and functionality of Koha integrated library management system in Indian Institute of Technology: A comparative study between Bombay and Bhubaneswar. *Library Philosophy and Practice (e-journal)*, 5607.

[5] Bordeianu, S., & Kohl, L. (2015). The voyage home: New Mexico libraries migrate to WMS, OCLC's cloudbased ILS. *Technical Services Quarterly*, 32(3), 274–293.

[6] Bwalya, T. (2017). OpenBiblio: A free and open source integrated library management system that answers small libraries' automation needs. *Journal of Balkan Libraries Union*, 5(1), 35–42.

[7] Chee, M., & Weaver, K. D. (2021). Meeting a higher standard: A case study of accessibility compliance in LibGuides upon the adoption of WCAG 2.0 guidelines. *Journal of Web Librarianship*, 15(2), 69–89.

[8] Giri, R. (2012). NewGenLib 3: An integrated open-source library management system that makes your library visible on the web. *Library Hi Tech News*, 29(10), 4–12.

[9] Jayamma, K. V., & Krishnamurthy, M. (2017). Perspectives of library automation in developing countries: A review. *Asian Journal of Information Science and Technology*, 7(2), 39–46.

[10] Khan, S. A., & Ayesha, G (2022). Key features of information management systems (IMSs) for automation in university libraries: A viewpoint of information professionals in Pakistan. *Library Hi Tech*, 40(6), 1606–1626.

[11] Kulshreshtha, S., & Bajpai, R. P. (2018). Impact of ICT in libraries and improvement of excellence library services. *International Journal of Information Dissemination and Technology*, 8(3), 175–178.

[12] Kuri, R. B., & Patil, S. S. (2023). Awareness and use of information resources and services among the students of colleges in Belagavi, Karnataka. *International Journal of Research in Library Science*, 9(2), 42–56. https://doi.org/10.26761/ijrls.9.2.2023.1646

[13] Lakpathi, K. (2014). Status of library automation in India. *International Journal of Library and Information Studies*, 4(4), 77–83.

[14] Macan, B., Fernandez, G. V., & Stojanovski, J. (2013). Open source solutions for libraries: ABCD vs Koha. *Program*, 47(2), 136–154.

[15] Madhusudhan, M., & Singh, V. (2016). Integrated library management systems: Comparative analysis of Koha, Libsys, NewGenLib, and Virtua. *The Electronic Library*, 34(2), 223–249. https://doi.org/10.1108/EL-08-2014-01

[16] Mandal, S., & Das Kumar, A. (2013). Standard requirement for integrated library system. *Asian Journal of Multidisciplinary Studies*, 1(5), 61–70.

[17] Moruf, H. A., & Abu, I. Z. (2024). Next generation platforms in library management systems: A review of webbased and cloud-based software. *FUW Trends in Science & Technology Journal*, 9(2), 86–93.

[18] Moruf, H. A., Sani, S., & Abu, Z. I. (2020). Open source automation software: Stirring automated to integrated library system. *Journal of Applied Sciences and Environmental Management*, 24(7), 1273–1278.

[19] Onyebuchi, C. A., Daniel, O. C., Chima, O. D., & Udoaku, O. S. (2015). Influence of automated cataloguing and circulation systems operation on library services in three selected university libraries in South Western Nigeria. *Journal of Humanities and Social Science*, 20(50), 58–63.

[20] Odeyemi, O. J., & Musa, A. (2018). Evaluation of automated applications and their effects on cataloguing and classification practices in selected academic libraries in Southwest, Nigeria. *Asian Journal of Information Science and Technology*, 8(2), 54–60.

[21] Patil, S. S., Dasar, M. G., Melinamani, P. R., Patil, J., & Waddar, N. (2024). Unlocking efficiency: The role of radio frequency identification (RFID) technology in modernizing library management systems. *International Journal of Research in Library Science*, 10(4), 57–66. https://doi.org/10.26761/IJRLS.10.4.2024.1795

[22] Ranavagol, K., Patil, S. S., & Nijaguna. (2024). The wireless communication technology and its application in library services: A systematic review. *Annals of Library and Information Studies*, 71(3), 264–271.

https://doi.org/10.56042/alis.v71i3.8259

[23] Ranavagol, S. K., Chandariki, T., & Savanur, K. P. (2023). Role of libraries in promoting learning management systems in academic environments: A systematic review. *Library Herald*, 61(2), 90–103.

[24] Ravikumar, M. N., & Ramanan, T. (2014). Status and prospects of library automation in Sri Lankan universities: A perspective. *European Academic Research*, 1(12), 5770–5787.

[25] Roy, M. B., & Kumar, N. (2017). Open source integrated library management systems: Comparative analysis of Koha and NewGenLib. *International Journal of Information Movement*, 12(1), 30–47.

[26] Rai, N., & Kumar, S. (2011). Comparative features of integrated library management software systems available in Delhi. *The Electronic Library*, 29(1), 121–146.

[27] Sarma, G K., Das, J. M., & Singh, A. K. (2024). Peeking at the cataloguing modules of popular open-source ILS: Evergreen vs Koha. *Journal of Information and Knowledge*, 61(1), 9–17.

https://doi.org/10.17821/srels/2024/v61i1/171235

[28] Sharma, J. (2021). Koha as a solution for library administration. *Journal of Library and Information Communication Technology*, 10(2), 36–41.

[29] Singh, M., & Sanaman, G. (2012). Open source integrated library management systems: Comparative analysis of Koha and NewGenLib. *The Electronic Library*, 30(6), 809–832.

[30] Singh, M. M. V. (2016). Integrated library management systems: Comparative analysis of Koha, Libsys, NewGenLib, and Virtua. *The Electronic Library*, 34(2), 223–249.

[31] Stilwell, C., & Hoskins, R. (2013). Integrated library management systems: A review of choices made and their sustainability in South Africa. *Information Development*, 29(2), 154–171.

[32] Wang, Y., & Dawes, T. A. (2012). The next generation integrated library system: A promise fulfilled? *Information Technology and Libraries*, 31(3), 76–84.

[33] Wells, D. (2022). Online public access catalogues and library discovery systems. *Knowledge Organization*, 48(6), 457–466.

[34] Wilson, K. (2012). Introducing the next generation of library management systems. *Serials Review*, 38(2), 110–123.

[35] Zaveri, P., & Salve, D. (2018). Status of library automation software use in Mumbai college libraries. *Knowledge Librarian*, 5(1), 381–389.

2025 © IJRLS All Rights Reserved