

Impact of Integrated Library Management Software on Library Services of Central Library, Rivers State University, Port Harcourt.

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ABSTRACT

This study investigated the impact of Integrated Library Management Software (ILMS) on library service delivery in the Central Library, Rivers State University. The objective was to determine the extent to which ILMS modules contribute to effective library services. Three (3) research questions guided the study. The study adopted a descriptive survey research design. The population comprised all 50-library staff involved in ILMS operations at the Central Library, and a census sampling method was used to select all staff as respondents. Data were collected using a structured questionnaire titled “Integrated Library Management Software and Library Services Questionnaire (ILMSLSQ)”, which was validated by experts in library and information science and information technology. The reliability of the instrument was established using Cronbach’s Alpha, which yielded a coefficient of 0.87, indicating high internal consistency. Data were analyzed using descriptive statistics (mean and standard deviation) to answer the research questions. The findings revealed that cataloguing and classification, circulation management, and Online Public Access Catalogue (OPAC) modules of ILMS positively influence library service delivery in the Central Library. The study concludes that effective utilization of ILMS enhances efficiency, accuracy, and user satisfaction in library services. Based on the findings, the study recommends continuous staff training, adequate infrastructural support, and sustained institutional commitment to ILMS implementation.

Keywords: Integrated Library Management Software, Library Services, Academic Libraries, OPAC, Library Staff.

INTRODUCTION

In contemporary knowledge-driven societies, information has become a critical resource for teaching, learning, and research, particularly within university environments. University libraries occupy a central position in the organization, preservation, and dissemination of this information, serving as institutional hubs that support academic activities. A library is commonly understood as an organized collection of information resources in various formats, professionally managed to meet the information needs of users (Aina, 2014). In a similar vein, Rubin (2016) described the library as a service-oriented institution that facilitates access to recorded knowledge through systematically organized resources and professional assistance. The effectiveness of university libraries in fulfilling these responsibilities is largely dependent on the quality of library services they provide. Library services encompass professional activities through which information resources are made accessible and usable to library users. These services include circulation, cataloguing and classification, reference and information services, and information retrieval. According to Lawal and Oyewusi (2021), library services are structured activities designed to meet users' information needs, while Popoola and Haliso (2019) emphasized that the efficiency of these services significantly determines user satisfaction and the overall relevance of academic libraries.

With the continuous growth in the volume, diversity, and formats of information resources, traditional manual methods of library operations have become increasingly inadequate. As a result, libraries have turned to information and communication technology (ICT) to enhance service delivery. One major technological innovation adopted in libraries is the use of library management software. Library management software refers to computer-based applications used to manage bibliographic records, users' data, and routine library operations electronically (Adetimirin, 2012). The application of such software has been associated with improved operational accuracy, faster processing of library tasks, and enhanced efficiency in service delivery (Ogunleye & Afolabi, 2018). The increasing complexity of library operations has further led to the development of Integrated Library Management Software (ILMS). Integrated Library Management Software represents an advanced form of library automation that integrates major library functions into a single unified system. ILMS is designed to automate and coordinate activities such as acquisition, cataloguing, circulation, serials control, and the Online Public Access Catalogue (OPAC) within one platform (Adetimirin, 2012). According to Eze and Uzoigwe (2019), ILMS provides a

coherent framework that links core library operations, while Ifijeh, Ilogho, and Adebayo (2020) noted that such integration facilitates seamless data sharing among library departments, thereby reducing duplication of effort and improving coordination. The concept of integrated library management software has gained prominence across library and information science, information technology, and educational management due to the nature of academic library operations. University libraries handle large volumes of information resources and serve users with diverse and complex information needs. These responsibilities present both opportunities for improved service delivery and challenges related to information access, organization, retrieval, and dissemination (Ajegbomogun & Popoola, 2015). Consequently, the effectiveness of library services in academic institutions largely depends on how efficiently integrated library management software is utilized. The adoption and effective use of ILMS have been found to significantly influence library service delivery in academic institutions. Effective utilization of ILMS enhances service efficiency, improves information retrieval speed, increases accuracy of records, and promotes user satisfaction (Ani, Ngulube, & Onyancha, 2018). However, the extent of these benefits is influenced by several factors, including staff competence, system reliability, availability of ICT infrastructure, and institutional support. In developing countries such as Nigeria, challenges such as inadequate training, unstable power supply, limited technical support, and funding constraints may hinder the effective use of ILMS (Nwakanma & Asonye, 2016). In Nigerian university libraries, librarians and other library personnel perform critical roles such as organizing information resources, managing circulation activities, assisting users with information retrieval, and maintaining electronic databases. The growing demand for timely access to information and increasing user expectations have made the adoption of integrated library management software imperative. In the Central Library of Rivers State University, ILMS is expected to enhance operational efficiency, improve accuracy in service delivery, and increase user satisfaction. However, the extent to which these expectations have been achieved remains uncertain.

Although several empirical studies in Nigeria have examined the use of integrated library management software in academic libraries, findings have been mixed. While some studies report significant improvements in library services, others reveal persistent operational and infrastructural challenges that limit optimal performance (Nwakanma & Asonye, 2016; Popoola & Haliso, 2019). Moreover, there is a noticeable paucity of empirical studies focusing specifically

on the impact of integrated library management software on library services in university libraries within Rivers State. This gap in the literature necessitates an empirical investigation into how ILMS has influenced library services in the Central Library, Rivers State University. It is against this background that this study is undertaken.

Statement of the Problem

In today's university libraries, the demand for efficient, accurate, and timely access to information resources has intensified due to the increasing volume of academic materials and rising user expectations. To address these demands, many academic libraries have adopted Integrated Library Management Software (ILMS) to automate and integrate core library operations such as acquisition, cataloguing, circulation, serials control, and information retrieval. Ideally, the use of ILMS should enhance service delivery, improve operational efficiency, and increase user satisfaction. Despite the widespread adoption of ILMS, concerns remain regarding its actual impact on library services in Nigerian university libraries. Preliminary observations and anecdotal evidence suggest that challenges such as system downtime, inadequate staff training, limited technical support, and partial utilization of software functionalities persist in many academic libraries, including the Central Library of Rivers State University. These challenges may result in delays in service delivery, inaccurate bibliographic records, inefficient circulation processes, and difficulties in information retrieval, thereby undermining the expected benefits of ILMS. Although integrated library management software has been widely discussed in library and information science literature, there is limited empirical evidence linking ILMS usage directly to improvements in specific library services such as circulation, cataloguing, reference services, and user access within the context of Rivers State University. It remains unclear to what extent ILMS has enhanced library service delivery in the Central Library, or how existing operational challenges affect its effectiveness. This lack of institution-specific evidence creates a knowledge gap that limits informed decision-making regarding system improvement, staff capacity development, and policy formulation.

The persistence of these challenges may negatively affect library users' satisfaction and the overall quality of teaching, learning, and research in the university. Inefficient library services can hinder students and researchers from accessing needed resources promptly, thereby affecting academic

productivity. Given the importance of library services to the university system and the growing reliance on automated systems, it is necessary to empirically examine the impact of Integrated Library Management Software on library services in the Central Library, Rivers State University. This study is therefore undertaken to assess the effectiveness of ILMS, identify challenges associated with its use, and provide evidence-based recommendations for improving library service delivery.

Purpose of the Study

The purpose of this study is to examine the impact of Integrated Library Management Software (ILMS) on library services in the Central Library, Rivers State University.

The specific objectives of this study are to:

- i. Examine the impact of cataloguing and classification modules of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University.
- ii. Evaluate the impact of circulation management modules of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University.
- iii. Determine the impact of Online Public Access Catalogue (OPAC) features of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University.

Research Questions

The following research questions guided the study:

- i. What is the impact of cataloguing and classification modules of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University?
- ii. What is the impact of circulation management modules of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University?

- iii. What is the impact of Online Public Access Catalogue (OPAC) features of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University?

Literature Review

Integrated Library Management Software (ILMS) refers to a computerized system designed to automate and integrate the major operations of a library into a single unified platform. These operations include acquisition, cataloguing, circulation, serials control, and Online Public Access Catalogue (OPAC) (Breeding, 2012). Unlike standalone applications, ILMS enables seamless data sharing among library units, ensuring consistency and efficiency in service delivery.

Muller (2011) described ILMS as a multifunctional software solution that supports the organization, storage, retrieval, and dissemination of both print and electronic information resources. By integrating library functions, ILMS minimizes duplication of tasks, reduces errors, and improves coordination among departments. Modern academic libraries have evolved beyond physical collections to include digital resources, electronic databases, and networked information systems. Aina (2018) noted that contemporary libraries integrate physical facilities, digital platforms, professional staff, and information technologies to enhance access to knowledge. This evolution has increased the demand for efficient systems that can manage diverse resources and large user populations, making automation indispensable. The adoption of ILMS has become increasingly important in academic libraries due to the growing volume of information resources and the need for efficient service delivery. According to Adetimirin (2012), ILMS enables libraries to manage bibliographic records, user data, and operational processes electronically, thereby improving accuracy and reducing manual workload. Similarly, Eze and Uzoigwe (2019) noted that ILMS enhances coordination among library units by allowing seamless data sharing across departments. ILMS is structured into functional modules, each supporting a specific aspect of library operations:

- i. Acquisition Module: Manages procurement, budgeting, and supplier records.
- ii. Cataloguing Module: Facilitates bibliographic record creation and classification.
- iii. Circulation Module: Handles lending, returns, renewals, and fines.

- iv. Serials Control Module: Manages journals and periodicals.
- v. OPAC Module: Enables users to search and access library collections independently.

Effective cataloguing ensures consistency in bibliographic records and improves information retrieval. Ogunleye and Afolabi (2018) emphasized that automated cataloguing systems reduce errors associated with manual processing and support uniform access points. Similarly, circulation management modules facilitate borrowing, returning, renewal, and reservation of library materials. Through automation, circulation services become faster and more reliable, reducing waiting time and improving user experience. Ifijeh, Ilogho, and Adebayo (2020) noted that automated acquisition systems enhance accountability and ensure timely availability of resources.

Library services refer to the professional activities and support systems through which information resources are made accessible and usable by library users. These services translate library collections into meaningful academic support for teaching, learning, and research. Ojedokun (2015) defined library services as activities carried out by library personnel to assist users in locating, retrieving, and utilizing information effectively, (Ogonu, 2026). Library services constitute the professional activities through which information resources are made accessible to users. These services include cataloguing and classification, circulation, reference and information services, serials management, and information retrieval. Lawal and Oyewusi (2021) observed that the effectiveness of library services largely determines user satisfaction and the overall relevance of academic libraries. The integration of ILMS into library operations has transformed traditional service delivery by enabling faster processing, improved access to resources, and enhanced record management. Ani, Ngulube, and Onyancha (2018) reported that the application of ILMS in academic libraries improves efficiency in circulation transactions and enhance the accuracy of cataloguing processes.

Core library services in academic libraries include cataloguing and classification, circulation, reference and information services, serials management, and user education. Effective library services enhance information access, improve user satisfaction, and promote academic productivity (Ifijeh & Adebayo, 2015). In the digital era, the efficiency of these services increasingly depends on the deployment of integrated technological systems such as ILMS. The adoption of ILMS offers several benefits to academic libraries. It improves operational efficiency

by automating routine tasks, enhances accuracy of records, and provides faster access to information resources. Breeding (2012) observed that ILMS improves workflow and allows librarians to focus more on user-centered services. ILMS also enhances user satisfaction through OPAC access, timely circulation services, and improved resource visibility. Additionally, automated reporting supports effective decision-making and accountability in library management (Uzomba et al., 2015). Despite the benefits of ILMS, several challenges hinder its effective utilization in Nigerian university libraries (Ukachi et al., 2014; Kari & Baro, 2014). These include inadequate funding, insufficient staff training, unreliable power supply, limited technical support, and resistance to change (Nwakanma & Asonye, 2016). These challenges may negatively affect library service delivery by limiting the full potential of ILMS. Addressing these constraints is essential for maximizing the impact of ILMS on library services in academic institutions. The Online Public Access Catalogue (OPAC) is one of the most visible components of ILMS and serves as the primary interface between the library and its users. OPAC enables users to search library holdings remotely, check item availability, and locate materials efficiently.

According to Popoola and Haliso (2019), OPAC improves access to information resources and promotes independent information seeking among library users. The availability of OPAC services enhances user satisfaction by reducing dependence on staff assistance and improving search flexibility. Despite the numerous benefits associated with ILMS, several challenges affect its effective utilization in academic libraries. Studies have identified inadequate training, system downtime, poor technical support, and unreliable power supply as major constraints to ILMS performance in Nigerian university libraries (Nwakanma & Asonye, 2016). These challenges may limit staff competence and reduce the expected impact of ILMS on service delivery. The level of improvement in library services depends not only on the availability of ILMS but also on the capacity of staff and institutional support mechanisms.

Empirical studies on ILMS adoption in Nigerian academic libraries have produced mixed findings. While some studies report significant improvements in efficiency and user satisfaction, others reveal persistent operational difficulties that hinder optimal performance (Ani et al., 2018; Popoola & Haliso, 2019). Moreover, limited studies have focused specifically on the Central Library of Rivers State University, creating a gap in empirical knowledge. This gap necessitates further

investigation into how ILMS influences library services in the institution, with particular attention to its operational effectiveness and associated challenges.

METHODOLOGY

The study adopted a descriptive survey research design to examine the impact of Integrated Library Management Software (ILMS) on library service in the Central Library, Rivers State University. The study focused on determining how the use of ILMS modules such as cataloguing, circulation, acquisitions, serials control, and Online Public Access Catalogue (OPAC) affects the effectiveness of library service delivery. The study was delimited to the Central Library of Rivers State University, Nigeria. The population of the study was 50, comprising of all library staff directly involved in the operation and use of ILMS in the Central Library, Rivers State University. This included professional librarians, para-professional staff, and ICT personnel. Due to the manageable size of the population, a census sampling method was adopted. Data were collected using a structured questionnaire titled “Integrated Library Management Software and Library Services Questionnaire (ILMSLSQ)”, designed by the researchers. The instrument was subjected to face and content validation by experts in library and information science and information technology and measurement and evaluation unit. Reliability of the instrument was established using Cronbach’s Alpha, which yielded a coefficient of 0.87, indicating high internal consistency. The questionnaire was administered personally with the assistance of research assistants to ensure a high response rate. Data collected were analyzed using descriptive statistics (mean and standard deviation) with the aid of SPSS Version 22.

DATA PRESENTATION

Research Question One: What is the impact of cataloguing and classification modules of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University?

Table 1: Mean Ratings on the Impact of Cataloguing and Classification Module of ILMS on Library Service Delivery

S/N	Items	Mean ($\bar{X}$)	SD	Decision
1	Automated cataloguing improves organization of library materials	3.42	0.61	Accepted
2	Classification through ILMS enhances easy location of resources	3.35	0.58	Accepted
3	ILMS reduces errors in cataloguing records	3.28	0.64	Accepted
4	Cataloguing module improves overall service efficiency	3.40	0.59	Accepted
Grand Mean		3.36	0.61	Accepted

Decision Rule: Mean $\geq$ 2.50 = Accepted

Grand Mean: 3.36, Staff responses indicate that the cataloguing and classification module of ILMS positively influences the organization of materials, accuracy in cataloguing, and overall efficiency of library service delivery.

Research Question Two: What is the impact of circulation management modules of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University?

Table 2: Mean Ratings on the Impact of Circulation Management Module of ILMS on Library Service Delivery

S/N	Items	Mean ($\bar{X}$)	SD	Decision
1	ILMS speeds up charging and discharging of materials	3.38	0.63	Accepted
2	Automated circulation improves accuracy of user records	3.31	0.60	Accepted
3	Circulation module reduces delays in service delivery	3.27	0.66	Accepted
4	ILMS enhances accountability in borrowing transactions	3.34	0.57	Accepted
Grand Mean		3.33	0.62	Accepted

Decision Rule: Mean $\geq$ 2.50 = Accepted

Grand Mean: 3.33, The circulation management module of ILMS positively influences charging and discharging of materials, accuracy of user records, and timeliness of service delivery according to staff responses.

Research Question Three: What is the impact of Online Public Access Catalogue (OPAC) features of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University?

Table 3: Mean Ratings on the Impact of OPAC Features of ILMS on Library Service Delivery

S/N	Items	Mean ($\bar{X}$)	SD	Decision
1	OPAC enables users to search library resources independently	3.45	0.55	Accepted
2	OPAC improves access to library collections	3.37	0.59	Accepted
3	OPAC reduces reliance on staff assistance	3.22	0.68	Accepted
4	OPAC enhances user satisfaction with library services	3.41	0.56	Accepted
Grand Mean		3.36	0.60	Accepted

Decision Rule: Mean ≥ 2.50 = Accepted

The grand mean of 3.36 indicates the OPAC features of ILMS positively influence user access to resources, independence in searching, and overall satisfaction with library services based on staff responses.

DISCUSSION OF FINDINGS

Impact of Cataloguing and Classification Modules of Integrated Library Management Software on Library Service Delivery

The findings of this study revealed that the cataloguing and classification modules of Integrated Library Management Software (ILMS) have a positive and significant impact on library service delivery in the Central Library, Rivers State University. The results indicate that automation of cataloguing activities improves the organization of library materials, enhances ease of resource

location, and reduces errors in bibliographic records. This implies that ILMS supports accuracy, consistency, and efficiency in technical processing operations, which are fundamental to effective library services. This finding aligns with the views of Breeding (2012), who emphasized that automated cataloguing systems enhance standardization and minimize inconsistencies commonly associated with manual cataloguing practices. In the context of this study, ILMS enables library staff to create, modify, and retrieve bibliographic records more efficiently, thereby improving access to information resources. Improved cataloguing accuracy ensures that users can locate materials easily through the catalogue, which directly enhances user satisfaction and service quality. The result supports Systems Theory, which posits that organizational efficiency improves when subsystems work in an integrated manner. The cataloguing and classification modules of ILMS function as core subsystems that interact seamlessly with circulation and OPAC modules. When these subsystems operate efficiently, the overall library system performs optimally, leading to improved service delivery. The finding also corroborates earlier empirical studies by Uzomba et al. (2015), who reported that automated cataloguing contributes to improved resource visibility and effective utilization in academic libraries. The implication of this finding is that effective cataloguing and classification through ILMS reduces delays, minimizes user frustration, and strengthens the library's role in supporting teaching, learning, and research activities. Therefore, the cataloguing and classification modules of ILMS play a critical role in enhancing library service delivery in the study area.

Impact of Circulation Management Modules of Integrated Library Management Software on Library Service Delivery

The findings of the study further revealed that the circulation management module of ILMS has a positive impact on library service delivery in the Central Library, Rivers State University. The results indicate that automation of circulation activities improves the speed and accuracy of lending and return processes, enhances record management, and strengthens accountability in borrowing transactions. This suggests that ILMS significantly improves the efficiency of user services that involve direct interaction between library staff and users. This finding is consistent with the assertion of Ifijeh and Adebayo (2015), who observed that automated circulation systems reduce delays and errors associated with manual circulation processes. In the context of the Central Library, Rivers State University, the circulation module of ILMS enables staff to manage user

records effectively, monitor overdue materials, and generate reports that support decision-making. As a result, users experience faster service delivery and improved satisfaction. The finding also aligns with the Technology Acceptance Model (TAM), which suggests that perceived usefulness and ease of use influence the adoption and effectiveness of technology systems. When library staff perceive the circulation module of ILMS as useful and easy to operate, they are more likely to utilize it effectively, leading to improved service delivery. This reinforces the importance of user-friendly systems and adequate staff training in maximizing the benefits of ILMS. The circulation module enhances transparency and accountability in library operations by maintaining accurate transaction records. This reduces cases of misplaced materials, disputes over borrowed items, and inefficiencies in service delivery. The implication is that effective circulation management through ILMS strengthens trust between the library and its users and improves the overall image of the library as a reliable information service provider.

Impact of Online Public Access Catalogue (OPAC) Features of Integrated Library Management Software on Library Service Delivery

The findings also revealed that OPAC features of ILMS have a positive impact on library service delivery in the Central Library, Rivers State University. The results indicate that OPAC enables users to search library collections independently, improves access to information resources, and enhances user satisfaction. This suggests that OPAC empowers users by providing timely and unrestricted access to bibliographic information, thereby reducing overdependence on library staff for routine information retrieval. This finding supports Ani, Ngulube, and Onyancha (2018), who reported that OPAC enhances access to information resources and promotes effective utilization of library collections in academic libraries. In the study area, OPAC serves as a gateway through which users can locate available resources, check item status, and make informed decisions about information use. This improves the efficiency of information retrieval and supports self-directed learning. The finding aligns with the principles of user-centered library services, which emphasize ease of access, convenience, and autonomy by enabling independent searches, OPAC reduces congestion at service desks and allows library staff to focus on advanced reference and information services. This improves both staff productivity and service quality. The implication of this finding is that effective deployment and utilization of OPAC features enhance the visibility of library

resources and improve user experience. Consequently, OPAC plays a critical role in strengthening the relevance and effectiveness of library services in the digital environment.

RECOMMENDATIONS

Based on the findings of the study, the researcher recommends the following:

1. University management should ensure continuous investment in the acquisition, upgrading, and maintenance of Integrated Library Management Software to support efficient library service delivery.
2. Library administrators should organize regular training and retraining programmes for library staff to enhance their competence in the effective use of ILMS modules such as cataloguing, circulation, and OPAC.
3. Adequate technical support and stable infrastructure, including reliable power supply and internet connectivity, should be provided to ensure the optimal functioning of ILMS in the Central Library.

CONCLUSION

The study investigated the impact of Integrated Library Management Software on library service delivery in the Central Library, Rivers State University. The study conclusively establishes that Integrated Library Management Software plays a significant role in enhancing library service delivery in the study area. The empirical findings demonstrate that the cataloguing and classification, circulation management, and Online Public Access Catalogue (OPAC) modules of ILMS positively influence the efficiency, accuracy, and accessibility of library services. The findings underscore that effective library service delivery in contemporary academic libraries is not achievable through manual processes alone but relies heavily on the adoption and proper utilization of automated library systems. The improved organization of information resources, faster circulation processes, and enhanced user access through OPAC affirm the relevance of ILMS in supporting teaching, learning, and research activities. The study highlights that while ILMS contributes significantly to service improvement, its effectiveness depends on staff competence, institutional support, and availability of functional infrastructure. This research affirms that the successful implementation and utilization of Integrated Library Management

Software is indispensable for improving the quality, efficiency, and reliability of library services in the digital age.

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