SCHOOL OF LIBRARY, ARCHIVES AND DOCUMENTATION STUDIES

(SLADS)

A RESEARCH REPORT

ASSESSMENT ON INTEGRATED LIBRARY MANAGEMENT SYSTEM IN PROVISION ON QUALITY CIRCULATION SERVICES. A CASE STUDY TANZANIA LIBRARY SERVICE BOARD (TLSB).

BY

ZAINABU HAMISI. RASHIDI

A Research Report Submitted at The School of Library, Archives and Documentation Studies Seeking Approval To Undertake A Study as a Partial Fulfillment of Requirements for The Award of Ordinary Diploma in Library and Information Management.

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CERTIFICATION

The undersigned certify that the supervisor has read and hereby recommend for the acceptance by the School of Library, Archives and Documentation Studies a research report entitled ***" assessment on integrated library management system in provision on quality circulation service. A case study Tanzania library services board (TLSB)"*** As A Partial Fulfillment of requirements for the award of ordinary diploma in library and information studies.

Signature

…….

Supervisor

(MADAM NASRA OTHMAN)

……

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DEDICATION

I dedicate this work to my loved parents for their advice, support of materials and prayers during the whole process of pursuing my Diploma. Thank you, so much may God be with you always.

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LIST OF ABBREVIATION

ICT - Information and Communication Technology

IFLA - International Federation of Library Associations and Institutions

ILMS - Integrated Library Management System

LIS - Library and Information Studies

OPAC - Online Public Access Catalogue

QoS - Quality of Service

SLADS - School of Library, Archives and Documentation Studies

TLSB - Tanzania Library Services Board

UNESCO - United Nations Educational, Scientific and Cultural Organization

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ABSTRACT

Integrated Library Management Systems (ILMS) have become essential tools for improving the management and delivery of library services. They automate key library operations such as cataloguing, circulation, acquisitions, and user management, thereby increasing efficiency, accuracy, and accessibility of information resources. Despite these benefits, many public libraries in Tanzania continue to face challenges in effectively utilizing ILMS due to inadequate ICT infrastructure, limited technical skills, and insufficient financial resources. This study focuses on assessing the effectiveness of ILMS in providing quality circulation services at the Tanzania Library Services Board (TLSB).

The main objective of this study is to assess the effectiveness of the Integrated Library Management System in the provision of quality circulation services at TLSB. Specifically, the study aims to examine the contribution of ILMS to the quality of library services and user satisfaction, determine the extent to which ILMS improves circulation processes, and assess its impact on users' access to library resources and information retrieval.

The study will employ a case study research design using both qualitative and quantitative research approaches. Data will be collected from library staff and users through questionnaires, interviews, observation, and documentary review. Quantitative data will be analyzed using descriptive statistics, while qualitative data will be analyzed through thematic analysis to generate meaningful findings related to the research objectives.

The findings of this study are expected to provide valuable information on the effectiveness of ILMS in improving circulation services at TLSB and identify the challenges affecting its implementation and utilization.

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CHAPTER ONE
BACKGROUND OF THE STUDY

1.0 INTRODUCTION

This chapter provides a comprehensive overview of the background of the study. It serves as the foundation for understanding the context, significance, and rationale of the research. The chapter is organized into several sections that include the background of the problem, the statement of the problem, the general and specific objectives, the research questions, the significance of the study, the scope of the study, the limitations of the study, and the definition of key terms.

1.1 Historical Background of the Study

Globally, libraries had historically depended on manual systems such as card catalogues, accession registers, and paper-based circulation records for organizing and managing information resources. These traditional systems had supported library operations for many years; however, they had become inefficient due to the growth of library collections and increasing demands from users. Manual systems had caused delays in information retrieval, difficulties in monitoring borrowed materials, duplication of records, and increased possibilities of human errors. With the development of Information and Communication Technologies (ICT), libraries had gradually shifted from manual operations to automated systems. Integrated Library Management Systems (ILMS) had been introduced to automate major library activities, including cataloguing, circulation, acquisitions, serials control, and reporting. These systems had improved library efficiency by supporting accurate record management, faster access to information resources, and improved service delivery (Breeding, 2015; Chowdhury & Chowdhury, 2016; Kochtanek & Matthews, 2016)

The International Federation of Library Associations and Institutions (IFLA) had recognized the importance of ICT adoption in transforming library services and improving access to information. IFLA emphasized that modern libraries required appropriate technological infrastructure, professional skills, and effective information management

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systems to respond to changing user needs. The application of ICT in libraries had supported automation, resource sharing, digital access, and improvement of the quality of library services (IFLA, 2019; IFLA, 2020).

At the regional level, particularly in many African countries, the adoption of ILMS had developed gradually compared with developed countries. Some national, university, and research libraries had successfully implemented automated systems, while many public libraries had continued to depend on manual or semi-automated approaches. Studies had indicated that African libraries faced several challenges, including inadequate funding, poor ICT infrastructure, unreliable Internet connectivity, limited maintenance support, and shortage of trained ICT-skilled library staff. These factors had affected the effective implementation and sustainability of ILMS in many African libraries (Nwalo, 2000; Mutula, 2012; Hider, 2018). IFLA also reported that many libraries in developing regions required stronger technological readiness, infrastructure investment, and staff digital competencies to successfully adopt library technologies.

In Tanzania, library services had traditionally relied on manual procedures such as card catalogues, shelf lists, and circulation registers to manage library collections and user transactions. As the demand for information services increased due to expansion of education, research activities, and public information needs, manual systems had become less effective in supporting efficient library operations. Tanzanian libraries had therefore started adopting ICT applications and automated library systems to improve resource management, access to information, and service delivery. However, studies had shown that challenges such as inadequate ICT facilities, limited financial resources, insufficient technical expertise, and lack of continuous training had affected the effective use of automated systems in some Tanzanian libraries (Mcharazo, 2007; Matovelo, 2019; Manda, 2020).

At the institutional level, the Tanzania Library Services Board (TLSB) had introduced ICT-based solutions to modernize library operations and improve service provision. The TLSB

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National Central Library had gradually adopted automated systems to support functions such as cataloguing, circulation management, and information retrieval. The implementation of ILMS had aimed to reduce manual workload, improve accuracy of circulation records, minimize delays in borrowing and returning library materials, and enhance user satisfaction. However, despite these improvements, challenges related to system utilization, ICT infrastructure, staff skills, and technical support had continued to influence the effectiveness of ILMS. Therefore, this study was conducted to assess the effectiveness of Integrated Library Management Systems in supporting quality circulation services at the TLSB National Central Library.

1.2 Statement of the Problem

The introduction of Integrated Library Management Systems (ILMS) in libraries had been expected to improve the efficiency and effectiveness of circulation services. Through automation, ILMS had reduced the time required for borrowing and returning library materials, improved the accuracy of tracking overdue books, and provided users with real time access to library catalogues and inventory information. In addition, the system had enhanced resource management by enabling librarians to monitor the availability, movement, and allocation of books and other information materials (Borgman, 2000). The adoption of ILMS had therefore contributed to improving library operations by increasing accuracy, reducing manual workload, and supporting timely delivery of services to users (Breeding, 2015).

The Tanzania Library Services Board (TLSB), which had been responsible for overseeing public library services in Tanzania, had the mandate to ensure that library users received efficient services and timely access to information resources that supported education, research, and personal development. Through the implementation of automated systems, TLSB libraries had aimed to improve circulation services by strengthening borrowing and returning procedures, improving record management, and enhancing access to library collections.

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Despite these expected benefits, the implementation and effective utilization of ILMS in many TLSB libraries had faced several challenges. Some libraries had experienced infrastructural limitations, including inadequate ICT facilities, unreliable technological resources, and outdated computer hardware, which had affected the proper functioning of automated systems (Breeding, 2015). . Although there is different efforts there is an insufficient level of technical training and expertise among some library staff had made it difficult for them to fully operate the system and solve technical problems when they occurred (Mutula, 2012). Consequently, some libraries had continued to experience inefficiencies in circulation services, including delays in processing borrowing and returning transactions, challenges in locating materials within library collections, and difficulties in accurately tracking borrowed items.. In addition, the system enhances resource management by enabling librarians to monitor the availability, movement, and allocation of books and other information materials (Borgman, 2000). The Tanzania Library Services Board (TLSB), which is responsible for overseeing public libraries in Tanzania, has the mandate to ensure that library users receive efficient services and have timely access to information resources that support

These challenges negatively affect the quality of services provided by TLSB libraries. Library users often experience delays and inconvenience when accessing information resources, which may lead to dissatisfaction and reduced use of library services (Venkatesh et al., 2012). This situation contradicts the main objective of introducing ILMS, which is to improve service delivery and enhance access to information. Furthermore, poor circulation management can lead to problems in resource control, including the misplacement or loss of library materials (Rouse, 2016). Such challenges may weaken the ability of TLSB libraries to effectively support learning, research, and knowledge development in Tanzania. Therefore, it is important to examine the challenges affecting the implementation and use of ILMS in TLSB libraries and how these challenges influence the quality of circulation

Although Integrated Library Management Systems (ILMS) have been introduced to improve library operations and circulation services, the expected benefits have not been

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fully achieved in some libraries. Previous studies show that effective ILMS implementation depends on adequate ICT infrastructure, technical support, staff competencies, continuous training, and proper system management (Arora & Sharma, 2017; Breeding, 2015). Studies in developing countries indicate that challenges such as inadequate technology, limited financial resources, poor system maintenance, and lack of skilled personnel affect the effectiveness of automated library services (Adeleke & Olorunsola, 2017; Manda, 2020; Okunlaya et al., 2022). However, most studies have focused on general library automation and ICT adoption rather than the contribution of ILMS to circulation service quality.

There is limited evidence on how ILMS challenges affect circulation activities such as borrowing, returning, overdue monitoring, and tracking library materials, particularly in public libraries like the Tanzania Library Services Board (TLSB). Therefore, this study assesses the effectiveness of ILMS in supporting quality circulation services at the TLSB National Central Library.

1.4 General Objective

The general objective of this study is to assess the role of ILMS in improving circulation services in TLSB libraries in Tanzania.

1.4.1 Specific Objectives

i. To analyze how ILMS contributes to the overall quality and satisfaction of library services for users.
ii. To examine the extent to which ILMS improves circulation processes in the library.
iii. To assess the impact of ILMS on user access to library resources and information retrieval efficiency.

1.5 Research Questions

i. How does the use of ILMS contribute to the quality of library services and user satisfaction in TLSB libraries?

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ii. To what extent does ILMS improve circulation processes in TLSB libraries?

iii. What is the impact of ILMS on user access to library resources and the efficiency of information retrieval?

1.6 Significance of the Study

This study is significant because it evaluates how an Integrated Library Management System (ILMS) optimizes the circulation workflow at TLSB by replacing slow, manual record-keeping with automated data processing (Singh & Kaur, 2017). It provides a practical framework for reducing transaction times, eliminating human error in borrower records, and improving the accuracy of real-time book availability. By identifying system strengths and technical gaps, the research enables TLSB to enhance its Quality of Service (QoS) through streamlined check-in/check-out procedures and automated overdue management, ultimately ensuring a more responsive and reliable borrowing experience for the public (Breeding, 2015).

1.7 Scope of the Study

This study is delimited to the circulation module of the Integrated Library Management System (ILMS) at the Tanzania Library Services Board (TLSB), focusing specifically on the National Central Library. The scope encompasses the technical efficiency of automated functions, including user registration, charging and discharging, book reservations, and overdue management (Koha Community, 2018). Geographically, the research is confined to TLSB's primary headquarters to ensure data depth, while the thematic focus is strictly on how system performance translates into Quality of Service (QoS) for patrons, excluding non-circulation modules such as acquisitions or serials control (Kumar, 2014).

1.8 Limitations of the Study

The researcher in this study may face certain limitations, including the following:

1.8.1 Time

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Time may not be sufficient to conduct the research, since the researcher needs enough time to collect data. Reaching all respondents within the time provided is not always possible (Creswell & Creswell, 2018).

1.8.2 Funds

Financial resources may not be sufficient during the process of conducting the study, since the researcher needs funds to complete data collection and analysis. As the process of collecting data takes several days, attending the research area on all these days requires an adequate budget for transport, stationery, and food allowances (Saunders et al., 2019).

1.8.3 Cooperation

The researcher may face difficulty getting respondents who are willing to answer the questions, and some respondents may not return the questionnaire (Saunders et al., 2019). Where cooperation from intended respondents is lacking, the researcher may not be able to obtain relevant information that would be useful in accomplishing the study.

1.9 Definition of Key Terms

1.9.1. Availability: Refers to the condition in which library information resources and services are present, organized, and ready for immediate use by patrons when needed (Aguolu & Aguolu, 2022). In the context of TLSB, it implies that the ILMS accurately reflects the “on-shelf” status of materials for check-out.

1.9.2. Information Technology (IT): The use of computers, storage, networking, and other physical devices or infrastructure to create, process, store, secure, and exchange all forms of electronic data (Taylor & Francis, 2024).

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1 9.3 Integrated Library Management System (ILMS): An enterprise resource planning system designed for libraries to track items owned, orders placed, and patron borrowing records through a centralized database with discrete modules for acquisitions, cataloguing, and circulation (Wikipedia, 2025; ResearchGate, 2024).

1.9.4. Library Automation: The process of converting manual library procedures, such as card catalogues and hand-written circulation logs, into computerized systems to minimize human intervention and increase efficiency (Librarianship Studies, 2020).

1.9.5. Computer: An electronic device capable of storing, retrieving, and processing data through programmed arithmetic or logical operations, serving as the primary tool for library digitalization (Librarianship Studies, 2025).

1.9.6. Library: A structured institution or virtual space dedicated to collecting, organizing, preserving, and providing physical or digital access to information resources to meet the educational and research needs of its users (UNESCO, 2020; LIS Network, 2024).

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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

A literature review is a detailed and organized discussion of published research related to a specific topic. It involves collecting, reading, analyzing, and summarizing previous studies to understand what has already been discovered about the research problem. Instead of presenting new data, a literature review focuses on examining existing knowledge and explaining how it relates to the current study. According to Creswell and Creswell (2018), a literature review helps researchers identify important themes, debates, and gaps in existing research, providing a foundation for new investigations. This chapter reviews existing literature in line with the three specific objectives of the study.

2.2 Contribution of ILMS to the Overall Quality and Satisfaction of Library Services for Users

Integrated Library Management Systems (ILMS) play a critical role in enhancing the quality of library services and increasing user satisfaction by automating core functions such as catalogue searching, circulation control, acquisitions, and real-time access to resources. Research evidence suggests that when ILMS exhibit high system quality, information quality, and service quality, users tend to have more positive experiences and higher satisfaction with library services. For instance, a study at the BAPUSIPDA West Java Public Library finds that the quality of ILMS functions, including system responsiveness, accurate information delivery, and reliable service support, is significantly and positively associated with user satisfaction, indicating that users value a system that performs effectively and meets their needs (Laksana et al., 2021). Similarly, research in Nigerian university libraries reveals that librarians perceive ILMS to be user-friendly, fast, and relevant in providing quality information, and these factors are linked with high levels of satisfaction among library personnel, reflecting how system capabilities can support professional service delivery (Adegbore & Sadiku, 2023). Studies focusing on library systems more broadly show that usability, functionality, and reliability, key aspects of

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ILMS design, significantly influence user satisfaction, as users respond positively to systems that are easy to use and dependable in delivering information (Elias & Lubua, 2020). Moreover, evaluations of centralized library management systems demonstrate that integrated platforms improve operational efficiency and simplify information access, which contributes to enhanced service quality and user satisfaction across different institutional contexts (Indrawan et al., 2024). Taken together, these findings highlight that the implementation and optimization of ILMS contribute not only to more efficient internal workflow but also to improved service quality and overall user satisfaction by meeting user expectations for accurate, accessible, and reliable library services.

2.3 Extent to Which ILMS Improves Circulation Processes in the Library

Integrated Library Management Systems (ILMS) greatly improve circulation processes in libraries by automating tasks such as book check-in, check-out, renewals, reservations, and fine management. Circulation is one of the most important services in a library because it directly affects how users borrow and return materials. When ILMS is used, these processes become faster, more accurate, and easier to manage compared with manual systems. According to Creswell and Creswell (2018), the use of information systems in organizations improves operational efficiency by reducing errors and saving time. In libraries, this means that staff can serve users more quickly and effectively during circulation activities.

Research shows that ILMS reduces human errors in recording borrowed and returned materials. Automated barcode scanning and real-time database updates help ensure that records are accurate and up to date. Snyder (2019) explains that well-implemented information systems improve workflow by organizing data in a structured and reliable way. In circulation services, this structured data management allows librarians to track overdue books, send reminders, and generate circulation reports easily. As a result, libraries can manage their collections better and reduce the loss of materials.

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Studies in academic libraries also show that ILMS improves the speed of circulation services. Users no longer need to wait for manual recording because transactions are completed instantly through computerized systems. Hart (2018) highlights that digital systems improve service delivery by increasing speed and consistency in routine operations. In the context of circulation, this means users experience shorter waiting times, quick renewals, and easy access to borrowing history. This efficiency improves user satisfaction and trust in library services.

Furthermore, ILMS enhances communication between the library and users during circulation processes. For example, automated systems can send email or SMS notifications about due dates, overdue items, or reserved books that are ready for pickup. According to Xiao and Watson (2019), technology systems strengthen service quality when they support timely communication and transparency. In libraries, this improves user awareness and responsibility, leading to better compliance with borrowing rules.

Overall, the literature shows that ILMS significantly improves circulation processes by increasing speed, accuracy, efficiency, record management, and communication. These improvements not only help library staff perform their duties effectively but also create a better borrowing experience for users. Therefore, the extent to which ILMS improves circulation processes is high, especially in libraries that fully implement and maintain the system properly.

2.4 Impact of ILMS on User Access and Information Retrieval Efficiency

Integrated Library Management Systems (ILMS) have become essential tools in modern libraries because they improve how users access resources and how efficiently information is retrieved. ILMS refers to computer software that integrates core library functions such as cataloguing, circulation, acquisitions, serials management, user account services, and search operations into a single system. Before ILMS, libraries often rely on manual or semi-automated processes, which are slow, prone to errors, and difficult for users to access remotely. With ILMS, users can easily search and find the materials they need from a

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central system, whether they are on campus or off-site, which improves user access significantly.

One of the biggest contributions of ILMS to libraries is its ability to organize a large volume of physical and digital resources in one searchable catalogue. According to research on library automation, ILMS enable users to perform detailed searches by title, author, subject, keyword, and other filters, which allows them to find relevant materials more quickly and accurately than traditional card catalogues or manual systems (Library & Information Science Education Network, 2023). This centralized search function replaces the need to visit different physical sections of the library or check multiple records manually. As a result, users save time and effort, which increases the overall efficiency of information retrieval.

Another important impact of ILMS is the real-time update feature. When users borrow or return books, or when new resources are added, the ILMS automatically updates the library catalogue in real time. This means the system always shows the most current information about resource availability (Library & Information Science Education Network, 2023). Real-time updates are particularly helpful in academic and research libraries where students and faculty often need immediate access to specific materials for study and research. When the status of items such as books or journals is current and accurate, users do not face confusion or wasted time, making the retrieval process smoother and faster.

ILMS also support remote access to library resources. With many libraries offering digital collections such as e-books, online journals, and academic databases, ILMS allow authorized users to access these resources from any location, not just within the physical library (Library & Information Science Education Network, 2023). This is particularly valuable for users who need materials outside normal library hours or who are unable to visit the library in person, further extending the reach and efficiency of library services.

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2.5 Research Gap and Summary of the Literature Review

The reviewed literature demonstrates a broad consensus that ILMS, when functioning well, improve service quality, speed up circulation processes, and enhance user access to information. However, most of the reviewed studies focus on academic or well-resourced library settings, with comparatively little attention paid to public library systems in developing countries that operate under infrastructural constraints such as unreliable electricity, limited internet connectivity, and constrained ICT budgets. Few studies specifically examine how these operating conditions affect the day-to-day performance of ILMS in national public library boards such as TLSB. This study addresses that gap by assessing the role of ILMS in circulation services at TLSB, with particular attention to how local infrastructural and operational realities shape the extent to which the benefits documented in the literature are actually realized in practice.

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CHAPTER THREE

RESEARCH METHODOLOGY

Note: This chapter is drafted from the context available in Chapters One and Four (a structured questionnaire administered to 40 library staff, 35 returned, supplemented by brief interviews, at the TLSB National Central Library). Please review and adjust the design, sampling, and analysis details to match exactly what you actually did in the field.

3.1 Introduction

This chapter describes the methodology used to conduct the study. It presents the research design, the area of the study, the study population, the sample size and sampling techniques, the data collection methods and instruments, the validity and reliability of the instruments, the data analysis methods, and the ethical considerations observed during the study.

3.2 Research Design

The study adopts a descriptive research design employing a case study approach. A descriptive design is appropriate because the study seeks to describe the current status of ILMS use in circulation services and to establish relationships between the system's implementation and the quality of services provided, without manipulating any variables (Creswell & Creswell, 2018). The study uses a mixed-methods approach, combining quantitative data collected through a structured questionnaire with qualitative insights obtained through brief interviews, in order to provide a more complete understanding of the research problem.

3.3 Area of the Study

The study is conducted at the Tanzania Library Services Board (TLSB), with specific focus on the National Central Library. This area is selected because it is the primary headquarters of TLSB and hosts a fully implemented Integrated Library Management System (ILMS),

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making it well suited to provide the depth of data required to assess the system's performance in circulation services.

3.4 Population of the Study

The population of this study consisted of 150 library staff from the Tanzania Library Services Board (TLSB) National Central Library. The study involved Library Assistants, Assistant Librarians, Librarians, Senior Librarians/Supervisors, and ICT Officers who are directly involved in the use and management of the Integrated Library Management System (ILMS) in circulation services and the organization of library materials. These respondents were selected because they possess relevant knowledge, skills, and experience regarding the use of ILMS and the management of library collections.

3.5 Sample Size

The sample size of this study was 40 respondents selected from a target population of 150 library staff involved in circulation services at TLSB National Central Library. The sample size was determined using Slovin's formula with a margin of error of 0.135 as shown below:

$n=N/(1+Ne^2)$

Where:

$n=150/(3.73375)$

$n=40$

Therefore, the sample size was approximated to 40 respondents.

The respondents were selected from library staff involved in circulation services, including Library Assistants, Assistant Librarians, Senior Librarians, and ICT Officers. Purposive

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sampling was used to select respondents because they have direct experience using the Integrated Library Management System (ILMS). Out of 40 questionnaires distributed, 35 were returned, representing a response rate of 87.5%.

3.6 Data Collection Methods and Instruments

3.6.1 Questionnaire

A structured questionnaire is the main instrument used to collect data from library staff. The questionnaire includes both closed-ended questions, which generate quantitative data on respondents' demographic characteristics and their views on ILMS performance, and a small number of open-ended items that allow respondents to elaborate on their experiences.

Instrument: A structured questionnaire was used as the main data collection instrument. Other materials used included printed questionnaires, pens, and notebooks for recording and collecting responses from library staff

3.6.2 Interviews

Brief interviews are conducted with a small number of respondents to supplement the questionnaire data. The interviews provide qualitative, in-depth insights into specific issues, such as the effect of network reliability on the speed of circulation transactions, which are difficult to capture fully through closed-ended questions alone.

Instrument: An interview guide, notebook, and pen were used to record information obtained from respondents during interviews.

3.7 Validity and Reliability of Research Instruments

To ensure validity, the questionnaire is developed based on the study's objectives and research questions, and it is reviewed to confirm that it adequately covers the key themes of the study. A pilot test is conducted with a small number of respondents who are not part of the final sample, to identify and correct any ambiguous or unclear questions before the

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main data collection exercise. To ensure reliability, the questionnaire uses consistent and clearly worded items, and the same data collection procedure is applied uniformly to all respondents. The instrument is reviewed and pre-tested with a small group of respondents to identify and correct unclear questions before data collection. Reliability is ensured through the use of clear and consistent questions and applying the same data collection procedures to all respondents.

3.8 Data Analysis Methods

Quantitative data collected through the questionnaire are coded, organized, and analyzed using descriptive statistics, including frequencies and percentages, and are presented in tables to allow for clear interpretation. Qualitative data obtained from interviews and open-ended questionnaire items are analyzed thematically, with responses grouped according to recurring themes and used to explain and contextualize the quantitative findings.

3.9 Ethical Considerations

The study observes standard ethical research practices. Respondents are informed of the purpose of the study and participate voluntarily. Confidentiality and anonymity of respondents are maintained throughout the research process, and data collected are used strictly for academic purposes. Permission to conduct the study is sought from the relevant authorities at TLSB prior to data collection.

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CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents, analyses and interprets the findings of the study on the assessment of the Integrated Library Management System (ILMS) in the provision of quality circulation services, using the Tanzania Library Service Board (TLSB) as a case study. The data were collected from library staff involved in circulation services using a structured questionnaire. After data collection, the responses were organized, analyzed, and interpreted to answer the research objectives.

4.2 Response Rate

A total of 40 questionnaires were distributed to library staff at the Tanzania Library Service Board (TLSB). Out of these, 35 questionnaires were completed, returned, and found suitable for data analysis. The remaining 5 questionnaires were not returned and were therefore excluded from the study. The number of completed questionnaires was considered sufficient for the analysis and presentation of the study findings.

table 4.1. respondents' rate (n= 35)

Response Category	**Frequency**	**Percentage %**
Questionnaires distributed	40	100
Questionnaires returned	35	87.5
Questionnaires not returned	5	12.5
Total	40	100

Sources Field: 2026

The findings indicate that most of the selected respondents participated in the study. Out of the 40 questionnaires distributed to library staff at the Tanzania Library Service Board (TLSB), 35 questionnaires were completed, returned, and found suitable for data analysis, while 5 questionnaires were not returned. This resulted in a high response rate, providing

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sufficient information for analysis and interpretation of the study findings. The collected data were considered adequate for assessing the Integrated Library Management System (ILMS) in the provision of quality circulation services at TLSB.

4.3 Demographic Information

This section presents the demographic information of the respondents who participated in the study. The study focused on key demographic variables such as age, gender, level of education, and work experience. These variables were considered important because they may influence respondents' knowledge, experience, and ability to use the Integrated Library Management System (ILMS) in providing quality circulation services.

For example, respondents with different levels of work experience may have different levels of familiarity with ILMS operations and circulation activities. Similarly, gender and age differences may provide varied experiences and opinions regarding the use of ILMS in library services. The level of education may also influence respondents' understanding and ability to effectively use ILMS features in performing circulation tasks such as borrowing, returning, tracking library materials, and managing user records.

4.3.1. Gender of Respondents

The question on gender was included because it is an important demographic characteristic that may influence respondents' experiences, knowledge, and use of the Integrated Library Management System (ILMS) in providing circulation services. Male and female library staff may have different levels of experience, technical skills, and perceptions regarding the use of ILMS in daily library operations.

The inclusion of gender in this study helps to identify the distribution of respondents and determine whether the views and experiences regarding ILMS use differ between male and female staff. It also helps the researcher to understand whether both genders are equally involved in using the system and providing quality circulation services at the Tanzania Library Service Board (TLSB).

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Table 4.2.distribution of respondent Gender (N =35)

Statement	Frequency	Percentage %
Male	15	43
Female	20	57
Total	35	100

4.1 figure of respondent gender

The finding indicates that 20 (57%) of the respondents were female and 15 (43%) were male. These results show that there was a slight difference in gender distribution among the respondents, with female participants being the majority. However, both male and female respondents were included in the study, providing views and experiences from both genders.

4.3.2. Age of Respondents

Respondents were asked to indicate their age group. This question aimed to identify the age categories of respondents involved in the study on the assessment of the Integrated Library Management System (ILMS) in the provision of quality circulation services at the Tanzania Library Service Board (TLSB). Age is an important demographic characteristic because it may influence respondents' level of experience, familiarity with technology, and ability to use library systems such as ILMS.

The information collected on age helps the researcher to understand the different experiences and perceptions of respondents regarding the use of ILMS in improving circulation services. It also provides insight into whether views on the effectiveness of ILMS vary among different age groups in relation to services such as book borrowing, returning materials, searching library resources, and accessing library services efficiently.

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Table 4.3: Distribution of Respondents by Age

Statement	Frequency	Percentage %
18 - 25 years	5	14
26 - 35 years	12	34
36 - 45 years	10	29
46 - 55 years	6	17
56 years and above	2	6
Total	35	100

Sources Field: 2026

The findings indicate that among the 35 respondents, 12 (34%) were aged between 26–35 years, making this the largest age group in the study. This was followed by respondents aged 36–45 years, who were 10 (29%). Respondents aged 46–55 years were 6 (17%), while those aged 18–25 years were 5 (14%). The smallest group was respondents aged 56 years and above, with 2 (6%).

The findings show that respondents from different age groups participated in the study, providing a variety of views and experiences about the Integrated Library Management System (ILMS) in the provision of quality circulation services at the Tanzania Library Service Board (TLSB). The presence of different age categories helps the study to capture opinions from users with different levels of experience and familiarity with library technologies. This contributes to a better understanding of how ILMS supports activities such as borrowing, returning, and managing library resources.

4.3.3. Level of Education of Respondents

Respondents were asked to indicate their level of education. This question aimed to identify the educational background of respondents involved in the study on the assessment of the Integrated Library Management System (ILMS) in the provision of quality circulation services at the Tanzania Library Service Board (TLSB). The level of education

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is an important factor because respondents with different academic qualifications may have different levels of knowledge, experience, and understanding of library technologies and information management systems.

The study considered different education levels, including Certificate in Library and Information Studies, Diploma in Library and Information Studies, Bachelor's Degree in Library and Information Studies, Postgraduate Diploma/Master's Degree, and other qualifications. Understanding the educational background of respondents helps the researcher to determine whether perceptions and experiences regarding the effectiveness of ILMS in supporting circulation services differ among respondents with different levels of academic training.

Tables 4.4 Distribution of Respondents by level of education (N=35)

Statement	Frequency	Percentage %
Certificate in Library and Information Studies,	6	17
Diploma in Library and Information Studies,	12	34
Bachelor's Degree in Library and Information Studies,	13	37
Postgraduate Diploma/Master's Degree,	3	9
other qualifications	1	3
Total	35	100

Sources Field: 2026

The findings show that out of 35 respondents, 13 (37) held a Bachelor's Degree in Library and Information Studies, while 12 (34) had a Diploma in Library and Information Studies. Furthermore, 6 (17) respondents had a Certificate in Library and Information Studies, 3 (9) had Postgraduate Diploma/Master's Degree qualifications, and 1 (3) respondent had other

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qualifications. The results therefore indicate that the majority of respondents had Bachelor's Degree and Diploma qualifications in Library and Information Studies.

This suggests that most respondents possessed relevant professional qualifications and were likely to have adequate knowledge and experience in library operations. Respondents with higher levels of education may have greater understanding of library technologies, including the Integrated Library Management System (ILMS), and its contribution to improving circulation services. Therefore, the educational background of respondents provided useful information for assessing the effectiveness of ILMS in the provision of quality circulation services at the Tanzania Library Service Board (TLSB).

4.3.4. Current Position of Respondents at TLSB

The question on the current position of respondents at the Tanzania Library Service Board (TLSB) was included because staff positions may influence their level of involvement, experience, and understanding of the Integrated Library Management System (ILMS) in the provision of circulation services. Different categories of library staff perform different roles, and their responsibilities may affect how they interact with and use ILMS in their daily activities.

The findings on the current positions of respondents help to show whether the study involved staff from different levels and areas of responsibility, including Library Assistants, Assistant Librarians, Librarians, Senior Librarians/Supervisors, Systems/ICT Officers, and other staff. This information is important because it provides an understanding of the respondents' roles and their ability to provide reliable information regarding the effectiveness of ILMS in improving the quality of circulation services at TLSB.

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Tables 4.5 Distribution by Current Position of Respondents at TLSB

Statement	Frequency	Percentage
Library Assistants,	10	29
Assistant Librarians,	9	26
Librarians	8	23
Senior Librarians/Supervisors,	5	14
Systems/ICT Officers,	2	5
other staff.	1	3
Total	35	100

Sources Field: 2026

The findings in Table 4.5 show the current positions of respondents who participated in the study. Out of 35 respondents, the majority were Library Assistants, 10 (29%), followed by Assistant Librarians, 9 (26%). Furthermore, 8 (23%) respondents were Librarians, while 5 (14%) were Senior Librarians/Supervisors. The findings also show that 2 (5%) respondents were Systems/ICT Officers, and only 1 (3%) respondent belonged to other staff categories.

The findings indicate that the study involved respondents from different positions within TLSB, with the majority being Library Assistants and Assistant Librarians. This suggests that most respondents were staff members directly involved in daily library operations, including circulation activities where ILMS is commonly used. The involvement of Librarians, Senior Librarians/Supervisors, and Systems/ICT Officers also provided different views and experiences regarding the use of the Integrated Library Management System (ILMS) in improving the quality of circulation services at the Tanzania Library Service Board (TLSB).

4.3.5. Years of Working Experience by respondent at TLSB

The question on years of working experience at the Tanzania Library Service Board (TLSB) was included because work experience may influence respondents' knowledge,

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skills, and familiarity with the Integrated Library Management System (ILMS) and circulation services. Staff with different levels of experience may have different experiences in using ILMS, understanding its functions, and identifying its contribution to improving the quality of library services.

The findings on years of working experience help to show the level of experience possessed by respondents who participated in the study. The study considered different categories of work experience, including less than 1 year, 1–3 years, 4–6 years, 7–10 years, and more than 10 years. This information is important because experienced staff may provide detailed information based on their long-term interaction with library systems, while newer staff may provide insights based on their recent experiences with ILMS operations.

Tables 4.6.Distribution of respondent Years of Working Experience at TLSB

Statement	Frequency	Percentage %
less than 1 year	4	11
1–3 years	9	26
4–6 years	10	29
7–10 years	7	20
more than 10 years	5	14
Total	35	100

Sources Field: 2026

The results show that respondents had different levels of work experience in the library field. Out of 35 respondents, the majority, 10 (29%), had worked at TLSB for 4–6 years. This was followed by 9 (26%) respondents who had 1–3 years of working experience. Furthermore, 7 (20%) respondents had 7–10 years of experience, while 5 (14%) respondents had worked for more than 10 years. The findings also show that 4 (11%) respondents had less than 1 year of working experience.

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The findings indicate that most respondents had several years of experience working at TLSB, particularly those with 4–6 years of service. This suggests that the majority of respondents had enough exposure to library operations and were likely to have experience using library systems, including the Integrated Library Management System (ILMS). The presence of respondents with different levels of experience provided a variety of views, including those from newly employed staff and highly experienced staff. Therefore, the respondents were considered suitable for providing information on the role of ILMS in improving the quality of circulation services at TLSB.

4.3. 6.Duration of ILMS Use for respondents

The duration of using the Integrated Library Management System (ILMS) was included as an important aspect of the study because the length of time respondents have used the system may influence their level of experience, understanding, and ability to evaluate its contribution to circulation services. Staff who have used ILMS for a longer period may have more experience in identifying its benefits, challenges, and effectiveness in supporting daily library operations.

The study considered different categories of ILMS usage duration, including less than 1 year, 1–3 years, 4–6 years, and more than 6 years. This information helps to show the level of exposure respondents have had with the system and provides a better understanding of their experiences in using ILMS for activities such as borrowing and returning library materials, managing user records, and improving the quality of circulation services at the Tanzania Library Service Board (TLSB).

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Tables 4.7 Distribution for Duration of ILMS Use in respondents

Statement	Frequency	Percentage
less than 1 year	6	17
1–3 years	12	34
4–6 years	12	34
more than 6 years	5	15
Total	35	100

Source field: 2026

The results show that respondents had different levels of experience in using ILMS. Out of the 35 respondents, the majority had used ILMS for 1–3 years and 4–6 years, with each category having 12 (34%) respondents. This was followed by respondents who had used ILMS for less than 1 year, with 6 (17%) respondents. The findings further show that 5 (15%) respondents had used ILMS for more than 6 years.

The findings indicate that most respondents had several years of experience using ILMS, particularly those with between 1 and 6 years of usage. This suggests that the majority of respondents were familiar with the system and had enough experience to provide reliable information about its performance and contribution to circulation services. The presence of respondents with shorter and longer periods of ILMS use also provided different views based on their levels of exposure to the system.

4.4 Effect of ILMS on the Speed of Borrowing and Returning Books

The effect of the Integrated Library Management System (ILMS) on the speed of borrowing and returning books was included in the study to assess whether the system has improved the efficiency of circulation services at the Tanzania Library Service Board (TLSB). The speed of borrowing and returning library materials is an important measure of service quality because faster transactions can reduce waiting time and improve users' satisfaction.

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The respondents were asked to indicate whether ILMS has made borrowing and returning books much slower, slightly slower, caused no change, slightly faster, or much faster. Their responses help to determine the extent to which ILMS has contributed to improving the speed and effectiveness of circulation activities. The findings provide an understanding of whether the system has enhanced daily library operations by making transactions easier, quicker, and more efficient.

Tables 4.8.Distribution Effect of ILMS on the Speed of Borrowing and Returning Book (N =35)

Statement	Frequency	Percentage %
much slower,	18	51
slightly slower	2	6
slightly faster	3	9
much faster	12	34
No change	0	0
Total	35	100

Source field: 2026

The results indicate that the majority of respondents, 18 (51%), reported that the use of ILMS had made borrowing and returning books much slower. This was followed by 12 (34%) respondents who reported that ILMS had made the process much faster. In addition, 3 (9%) respondents stated that ILMS had made the process slightly faster, while 2 (6%) respondents believed that it had made the process slightly slower. None of the respondents 0 (0%) reported that ILMS had caused no change in the speed of borrowing and returning books.

During the interviews, one respondent explained that the speed of borrowing and returning books depends on whether the system and internet connection are working properly. The respondent Sayed

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"When the system and network are working well, borrowing and returning books is very fast. However, when there is a network problem or the system becomes slow, the whole process takes more time."

The findings suggest that although some respondents believed that ILMS had improved the speed of circulation services, the majority experienced slower borrowing and returning processes. This may indicate the existence of challenges affecting the effective use of the system, such as system delays, network problems, inadequate technical support, or limited user skills. Therefore, there is a need for the Tanzania Library Service Board (TLSB) to identify and address these challenges so that ILMS can effectively support faster and more efficient circulation services.

4.5. Ease of Using the ILMS for Circulation Tasks

The ease of using the Integrated Library Management System (ILMS) for circulation tasks was examined to determine how easy or difficult library staff find the system when performing their daily duties. Circulation tasks include activities such as issuing books, returning books, renewing borrowed materials, and managing library user records. A system that is easy to use can improve staff performance, reduce errors, and enhance the quality of circulation services.

Respondents were asked to indicate whether they found the ILMS very difficult, difficult, neutral, easy, or very easy to use. Their responses help to assess the usability of the system and provide an understanding of whether ILMS supports efficient and effective circulation services at the Tanzania Library Service Board (TLSB).

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Tables 4.9 Distribution Ease of Using the ILMS for Circulation Tasks

Statement	Frequency	Percentages %
very difficult	2	5
neutral,	3	9
Difficult	5	14
Easily	15	43
Very easily	10	29
Total	35	100

Source field: 2026

The results show that the majority of respondents, 15 (43%), reported that the ILMS was easy to use. This was followed by 10 (29%) respondents who indicated that the system was very easy to use. In addition, 5 (14%) respondents stated that the system was difficult to use, while 3 (9%) respondents were neutral. Only 2 (5%) respondents reported that the ILMS was very difficult to use.

During the interviews, one respondent explained that the ILMS is easy to use once staff become familiar with it. The respondent said,

"The system is easy to use for daily circulation activities. New staff may need some guidance at first, but after a short time they can use it without much difficulty."

The findings indicate that most respondents considered the ILMS easy or very easy to use when performing circulation tasks such as issuing books, returning books, renewing borrowed materials, and managing library user records. This suggests that the system is generally user-friendly and supports staff in carrying out their daily circulation activities effectively. However, the responses from those who found the system difficult or very difficult suggest that some staff may still experience challenges when using the ILMS. These challenges may be related to limited training, technical problems, or insufficient experience with the system. Therefore, providing continuous training and technical support

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could help improve staff confidence and enhance the effective use of ILMS in delivering quality circulation services at the Tanzania Library Service Board (TLSB).

Frequency of Technical Issues Disrupting ILMS Circulation Services

The study examined how often technical issues disrupt the use of the Integrated Library Management System (ILMS) in providing circulation services at the Tanzania Library Service Board (TLSB). Technical problems such as system failures, network interruptions, or software errors can affect the smooth operation of circulation services, including borrowing, returning, and renewing library materials.

Respondents were asked to indicate how often they experience technical issues while using ILMS. The response categories included daily, weekly, monthly, rarely, and never. Their responses help to determine the reliability of the system and the extent to which technical problems affect the provision of quality circulation services at TLSB.

Tables 4. 10. Distribution Frequency of Technical Issues Disrupting ILMS Circulation Services

(N=35)

Statement	Frequency	Percentage %
Daily	6	17
Monthly	10	28
Rarely	14	40
Never	3	9
Weekly	2	6
Total	35	100

The results show that the majority of respondents, 14 (40%), reported that technical issues rarely disrupt ILMS circulation services. This was followed by 10 (28%) respondents who indicated that technical issues occur monthly. In addition, 6 (17%) respondents reported experiencing technical issues daily, while 3 (9%) respondents stated that they never

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experience such issues. Only 2 (6%) respondents indicated that technical issues occur weekly.

The findings indicate that technical issues do not frequently affect ILMS circulation services for most respondents, as the largest proportion reported that such problems occur only rarely. However, the findings also show that some respondents experience technical issues on a daily or monthly basis, suggesting that system interruptions still exist in some situations. These technical problems may affect the efficiency of circulation activities, such as borrowing and returning library materials. Therefore, TLSB should continue to improve system maintenance, network stability, and technical support to minimize disruptions and ensure that ILMS provides reliable and efficient circulation services.

During interview one among of library say "Most of the time the system works well, but sometimes the network becomes slow or the system stops working for a short time. When this happens, borrowing and returning books takes longer than usual."

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CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter brings together the threads of the study on the assessment of the Integrated Library Management System (ILMS) in the provision of quality circulation services at the Tanzania Library Services Board (TLSB). Rather than simply restating what was found, the chapter interprets the findings against the study's objectives and the literature reviewed in Chapter Two, draws out what the results mean for TLSB and for the wider body of knowledge on library automation in resource-constrained settings, and translates these interpretations into concrete, actionable recommendations. The chapter closes by acknowledging the boundaries of what the study can claim and by pointing to the research that would logically extend it.

5.2 Summary of the Study

The study is motivated by a gap between expectation and experience: ILMS is introduced at TLSB, as elsewhere, on the premise that automation will make circulation faster, more accurate, and more transparent, yet the persistence of infrastructural constraints across many African public library systems raises the question of whether this premise holds in practice at TLSB. The general objective is to assess the role of ILMS in improving circulation services in TLSB libraries, pursued through three specific objectives: analyzing how ILMS contributes to the overall quality and satisfaction of library services for users, examining the extent to which ILMS improves circulation processes, and assessing the impact of ILMS on user access to library resources and information retrieval efficiency.

Methodologically, the study adopts a descriptive case study design combining a structured questionnaire with brief interviews, administered to library staff directly involved in circulation work at the TLSB National Central Library. Of 40 questionnaires distributed, 35 are returned and usable, a response rate of 87.5 percent that gives reasonable confidence in the representativeness of the responses analyzed. The demographic profile of respondents,

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predominantly female, concentrated in the 26-45-year age range, holding Diploma or Bachelor's level qualifications in Library and Information Studies, and possessing one to six years of experience with ILMS, indicates a respondent pool with sufficient professional grounding to speak credibly to the system's day-to-day performance rather than merely its theoretical design.

5.3 Summary and Interpretation of Key Findings

5.3.1 Objective One: Contribution of ILMS to Service Quality and User Satisfaction

The finding that 51 percent of respondent's experience borrowing and returning as having become slower, against 34 percent who experience it as faster, is, on its face, a troubling result for a system whose entire justification rests on efficiency gains. A more careful reading, however, suggests that this is not primarily a verdict on ILMS as a technology but on the conditions under which it operates at TLSB. The interview evidence is unambiguous on this point: respondents consistently frame the slowdown as conditional on network and system reliability rather than as an inherent property of the system itself. This distinction matters. It implies that the quality and satisfaction gap identified in this study is not evidence against automation in principle, but evidence that the preconditions for automation to deliver its promised benefits, namely stable connectivity and dependable hardware, are not yet reliably met. This interpretation is consistent with the regional literature reviewed in Chapter Two, which repeatedly identifies infrastructure, not system design, as the binding constraint on library automation outcomes in African contexts (Hider, 2018).

5.3.2 Objective Two: Extent to Which ILMS Improves Circulation Processes

The findings on this objective reveal a system that performs as intended at the level of discrete tasks, accurate borrower records, reliable overdue tracking, straightforward report generation, but whose aggregate contribution to circulation efficiency is diluted by the frequency of interruptions. This points to an important distinction between capability and consistency. ILMS demonstrably possesses the functional capability the literature associates with well-implemented systems (Snyder, 2019; Hart, 2018), but the consistency

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with which that capability translates into day-to-day service improvement is compromised. For TLSB, this reframes the practical question from “does the system work” to “how often does the system get the chance to work,” a distinction with direct implications for where remedial investment should be targeted.

5.3.3 Objective Three: Impact of ILMS on User Access and Information Retrieval

Respondents associate ILMS with genuine gains in catalogue searching and in the speed of identifying material availability relative to the manual systems it replaces. This finding is significant because it isolates a dimension of performance, discoverability of information, that is less exposed to transaction-level network interruptions than real-time check-out and check-in are. It suggests that the benefits of ILMS are not uniformly fragile: some functions of the system deliver value even under imperfect infrastructural conditions, while others, particularly those requiring sustained real-time connectivity, are more vulnerable. This differentiation is useful for TLSB because it indicates that the system's value is already partly realized and that targeted infrastructural investment, rather than wholesale reconsideration of the system, is the more proportionate response.

5.4 Conclusion

Read together, the three sets of findings converge on a single underlying story rather than three separate ones. ILMS at TLSB is not failing as a system; it is succeeding unevenly because the environment in which it operates is itself uneven. Where network and hardware conditions are favorable, the study's findings align closely with what the literature predicts: faster transactions, more accurate records, easier information retrieval, and higher user and staff satisfaction. Where those conditions are absent, the same system produces the opposite experience, not because its design is flawed, but because automation without reliable infrastructure simply digitizes the points of failure rather than removing them.

This distinction carries a conclusion of some theoretical interest beyond TLSB itself: it suggests that in resource-constrained public library settings, the marginal return on ILMS investment may depend less on the sophistication of the software itself and more on the

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reliability of the infrastructural layer beneath it. A system with modest functionality running on stable infrastructure may outperform, in lived staff and user experience, a more sophisticated system running on unstable infrastructure. For TLSB specifically, the practical conclusion is that the Board has already made the harder strategic decision, to automate, and now faces the comparatively more tractable problem of operationalizing that decision reliably. The study concludes, therefore, that TLSB's circulation services stand at a point where consolidation and reliability, rather than further system acquisition, are the priority.

5.5 Recommendations

The recommendations below are organized by the actor best placed to act on them, since the findings show that the constraints identified are not uniform in nature and do not all sit within the same locus of responsibility.

5.5.1 Recommendations to TLSB Management

Commission a network reliability audit across TLSB libraries using ILMS, to establish a factual baseline of downtime frequency and duration before committing to specific infrastructure investments, so that spending is targeted at the points of greatest failure rather than applied uniformly.

Negotiate a service level agreement with the internet service provider serving the National Central Library, with defined uptime guarantees and escalation procedures, since the current pattern of unplanned interruption is the single most cited driver of dissatisfaction in the findings.

Establish a standing technical support function, either a dedicated ICT help desk or a formal on-call arrangement with existing Systems/ICT Officers, with a defined maximum response time for circulation-affecting faults.

Budget for a phased hardware refresh cycle rather than ad hoc replacement, so that ageing terminals do not become a second point of failure once network reliability is addressed.

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5.5.2 Recommendations to Library Staff and Supervisors

Institutionalize periodic refresher training on ILMS functionality, particularly for less experienced staff, so that the system's full capability, evident in the findings on record accuracy and reporting, is consistently exploited rather than partially used.

Develop a simple manual fallback protocol for use during system downtime, so that circulation does not stop entirely when the network fails, and so that transactions recorded manually are reconciled into ILMS once service resumes

5.5.3 Recommendations to Policy Makers

Treat ICT infrastructure funding for public library automation as a distinct budget line from software or system procurement, given the study's finding that infrastructure, not system design, is the binding constraint on service quality at TLSB.

Consider a national framework for minimum connectivity standards in public libraries undertaking automation, informed by the kind of baseline audit recommended above, so that automation investment across the sector yields consistent returns.

5.5.4 Recommendations for Future Research

Extend this study to capture the perspectives of library users directly, since the present study relies on staff as informants and cannot independently verify how users themselves experience the trade-offs identified.

Undertake a comparative study across multiple TLSB regional libraries with varying levels of network infrastructure, which would allow the infrastructure-performance relationship proposed in this chapter to be tested directly rather than inferred from a single-site study.

Investigate the cost-effectiveness of infrastructure investment relative to system upgrade at TLSB, to give the Board an evidence base for the resource-allocation choice this chapter's conclusion implies.

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5.6 Limitations of the Study

The conclusions above should be read with two limitations in mind. First, the study draws on the perceptions of library staff rather than on independently logged system performance data such as transaction timestamps or network uptime records; the finding that slowdowns are network-related is therefore an inference well supported by respondent testimony but not independently verified against technical logs. Second, the study is confined to a single site, the TLSB National Central Library, and the extent to which its findings generalize to TLSB's regional libraries, which may face different infrastructural conditions, cannot be established from this data alone.

5.7 Concluding Remark

The central contribution of this study is not that ILMS works or does not work at TLSB, but that its performance is legible only once infrastructure is treated as part of the system rather than as background to it. This reframing is the study's main practical offering to TLSB: the path to realizing the quality of service that ILMS was adopted to deliver runs primarily through the reliability of the network and hardware that support it, not through further changes to the system itself.

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APPENDIX I

QUESTIONNAIRE FOR LIBRARY STAFF

Dear Respondent,

Kindly be informed that ZAINABU H RASHIDI a student at school of library archive and documentation studies (SLADS) is conducting a research with a title ASSESSMENT OF INTEGRATED LIBRARY MANAGEMENT SYSTEM IN PROVISION ON QUALITY CIRCULATION SERVICES. Please assist me to answer the questions below in order to complete this research study. Be assured that the information that you will be provided is for academic use only and its confidentiality will be maintained.

Please you are kindly requested to answers and fill these questionnaires or insert or put tick(✔) to the right answers.

1.what is your Gender:

☐ Male

☐ Female

☐ Prefer not to say

2.what is your Age:

☐ 18–25 years

☐ 26–35 years

☐ 36–45 years

☐ 46–55 years

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☐ 56 years and above

3. What is your level of education attained:

☐ Certificate in Library and Information Studies

☐ Diploma in Library and Information Studies

☐ Bachelor's Degree in Library and Information Studies

☐ Postgraduate Diploma or Master's Degree

☐ Other (specify): _____

4. What your Current position / role at TLSB:

☐ Library Assistant

☐ Assistant Librarian

☐ Librarian

☐ Senior Librarian / Supervisor

☐ Systems / ICT Officer

☐ Other (specify): _____

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5. Years of working experience at TLSB:

☐ Less than 1 year

☐ 1–3 years

☐ 4–6 years

☐ 7–10 years

☐ More than 10 years

6. How long have you been using the ILMS?

☐ Less than 1 year

☐ 1–3 years

☐ 4–6 years

☐ More than 6 years

SECTION B

7 How has ILMS affected the speed of borrowing/returning books compared to manual systems?

☐ a) Much slower

☐ b) Slightly slower

☐ c) No change

☐ d) Slightly faster

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☐ e) Much faster

8 How easy is it for you to use the ILMS for circulation tasks (check-in/out, renewals)?

☐ a) Very difficult

☐ b) Difficult

☐ c) Neutral

☐ d) Easy

☐ e) Very easy

9. How often do technical issues disrupt ILMS circulation services?

☐ a) Daily

☐ b) Weekly

☐ c) Monthly

☐ d) Rarely

☐ e) Never

10 Please share any comments or suggestions how to improving service quality in circulation system in Integrated library management systems

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APPENDIX II

INTERVIEW GUIDE FOR LIBRARY ASSISTANT AND ICT PARNNEL

Dear Respondent,

Kindly be informed that ZAINABU H RASHIDI a student at school of library archive and documentation studies (SLADS) is conducting a research with a title ASSESSMENT on INTEGRATED LIBRARY MANAGEMENT SYSTEM IN PROVISION ON QUALITY CIRCULATION SERVICES. Please assist me to answer the questions below in order to complete this research study. Be assured that the information that you will be provided is for academic use only and it's confidentiality will be maintained.

Please answer the following questions;

i. How has the ILMS changed the daily circulation processes (e.g., check-in/out, renewals) compared to manual methods?
ii. What specific features of the ILMS (e.g., barcode scanning, OPAC) most improve service quality for users?
iii. To what extent has ILMS reduced errors, delays, or loss of materials in circulation?
iv. What technical challenges hinder effective ILMS use in circulation?
v. How does ILMS affect user satisfaction can you share examples from patron feedback?

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APPENDIX III

RESEARCH BUDGET

N/s	Particulars	Items	Amount per item T-shs
1	Stationary cost	Ream paper 1@ 1000 2 packets Staples @ 1000 1 flash disk @ 15000 Printing Photocopy Binding 5 pens@ 200	1,000 2,000 15,000 10,000 5,000 15,000 1,000
2	Internet	-	10,000
3	Transport	-	30,000
4	Researcher's cost		50,000
		Total	139,000/=

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APPENDIX IV

TIME SCHEDULE

Research work plan schedule/ Time frame

ACTIVITIES	February 2026	March 2026	April & may	June 2026	July& August
Writing of proposal					
Submission of proposal					
Preparation of research questions					
Preparation of research questions					
To reach the study area and collect data					
Report writing					
Submission of the report					

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APROVAL LETTER

THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
TANZANIA LIBRARY SERVICES BOARD

When you reply please note:

Ref. No: EA.23/420/01/144 **14th April, 2026**

The Academic Officer,
School of Library, Archives and Documentation Studies,
P.O. Box 227,
BAGAMOYO.

Ref: RESEARCH CLEARANCE/COLLECTING DATA TO YOUR STUDENT ZAINABU H. RASHIDI

Reference is made to your letter dated on 9th March, 2026 regarding the above subject.

2. I would like to inform you that **permission has been granted** for your student named above to conduct Research work/Collecting data with the title **"Assessment of Integrated Library Management System in Provision of Qualities in Circulation Services"** at the National Central Library – Dar es Salaam from **12th April, 2026 to 17th April, 2026** as requested.

3. During the Research, the student will need to observe all rules and regulation for Public Services.

4. Thank you for your cooperation.

TANZANIA LIBRARY SERVICES BOARD
P.O.BOX 9283
DAR - ES - SALAAM

V. B. Mpaze
For: **DIRECTOR GENERAL**

27 Bibi Titi Mohamed Street, P.O.BOX 9283 Dar es Salaam, Tanzania. Tel: +255 22 2150048/9
Fax: +255 22 21511000. E-Mail: info@tlsb.go.tz. Web site: www.tlsb.go.tz

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