Lentera Pustaka: Jurnal Kajian Ilmu Perpustakaan, Informasi dan Kearsipan
Vol. 12, No. 1, June 2026
http://ejournal.undip.ac.id/index.php/lpustaka

Research Article
Received: 2 September 2025, Revised: 13 October 2025, Accepted: 18 June 2026, Online: 30 June 2026

The Role and Optimization Strategies of MIS in Improving the Quality of University Library Management

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Abstract
Background: Despite the growing emphasis on digital transformation in higher education, many university libraries in Indonesia still rely on manual and fragmented management systems. This gap hinders the development of data-driven planning and evaluation, resulting in service inefficiencies and poorly aligned decision-making. Previous studies have focused mainly on digital collection development and service theory, with limited attention to the strategic integration of Management Information Systems (MIS) for continuous quality improvement. Moreover, empirical research examining how MIS supports library performance and user-centered innovation in real institutional settings remains scarce. This study addresses that gap by exploring MIS implementation as a foundation for evidence-based library management.
Objective: This study aims to analyze the role of the Management Information System (MIS) in supporting planning and evaluation processes in library management. It also seeks to identify practical and effective strategies to improve service quality through data-driven MIS optimization in higher education libraries.
Methods: Using a qualitative method with a case study approach, the research was conducted over a three-month period. Data focused on MIS functions and strategic implementation, collected from the head librarian, library staff, system administrators, and users (students and lecturers) through in-depth interviews, observation, and documentation. Data validity was ensured through triangulation and member checks, and analysis followed Miles and Huberman's interactive model.
Results: Findings show that MIS enhances planning accuracy, automates reporting, and provides real-time access to user data, enabling better performance evaluation and decision-making. Strategies such as staff training, data-based standard operating procedures (SOPs), digital service transformation, and analytical dashboards contributed to improved responsiveness and accountability in library services.
Conclusion: The study concludes that MIS plays a strategic role in transforming library management into a more adaptive, efficient, and data-driven system. When effectively implemented, MIS strengthens institutional decision-making, aligns services with user needs, and establishes a culture of continuous quality improvement in university libraries.

Keywords: *Library management; management information system; data-based evaluation; strategic planning; qualitative case study*

INTRODUCTION

The ideal concept of library management in higher education emphasizes the integration of information services, digital technology, and quality-based management to optimally support the implementation of the three pillars of higher education (tri dharma). Libraries are no longer positioned as mere collection storage spaces, but rather as collaborative,

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doi: http://doi.org/10.14710/lenpust.v12i1.77522

adaptive, and data-driven learning centers. Sweeney (2008) stated that an ideal university library is a ― learning commons‖ that is flexible and digitally connected to the academic ecosystem.

Furthermore, Rowley and Hartley (2017) emphasized that strategic management and the use of adaptive information systems are key to managing access and ensuring the quality of information services.

Currently, the development of automation and digitalization in Indonesian libraries remains relatively slow and uneven. According to Purwandi and Irwansyah (2020), most libraries have not yet implemented automation systems comprehensively, with digitalization often limited to online public access catalogs (OPAC). A bibliometric study by Diaz Ilyasa et al. (2024) also indicates that although research on digital libraries has increased since the COVID-19 pandemic, implementation efforts still focus primarily on service theory and collection development, rather than on user-oriented digital system applications. Similarly, Ansar and colleagues (2024) found ongoing weaknesses in resource management and the dissemination of practical innovations in national-level digital libraries.

The quality of library management is often hindered by weak planning and evaluation processes that are not data-driven, resulting in strategic decisions that do not reflect the real needs of users. Many libraries, especially at school and university levels, still rely on manual and subjective reporting without integrated information systems. This leads to poor service effectiveness, a lack of accountability, and slow responses to shifting digital literacy needs. In fact, Management Information Systems (MIS) are available and capable of recording transaction data, user preferences, and service performance in real time. This issue underscores the urgent need for digital transformation to establish a quality management culture grounded in data, forming the foundation of an adaptive and professional library.

Data-driven planning and evaluation strategies through MIS in library management remain underexplored, with few studies systematically integrating data analytics and information systems in the context of quality improvement (Sukula et al., 2023; Holý, 2019). Recent research confirms that applying big data analytics can improve operational efficiency and patron service quality (Blummer & Kenton, 2018; Buchanek, 2023). Evaluation methods such as the Analytical Hierarchy Process (AHP) and fuzzy comprehensive evaluation offer new directions for measuring service performance (Zhang et al., 2023). However, organizational readiness for data-based decision-making remains a crucial challenge (Li et al., 2024).

Amid the demands of digital transformation, libraries are expected to function not only as information providers but also as institutions capable of managing services efficiently, accountably, and adaptively. MIS plays a vital role in supplying real-time data to support evidence-based decision-making, yet its implementation across many institutions remains limited and unsystematic. Therefore, this study explores the integration of MIS in the planning and evaluation of library management. The objectives of this study are: First, to analyze the role of MIS in supporting planning and evaluation processes in library management. Second,

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E-ISSN: 2540-9638, ISSN: 2302-4666.
doi: http://doi.org/10.14710/lenpust.v12i1.77522

to synthesize strategies for improving quality-based library management through MIS optimization.

This study is expected to provide a strategic overview of the role of Management Information Systems (MIS) in strengthening data-based planning and evaluation in library management. The key findings will identify core MIS elements that contribute to service quality improvement, such as collection management efficiency, reporting accuracy, and real-time performance monitoring. The study will also formulate effective and adaptive MIS implementation strategies tailored to the needs of libraries, particularly in school and university environments. The resulting strategic model will take into account technological readiness, human resource competencies, and institutional policy support. It is hoped that the outcomes of this research will serve as both a practical and conceptual reference in the development of library management based on information systems.

LITERATURE REVIEW

Previous studies have shown that the application of big data analytics and advanced Management Information Systems (MIS) in academic libraries significantly enhances service quality and operational efficiency (Awan et al., 2021). Research on next-generation library systems indicates that technologies such as collaborative filtering and data mining enable personalized collection recommendations and detailed user behavior analysis (Zhang et al., 2023; Zhao et al., 2022). Other studies highlight that successful data-driven management transformation requires simultaneous readiness of both systems and human resources to optimize performance evaluation and strategic planning (Data-Driven Decision-Making Toolkit, 2023). Therefore, higher education library management must integrate data-driven MIS as the foundation of modern quality management.

The use of data-driven MIS can significantly improve quality management practices across various organizations, including libraries (Awan et al., 2021). The integration of big data analytics and predictive analytics within MIS enables trend detection, service performance evaluation, and automated reporting that supports strategic decision-making (Chan & Uncles, 2021). Furthermore, organizational readiness theory emphasizes that successful implementation of data-driven MIS depends heavily on technological infrastructure, data quality, and the digital literacy of human resources (Awan et al., 2021; Chan & Uncles, 2021). These studies reinforce the argument that data-based MIS is not merely a technical tool, but a foundational element of adaptive and accountable modern library management.

METHODS

This study employed a qualitative research design using a case study approach, focusing on the utilization of Management Information Systems (MIS) to improve the quality of library management. This approach was chosen for its ability to explore in depth the dynamics of data-driven planning and evaluation within the context of higher education libraries. The case study design allowed the researcher to examine how MIS is implemented, including service documentation, reporting processes, and decision-making practices. It

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enabled a comprehensive investigation into data-based management practices, human resource involvement, and their impact on service effectiveness. This method also facilitated the identification of quality improvement strategies rooted in information systems, both holistically and contextually.

The research was conducted over a three-month period, from May to July 2025, at the National Islamic Institute of Religion (IAIN) Laaroiba, Bogor. This site was selected due to its institutional readiness to implement MIS and its strong commitment to data-driven service quality improvement. During the research period, the researcher engaged in direct field observation to record all managerial activities involving MIS in planning and evaluation processes. Field conditions revealed dynamic interactions between information technology and the working culture of librarians.

The data collected in this study consisted of: first, data related to the role of MIS in supporting library planning and evaluation processes, including service effectiveness, ease of access, reporting accuracy, and user involvement in evaluation; and second, data concerning strategies to enhance library management quality through MIS optimization, such as staff capacity building, data-based service standardization, digital access, and the use of analytical dashboards. The data sources included key informants—head librarians, library staff, system administrators, and active users (students and lecturers)—selected through purposive sampling.

TABLE 1
Types of Data and Data Sources

No.	Type of Data	Key Indicators	Data Sources
1	The role of MIS in library management planning and evaluation	Service effectiveness, ease of access, automated reporting, user survey-based evaluation via MIS	Head librarian, librarians, students, lecturers
2	Strategies to improve library management quality through MIS optimization	HR capacity building, data-based SOPs, service digitalization, analytical dashboards, collection planning	Head librarian, librarians, MIS administrators, students

The primary data collection technique used in this study was in-depth interviews, aimed at capturing detailed insights into the experiences, perspectives, and practices of informants regarding the implementation of the Management Information System (MIS) in library management. Semi-structured interviews were conducted to allow flexibility while remaining aligned with the research indicators. Supporting techniques included participant observation and documentation to validate interview data, such as observing MIS-based service activities, dashboard usage, and reviewing library reports and SOP documents. The researcher served as the key instrument throughout the data collection process, assisted by tools such as audio recorders, cameras for visual documentation, and notebooks for systematic field notes.

To ensure data validity, the study employed triangulation of both sources and methods, aiming to confirm the consistency and credibility of findings. Triangulation involved comparing interview results from multiple informants—head librarians, library staff, MIS administrators, students, and faculty—with direct observations and supporting documents, including MIS reports, meeting minutes, and service SOPs. Data credibility was further reinforced by the researcher's intensive field engagement over three months, allowing for deep

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contextual understanding. Member checking was also conducted by confirming interview interpretations with the informants to prevent bias. These procedures ensured that the findings were valid, trustworthy, and scientifically accountable.

Data analysis followed Miles and Huberman's interactive model, consisting of three main stages: data reduction, data display, and conclusion drawing/verification. During data reduction, interview, observation, and document data were categorized into key themes aligned with the study's focus, such as the role of MIS and quality improvement strategies. Data were displayed using matrices and tables to identify patterns, relationships among categories, and actor dynamics. Conclusions were drawn gradually and continuously verified with field data to maintain interpretive validity. This cyclical process allowed for a deep, reflective understanding of the studied phenomenon

FINDINGS

The Role of MIS in Library Planning and Evaluation

Based on field observations, the researcher found that the Management Information System (MIS) was actively used to record all library service activities, from circulation to visitor statistics. The dashboard displayed to the researcher showed structured, real-time data on borrowing trends and collection preferences. Monthly reports were automatically generated by the system and used as reference in internal coordination meetings. These findings confirmed the library head's statement that MIS enhances service effectiveness and expedites decision-making processes.

> "*MIS significantly improves service effectiveness, as all administrative and circulation activities are now digitally and instantly recorded. We can immediately view visitor data, popular collections, and borrowing statistics. This makes our decision-making process more efficient and accurate*".

Student interviews revealed that MIS significantly improved ease of access. They could check the availability of materials and renew their borrowings without visiting the library physically. This experience affirmed that digitizing services through MIS brought a level of convenience and efficiency not present in the manual system.

> *—Library services have become far more practical and faster. I can check for books from home and even renew loans online. This system makes everything easier—especially compared to the old manual process*‖

Librarians routinely accessed MIS statistical reports to monitor frequently used collections. Search histories and borrowing transactions were neatly recorded and used during meetings to propose new book acquisitions. This confirms that collection development and programming were fully data-driven.

> *—We use data from MIS to propose more relevant titles—those most frequently sought by students. The system stores user needs history, which is very helpful when planning services. So, we're not just guessing; it's all based on concrete data*‖.

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Observations and documentation showed that the library regularly conducted online surveys on user needs and satisfaction through platforms integrated with MIS. The results, presented in digital graphs and reports, indicated that user feedback was embedded into service evaluation.

> *—I've noticed the library now updates services and conducts surveys more often. Maybe it's because MIS provides the data for evaluations. As a user, I feel more appreciated since our input is actually recorded in the system‖.*

The researcher also observed that MIS automatically generated regular statistical reports, including borrowing data, visit frequency, and staff activity. These were used during internal evaluation forums, indicating that performance assessments were now grounded in concrete data.

> *—MIS generates reports that are very helpful for regular evaluations. We can measure user activity, collection performance, and staff contributions using system logs. Evaluation is no longer just opinion—it's based on objective data‖.*

Regular coordination meetings were held to review MIS reports, with documentation showing data on service usage and strategic decisions, such as schedule adjustments and literacy classes. These findings affirmed that MIS data served as an objective foundation for service- related decisions.

> *—We're involved in monthly meetings where MIS data is discussed. That's where decisions like changing service hours, launching literacy classes, or extending open hours come from. The data makes discussions more objective and measurable‖.*

In conclusion, MIS played a vital role in enhancing library planning, evaluation, and service effectiveness. It not only streamlined services and user access but also became a primary tool for objective and measurable decision-making. These findings demonstrate that integrating data-based MIS strengthens governance and guides libraries toward responsive and adaptive quality management.

Strategies for Improving Library Quality through MIS

Strategies to improve library management quality were implemented through a comprehensive and continuous approach. The core focus included strengthening human resource capacity, updating collections based on user needs, and transforming services into digital formats. In addition, partnerships with external information providers helped expand access and strengthen library functions. The researcher also noted that routine internal evaluations served as quality control mechanisms to ensure consistent service improvement over time.

> *—Our strategy includes enhancing staff competencies, updating collections based on user needs, and digitizing services. We also collaborate with external institutions to gain open access resources. Consistent internal evaluations help our services improve year by year‖.*

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Field observations revealed that the library redesigned service workflows to be more user- friendly, such as providing digital service guides and implementing an online queuing system. In the librarians' workspace, the researcher found SOP documents developed from MIS statistics, reflecting efforts toward data-driven standardization. There was also evidence of routine evaluations, including meeting notes and user feedback forms used to improve services.

> *—One of the most effective strategies is making services more accessible and user-friendly. We proposed SOPs based on MIS statistics to ensure standardized services. Regular evaluations help refine every operational aspect*‖.

Observations and documentation also showed that librarians used MIS data to develop annual work programs, including information literacy and user training. The planning documents included collection usage graphs and visitation trends, guiding service priorities. These practices demonstrated data-driven decision-making, moving away from assumptions.

> *—With data-driven management, we no longer rely on assumptions—we base everything on clear statistics. We use MIS to design literacy programs, user training, and collection proposals. This has built greater trust in library management*‖.

The MIS in use was equipped with interactive dashboards showing borrowing rates, visitor data, and collection statistics in an accessible visual format. The system could be accessed by both leadership and technical staff, enabling fast, evidence-based decision-making. The researcher noted that regular system updates improved data accuracy and usability.

> *—We continuously upgrade the system to deliver insights management can access quickly. With visual dashboards and analytics, data becomes meaningful and actionable. It's very helpful for both the library head and technical staff*‖.

Observations showed that students could access various services online through MIS, including searching for materials, borrowing, and renewing books. System screenshots and user guides supported findings that services were real-time, user-friendly, and compatible with distance learning needs.

> *—For us, an optimal MIS is easy to use and always up-to-date. If the information is accurate and access is smooth, it really helps with research and study. The impact is clear—we can access everything without going to the library*‖.

The MIS also included automated reporting and visual analytics features accessible to all staff through personal accounts. The researcher noted that the data was not merely archived but actively used during evaluation and planning meetings.

> *—We designed the system to produce automated reports accessible to all team members. Our analytics are interactive so the library head can immediately use them for evaluation and planning. Data has become a guiding tool, not just an archive*‖.

Further observations revealed that the library actively monitored journal access and borrowing data via MIS to determine collection needs. Documented usage reports were used

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as the basis for new acquisitions, confirming that user needs were addressed using data.

> *—As a user, I feel our needs are better considered now. For instance, when many users access a particular journal, the library increases its availability. I believe these decisions are data-driven, not just based on verbal requests*‖.

Based on interviews, observations, and documentation, it can be concluded that MIS has become a key element in improving overall library management quality. MIS not only simplifies service processes and user access but also fosters faster, more objective, and databased decision-making. These findings show that MIS optimization contributes directly to strategic planning, ongoing evaluation, and the development of adaptive service systems that respond effectively to user needs.

TABLE 1
Research Findings

No.	Research Focus	Findings
1	**The Role of MIS in Library Planning and Evaluation**	
1.1	Service effectiveness through MIS	MIS records service activities in real-time and generates automated reports that accelerate decision-making.
1.2	Easy access to services for users	Students can check availability and renew borrowings online without physically visiting the library.
1.3	Data-based collection and program planning	Librarians use MIS to monitor user preferences and design service programs based on statistical data.
1.4	Service evaluation through user surveys	Information needs and satisfaction surveys are conducted via MIS and serve as a basis for regular service evaluation.
1.5	Data-based performance evaluation	MIS reports include borrowing data, staff activity, and visit frequency as key metrics for performance review.
1.6	Collaborative decision-making based on MIS reports	MIS reports serve as discussion material in coordination meetings, leading to strategic decisions regarding library services.
2	**Strategies for Improving Library Quality via MIS**	
2.1	HR strengthening and internal evaluation	Strategies include staff training, service digitalization, and regular data-based evaluations for quality control.
2.2	Service standardization via data-based SOPs	SOPs are designed using MIS statistics and are used to improve workflow and service quality in a measurable way.
2.3	Literacy and user training program planning	Librarians use MIS data analysis to plan literacy and training programs that address student information needs.
2.4	Analytical dashboards for rapid decision-making	MIS includes interactive visual dashboards used by managers and technical staff for evaluation and planning.
2.5	Flexible online services through MIS	Users benefit from digital services that are efficient, easily accessible, and support research and distance learning.
2.6	Collection development based on journal access data	Usage statistics from MIS are used to guide new acquisitions that align with users' actual and measurable needs.

DISCUSSION

The Management Information System (MIS) now plays a crucial role in accelerating and improving library services. Field findings show that MIS allows all administrative and circulation activities to be recorded in real time, enabling management to directly access data on borrowings, visitor numbers, and frequently used collections. Decision-making becomes

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faster and evidence-based, without relying on delayed manual reports. This convenience marks a starting point for libraries to reform in a systematic and focused manner.

In addition to supporting internal management, MIS also brings tangible benefits to users, especially students. They no longer need to physically visit the library just to check book availability or extend borrowings—everything can be done remotely through the online system (Smita et al., 2023). Fast, flexible, and user-friendly access to services has been proven to improve user satisfaction and engagement. This supports previous research showing a significant correlation between the quality of digital library services and student satisfaction, with 52% of satisfaction linked to service quality (Siregar & Syam, 2024). Thus, MIS benefits not only the staff but also greatly enhances user convenience.

From the planning perspective, librarians now have a strong foundation to design work programs and collection development based on real user needs. Borrowing data, search frequency, and the most accessed types of collections provide accurate insight into information usage patterns. This allows librarians to move away from assumptions or past habits and make decisions based on concrete evidence. This data-driven approach makes collection acquisition policies more relevant, efficient, and well-targeted (Putri, 2022). Therefore, MIS serves as a strategic tool to guide the responsive and adaptive development of library services.

Library service evaluation has become more structured thanks to the integration of MIS in collecting and processing user feedback. Through integrated online survey features, the library regularly gathers input from students and faculty, presenting it in visual reports that are easy for management to understand. These survey results are used for reflection and decision-making in designing service improvements. With a system that systematically records feedback, communication between users and administrators becomes more open, transparent, and data-based (Ramadhani & Wulandari, 2021). This enhances the accountability of library service management in the digital era.

Beyond user-side evaluations, MIS's automatic reporting function also strengthens the internal performance appraisal system. Data such as daily transactions, librarian activity logs, and user visit frequency are recorded in detail and accessible in real time by management. This information serves as quantitative indicators for routine evaluations, such as monthly meetings or annual reviews. Library leaders no longer rely on subjective manual reports but use objective and measurable data. Consequently, management policy directions become more focused, transparent, and accountable (Nugroho & Cahyani, 2020).

One noteworthy aspect of MIS optimization is how the data is used regularly in shared decision-making forums. During monthly meetings, data from the MIS dashboard becomes the primary resource for librarians and management in forming strategic policies, such as adjusting service hours, expanding collections, or launching information literacy programs. Staff participation has increased due to their involvement in data-based decisions, rather than those based solely on personal opinions. This nurtures a reflective organizational culture and encourages continuous learning. When data is collectively referenced, decisions become fairer, more transparent, and justifiable (Hernawan & Yuliani, 2021).

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When viewed holistically, the integration of MIS has catalyzed a cultural shift in library operations—from administrative, reactive routines to a systematic, data-centered management approach. Planning, evaluation, and reporting no longer occur in an ad hoc manner but follow organized, measurable processes grounded in real-time analytics. This transformation aligns with modern quality management principles that emphasize efficiency, accountability, and adaptability in public service, including academic libraries. Recent international literature supports this trend: university libraries worldwide increasingly adopt data analytics to promote evidence-based governance and improve service delivery (Sukula et al., 2023; Transforming Higher Education Libraries with Data Analytics, 2025). As a result, MIS becomes an essential foundation for advancing library excellence in the digital age.

These findings reveal that MIS is not merely a technical tool but an integral part of a sustainable and strategic management system. Its impact is felt across all levels—library leaders can develop data-based policies, staff can work with clearer direction, and users enjoy responsive and efficient services. Libraries that integrate MIS effectively demonstrate how technology, when properly designed, bridges user needs with policy decisions. International studies affirm this trend, showing that data-driven systems in academic libraries significantly enhance accountability and service quality (Sukula et al., 2023).

Strategies for improving library management quality through MIS begin with strengthening human resources (HR) as the primary foundation for system effectiveness. The head librarian emphasizes the importance of technical training so staff can not only input data but also read, analyze, and strategically use information. When librarians and system administrators possess sufficient digital literacy, decision-making becomes faster, more accurate, and data-driven. As noted by Agustina and Hartono (2023), librarian competence in operating MIS significantly affects service quality and management accountability. Thus, HR development is a critical step in optimizing data-driven MIS.

Library service SOPs are now designed based on usage data recorded by MIS, including visit frequency and borrowing patterns. Internal documents show that librarians develop standard procedures that align service flows with current user trends, rather than following outdated habits. As a result, services become more efficient, consistent, and easier to evaluate regularly. This process not only improves service quality but also strengthens operational legitimacy through a data-driven approach. Clear, standardized SOP strategies make library management more systematic and sustainably quality-oriented (Sari & Rohmat, 2023).

Libraries actively use MIS data to design relevant information literacy and user training programs. Based on analysis of collection usage—borrowing data and search patterns—librarians identify popular and underutilized information categories. This proactive approach ensures that literacy programs and training address the actual needs of students and faculty. Quality improvement now stems not only from internal management but also from meaningful interaction with the user community. MIS enables libraries to become adaptive institutions that not only provide information but also support learning more effectively (Hutami & Putra, 2022).

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MIS optimization also involves developing interactive analytical dashboards that are easy to understand, speeding up evaluation and strategic decision-making. The system is designed to be accessible to the entire management team, including non-technical staff, by presenting data in clear, real-time visual graphics. These dashboards allow immediate data interpretation during coordination forums, positioning MIS as a responsive, evidence-based managerial tool. Smita et al. (2023) argue that MIS visual analytics enhance service analysis efficiency and strengthen management accountability. Therefore, dashboard development is a key strategy in the digital transformation of libraries.

The library also implements comprehensive digital service strategies, allowing users to access all features regardless of time or location. Self-service options such as borrowing, renewals, and collection searches are among the most appreciated MIS-based services by students. By involving users in the system, libraries expand service quality beyond internal metrics. This strategy shows that quality is not just about administration, but also user comfort, speed, and service relevance. Well-planned digitalization is key to realizing an inclusive and adaptive library.

When the MIS records a significant increase in journal searches or downloads, librarians promptly respond by proposing additional purchases or renewing subscriptions. This strategy ensures library collections accurately align with evolving user needs, rather than relying solely on assumptions or annual budgets. Findings by Salmi Addin et al. (2024) show that adaptive digital collection development in response to user behavior enhances service efficiency and user satisfaction. Access data is no longer just administrative but has become a strategic tool for making more precise and contextual collection development decisions.

Another essential strategy in library management reinforcement is establishing internal evaluation systems based on automated MIS reports. Real-time reports are used in coordination meetings as primary materials for formulating regular service improvements. When data becomes the main reference, each unit is encouraged to work in a measurable, accountable manner and remain open to evidence-based critiques. Wahyuni (2020) emphasizes that performance evaluation using the PIECES approach improves operational efficiency and strengthens the accountability of information services. MIS-based internal evaluation is not merely an administrative function but a strategic foundation for maintaining relevant and sustainable service quality.

The strategies developed by the library are interconnected, forming a dynamic, data-based management ecosystem that responds effectively to change. MIS optimization has evolved from a mere technical tool into a strategic framework encompassing service planning, execution, and evaluation. When technology, human resources, and data are harmonized, libraries can respond to contemporary challenges more adaptively and sustainably. National journals support these findings, reporting that institutions implementing integrated MIS show improved efficiency, accountability, and service quality (Agustina & Hartono, 2023). Evidently, data-driven approaches are no longer just trends but essential for modern libraries.

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CONCLUSIONS

Based on the findings and discussion, the following conclusions can be drawn: First, the Management Information System (MIS) plays a vital role in supporting the planning and evaluation of library management in a more efficient, objective, and data-driven manner. MIS facilitates decision-making, program development, and performance evaluation, transforming previously manual reporting into a structured and measurable process. Second, strategies for improving library management quality through MIS optimization include strengthening human resource competencies, standardizing data-based services, digitizing user access, and utilizing analytical dashboards. This overall process fosters a new work culture that is collaborative, reflective, and responsive to user needs. Therefore, MIS proves to be a crucial foundation for building a high-quality and adaptive library in the digital era.

AUTHOR CONTRIBUTIONS

[Nurul Hamidah]: Conceptualization, methodology, writing the original draft, review and editing.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

FUNDING

This research received no specific grant from any funding agency.

ACKNOWLEDGMENTS

The author would like to express sincere gratitude to all parties who supported the completion of this research. Special appreciation is extended to the head librarian, library staff, system administrators, and student users who willingly participated and provided valuable insights during the data collection process. Appreciation is also due to the institutional leaders who granted access and facilitated research activities. The constructive feedback from colleagues and academic supervisors greatly enriched the quality of analysis and presentation. Lastly, heartfelt thanks are given to family and peers for their continuous encouragement throughout the research journey.

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