International Journal of Science, Strategic Management and Technology
Volume **02** Issue **11** November-2026 | ISSN: **3108-1762 (Online)** | Impact Factor: 3.8
An International, Peer-Reviewed, Open Access Scholarly Journal Indexed in recognized academic databases

Applying the Balanced Scorecard Framework for Strategic Performance Management in Nigerian University Libraries

Felix A. Adewusi (PhD), CLN
Adekunle Ajasin University, Akungba Akoko, Ondo State, Nigeria
https://orcid.org/0000-0003-2402-1204
akinola.adewusi@aaua.ed.ng
femtojohng@gmail.com

https://doi.org/10.55041/ijsmt.v2i11.007

Cite this Article: Adewusi, F. A. (2026). Applying the Balanced Scorecard Framework for Strategic Performance Management in Nigerian University Libraries. International Journal of Science, Strategic Management and Technology, *02*(11), 1-9. https://doi.org/10.55041/ijsmt.v2i11.007

License: This article is published under the Creative Commons Attribution 4.0 International License (CC BY 4.0), permitting use, distribution, and reproduction in any medium, provided the original author(s) and source are properly credited.

Abstract

University libraries play an important role in supporting teaching, leaZrning, and research in Nigerian university education. However, many continue to face challenges related to inadequate funding, technological limitations, changing user expectations, and weak performance measurement systems. Conventional approaches often emphasize inputs and outputs without adequately demonstrating the library's broader contribution to university goals. Although the Balanced Scorecard (BSC), developed by Kaplan and Norton, offers a multidimensional approach to strategic performance management, its application in Nigerian university libraries remains limited and insufficiently explored. This theoretical study examines the applicability of the BSC as a strategic performance management framework for Nigerian university libraries. Using a conceptual and analytical approach informed by relevant empirical literature, the study considers how the four BSC perspectives—financial, customer, internal business processes, and learning and growth—can be adapted to the university library context. It also identifies potential key performance indicators and considers challenges and strategies associated with implementation. The analysis indicates that an appropriately adapted BSC can help Nigerian university libraries align their activities with institutional priorities, strengthen accountability, improve service delivery, support evidence-based decision-making, and encourage continuous improvement and innovation. The study concludes that the BSC provides a useful framework for strengthening strategic performance management in Nigerian university libraries and recommends greater institutional support, staff capacity development, and further empirical research to guide its implementation.

Keywords: Balanced Scorecard, strategic performance management, university libraries, Nigerian libraries, institutional goals.

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

Introduction

University libraries are central to the academic enterprise, providing information resources, student and faculty research support, and essential learning tools and environments that facilitate knowledge creation and dissemination. Today, their effectiveness directly shapes the overall quality of teaching, improves academic research outcomes, and drives success in modern knowledge economies within universities (Osisanwo et al., 2025; Corrall, 2021). However, Abdullahi and Darma (2026) argued that rapid technological changes, increased competition for institutional funding and growing expectations for digital services have compelled libraries to adopt more strategic approaches to management and performance evaluation.

Libraries used to judge their success just by counting books, loans, and members. Eromosele and Kayode (2026) stressed that old methods of counting books and loans no longer show a library's true value, making modern performance systems essential. The numbers are not enough; libraries must show their real impact on research, happiness, digital tools, and new services (Ebiwolate, 2025). To do this, many now use the balanced scorecard, a tool created for businesses in 1992 by Kaplan and Norton that has grown popular in non-profits and libraries worldwide. Therefore, this study attempts to show that the Balanced Scorecard helps university libraries in Nigeria match their daily work with school goals, boost accountability, improve services, and spark new ideas. Using this tool according to Yusuf et al. (2022) can greatly upgrade how these libraries plan and track their work. Practical tips are also shared for library leaders, policy makers, and researchers to make it work well.

In Nigeria, university libraries face low budgets, poor infrastructure, and high digital demands, requiring strategic tools like the Balanced Scorecard (BSC) to boost efficiency and service. Developed by Kaplan and Norton in the early 1990s, the Balanced Scorecard integrates financial and non-financial measures into a comprehensive framework that aligns organizational activities with strategic goals. The framework evaluates performance across four key perspectives: financial, customer, internal business processes, and learning and growth. By balancing these perspectives, organizations can monitor both short-term results and long-term strategic development. Although the Balanced Scorecard has been widely adopted in business organizations, its application in library and information services has gained momentum in recent years. Broady-Preston and Felice (2022) revealed that academic libraries worldwide have begun integrating the framework into their strategic planning and performance evaluation systems. However, empirical evidence regarding its application in Nigerian university libraries remains limited. This study therefore, investigates how the Balanced Scorecard (BSC) framework works as a strategic tool for managing performance in Nigerian university libraries, aiming to evaluate its relevance, adapt its four perspectives, propose clear performance indicators, and outline implementation challenges and solutions. By addressing these objectives, the study contributes to the growing body of literature on strategic management in academic libraries and provides a framework to help Nigerian university libraries measure and improve their work.

Statement of the Problem

Nigerian university libraries need better performance tools because traditional methods only focus on money spent, books owned, or basic services ignoring user satisfaction, staff training, and new ideas and fail to meet changing tech needs and budget limits instead of measuring true success. This theoretical study explores using the Balanced Scorecard—which balances financial, customer, internal process, and growth measures—to help these libraries manage resources and strategy more effectively despite limited funding and new digital demands. Despite the potential benefits of the BSC, its application in Nigerian university libraries remains limited and underexplored. There is a lack of study on a well-defined theoretical framework that demonstrates how the BSC can be adapted to the unique operational and strategic realities of Nigerian university libraries. Consequently, this theoretical study seeks to examine the applicability of the Balanced Scorecard framework as a strategic performance management tool for Nigerian university libraries.

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

Objectives of the Study

The objectives of this study are to examine the fundamental principles of the Balanced Scorecard framework, explore the role of strategic performance management in university libraries and identify the challenges of performance measurement in Nigerian university libraries. It will also analyze the applicability of the four Balanced Scorecard perspectives, develop a conceptual BSC model suitable for university libraries, and propose strategies for the effective implementation of the framework.

Research Questions

The study is guided by the following research questions:

1. What are the fundamental principles of the Balanced Scorecard framework?
2. What role does strategic performance management play in university libraries?
3. What challenges affect performance measurement in Nigerian university libraries?
4. How can the four Balanced Scorecard perspectives be applied in university libraries?
5. What conceptual BSC model is appropriate for Nigerian university libraries?
6. Finally, what strategies can enhance the effective implementation of the Balanced Scorecard framework in Nigerian university libraries?

Significance of the Study

This theoretical study will be beneficial to university librarians, library managers, university administrators, researchers, and policymakers. It provides insights into the application of the Balanced Scorecard (BSC) as a strategic performance management tool for improving library effectiveness, aligning library operations with institutional goals, and enhancing accountability. The study also contributes to the theoretical literature on performance management in academic libraries and serves as a foundation for future empirical research. In addition, it offers useful guidance for policymakers and regulatory agencies in developing standards and strategies for effective performance management in Nigerian university libraries.

Methodology

This study adopts a qualitative theoretical research design based on a comprehensive review of existing literature on the Balanced Scorecard (BSC) framework and strategic performance management in university libraries in Nigeria. Data are analyzed through content and conceptual analysis to develop a conceptual BSC model tailored to the strategic performance management needs of Nigerian university libraries. The study is limited to a theoretical examination and does not involve empirical data collection or testing of the proposed model.

Literature Review

Conceptual Clarifications

Strategic Performance Management (SPM)

Strategic performance management (SPM) has attracted increasing attention within public sector organizations as governments and public institutions seek more effective ways of improving organizational performance, accountability, and service delivery. The growing interest in strategic approaches is associated with the shift towards results-oriented management, which places greater emphasis on efficiency, transparency, measurable outcomes, and the effective use of public resources (Biondi & Russo, 2022). Within this context, strategic management provides a basis for linking institutional priorities with measurable performance and for ensuring that organizational activities contribute to broader institutional goals.

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

SPM is generally understood as a systematic and continuous process of translating organizational strategies into measurable objectives, monitoring performance, assessing results, and using performance information to guide managerial decisions. Marr (2022) described SPM as an approach that connects organizational activities with strategic objectives while providing mechanisms for monitoring progress and evaluating outcomes. The process therefore brings together planning, implementation, monitoring, and evaluation within an integrated management system. Such integration enables organizations to identify performance gaps, allocate resources more effectively, strengthen accountability, and make informed decisions about future actions.

The relationship between strategic planning and performance management is central to the concept of SPM. Redding and Layland (2015) viewed SPM as an integrated system in which strategic planning and performance assessment are connected rather than treated as separate organizational activities. This perspective allows institutions to establish clear strategic priorities, develop appropriate performance measures, assess progress, and introduce corrective actions where necessary. Corrall (2021) similarly emphasized the importance of performance information in supporting organizational learning and continuous improvement. SPM therefore provides a framework through which organizations can regularly assess whether their activities are producing the outcomes expected from their strategic plans.

In academic libraries, SPM is particularly relevant because library performance cannot be adequately represented by traditional measures such as collection size, circulation statistics, or the number of services provided. Rather, library performance increasingly needs to be assessed in terms of the quality, efficiency, relevance, and impact of services on the objectives of the parent institution. Edgar (2022) and Sahu and Mahendra (2015) noted that performance assessment in libraries should consider their contribution to teaching, learning, research, innovation, and other institutional priorities. From this perspective, SPM provides a means of connecting library activities with the wider goals of the university and demonstrating the value of library services to its academic community.

The changing environment in which academic libraries operate has further increased the importance of strategic performance management. Otike et al. (2022) observed that academic libraries are experiencing rapid technological change, changing user expectations, and growing demands for accountability. These developments have transformed the role of university libraries from primarily being custodians of information resources to becoming active partners in teaching, learning, research, and knowledge creation. Consequently, libraries require performance management approaches that can capture both their operational efficiency and their broader institutional contribution. The adoption of SPM can help libraries establish strategic priorities, monitor their achievement, and provide evidence of their relevance to university stakeholders.

An important component of SPM in academic libraries is the development of clearly defined objectives and performance indicators. Murphy and DeNisi (2023) emphasized the need for organizational objectives to be connected to institutional mission and strategic priorities. In a university library, such objectives may include improving access to information resources, increasing user satisfaction, strengthening information literacy, supporting digital scholarship, improving research support, and enhancing the visibility of institutional research. Nuut (2006) similarly highlighted the importance of aligning library activities with broader institutional objectives. Once objectives have been established, appropriate indicators can be used to monitor progress and assess outcomes.

Traditional library performance indicators remain useful within an SPM framework, but they need to be complemented by measures that capture service quality, user experience, and institutional impact. Poll and Boekhorst (2007) identified measures such as circulation, database use, user satisfaction, service turnaround time, reference effectiveness, and information literacy outcomes as important indicators of library performance. Contemporary SPM approaches can extend these measures to include digital resource use, institutional repository development, research support activities, staff competencies, service innovation, and the contribution of library programmes to student and researcher outcomes. This broader approach enables library managers to obtain a more comprehensive picture of institutional performance.

SPM also has implications for resource allocation and organizational improvement. Kapatel and Vaja (2025) argued that systematic performance assessment enables organizations to recognize their strengths, identify areas of weakness, and

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

make evidence-based decisions concerning resources, personnel, technology, and service development. In university libraries, performance information can guide decisions about collection development, electronic resources, staff training, digital technologies, and the redesign of services. By connecting these decisions to strategic objectives, libraries can direct limited resources towards activities that are most closely associated with institutional priorities.

Accountability is another important dimension of SPM in academic libraries. Universities increasingly expect their libraries to provide evidence of their contribution to institutional objectives, particularly in environments characterized by financial constraints and competing demands for resources. Iwu-James et al. (2020) and Edgar (2022) noted the importance of demonstrating library value through reliable performance evidence. Accordingly, performance information can be used to justify funding, assess service quality, communicate achievements, and demonstrate contributions to teaching and research. For instance, evidence relating to information literacy programmes can demonstrate their contribution to students' research competencies, while data on electronic resource use can provide insight into the role of digital collections in supporting scholarly activities (Association of College and Research Libraries [ACRL], 2016).

Among the frameworks available for strategic performance management, the Balanced Scorecard (BSC) has received considerable attention. Kaplan and Norton (1996) developed the BSC as a framework for assessing organizational performance from four interconnected perspectives: financial, customer, internal business processes, and learning and growth. The framework moves beyond reliance on financial or output-based measures by encouraging organizations to consider several dimensions of performance simultaneously. In academic libraries, these perspectives can be adapted to reflect issues such as financial sustainability, user satisfaction, service processes, staff development, technological innovation, and institutional contribution.

The relevance of the BSC to academic libraries lies in its capacity to provide a balanced view of performance. Self (2003) argued that the framework can assist libraries in connecting operational activities with strategic priorities through clearly defined measures. Rather than focusing exclusively on inputs or routine outputs, libraries can use the BSC to examine how their resources and internal processes contribute to user outcomes and institutional objectives. This makes the framework particularly relevant to university libraries seeking to demonstrate their strategic value within the wider higher education environment.

Technological developments have also expanded the possibilities for implementing SPM in libraries. Integrated library systems, institutional repositories, electronic resource platforms, and data visualization technologies generate substantial amounts of performance information. Corrall (2015) and Orner (2023) noted that such technologies can support the collection, analysis, and presentation of data relating to resource use, service delivery, and user behaviour. When appropriately managed, these data can strengthen evidence-based decision-making, improve transparency, and enable library managers to monitor performance more effectively.

Overall, the literature indicated that SPM provides an important basis for linking library activities with institutional strategy, measuring performance, supporting evidence-based decision-making, and demonstrating organizational value. Its application in university libraries extends performance assessment beyond conventional operational statistics to include user outcomes, internal processes, staff development, innovation, and institutional impact. The Balanced Scorecard offers one practical framework for operationalizing these principles because its multiple perspectives can be adapted to the distinctive objectives and operational realities of academic libraries. However, effective implementation requires performance indicators that reflect the specific strategic priorities, resource conditions, technological environment, and stakeholder expectations of individual university libraries. This consideration is particularly important in the Nigerian university library context, where institutional and environmental conditions may require further adaptation of established SPM frameworks.

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

User-Centred Assessment and Challenges of Strategic Performance Management

User-centred assessment is an important component of strategic performance management (SPM) in academic libraries because it focuses on users' experiences, expectations, and outcomes. Ashikuzzaman (2026) stressed that it involves the systematic assessment of users' perceptions of library collections, facilities, technologies, and services through methods such as satisfaction surveys, interviews, focus groups, usability studies, and service-quality assessments. These approaches according to Amarasekara and Marasinghe (2020) provided evidence that can help libraries identify service deficiencies, improve the quality of their services, and respond more effectively to changing information needs. Thus, user-centred assessment is therefore important for ensuring that library resources and services remain relevant to the academic activities of students, lecturers, and researchers.

The assessment of library value, however, extends beyond conventional measures such as circulation statistics, gate counts, collection size, and database usage. Although such indicators are useful for monitoring library activities, they do not necessarily demonstrate the broader contribution of library services to institutional outcomes. Oakleaf (2010) emphasised that academic libraries need to demonstrate their value in relation to student learning, research, and institutional goals. Similarly, recent approaches to library assessment increasingly emphasise outcomes and impact rather than focusing exclusively on inputs and outputs. This suggests that effective SPM should incorporate measures that demonstrate how library services contribute to teaching, learning, research, and the wider mission of the university.

Despite its importance, the implementation of SPM in academic libraries presents several challenges. One of the major challenges is the difficulty of measuring intangible outcomes. Outcomes such as improved learning, enhanced research capability, knowledge creation, and academic success are influenced by several factors and may therefore be difficult to attribute directly to library services. De Jager (2017) observed that demonstrating library impact requires assessment approaches capable of capturing outcomes that extend beyond traditional service statistics. Thus, this limitation makes it necessary for libraries to combine quantitative indicators with qualitative evidence obtained from users and other stakeholders.

Resource limitations can also constrain the implementation of effective performance management. According to Okogwu et al. (2023) academic libraries may face inadequate funding, shortages of appropriately skilled personnel, limited technological infrastructure, and insufficient expertise in assessment and data analysis. Thus, the constraints can affect the ability of libraries to establish appropriate performance indicators, collect reliable data, and use assessment results for decision-making. Poll (2001) noted that performance measurement requires appropriate organisational structures, clearly defined indicators, and the capacity to collect and interpret performance information. In developing higher education systems, these challenges may be more pronounced because libraries often have to manage competing demands with limited institutional resources.

Organisational resistance to change represents another challenge. The introduction of SPM may require library staff to adopt new responsibilities, performance indicators, technologies, and methods of evaluating services. Musaigwa and Kalitany (2026) argued that where performance measurement is perceived primarily as a mechanism for control or staff evaluation, employees may be reluctant to participate fully in the assessment process. Their study further indicated that successful implementation therefore requires organisational commitment, staff involvement, effective communication, and a culture that views assessment as a means of learning and service improvement rather than merely as an accountability requirement.

The rapidly changing technological and educational environment also requires academic libraries to continually review their performance indicators. This is because, according to Shimray et al. (2025), the growth of electronic resources, open access, institutional repositories, artificial intelligence, digital scholarship, and virtual learning environments has transformed the ways in which users access and use library resources. Consequently, indicators developed primarily for traditional print-based library services may not adequately capture the performance of contemporary academic libraries. Thus, SPM should therefore remain sufficiently flexible to accommodate technological developments and changes in user behaviour.

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

Overall, SPM provides academic libraries with a systematic approach to aligning library activities with institutional objectives, monitoring performance, identifying areas requiring improvement, and demonstrating value to stakeholders. Its effectiveness depends largely on the selection of appropriate indicators and the ability of library managers to connect performance information with strategic decision-making. Within this context, the Balanced Scorecard (BSC) provides a potentially useful framework because it combines financial and non-financial dimensions of performance and links operational activities to strategic objectives.

Balanced Scorecard Framework

The Balanced Scorecard (BSC) is a strategic management and performance measurement framework developed by Kaplan and Norton (1992). It emerged partly from concerns about the limitations of traditional performance measurement systems that relied heavily on financial indicators. Kaplan and Norton proposed that organisations should complement financial measures with indicators relating to customers, internal business processes, and learning and growth. The framework was subsequently developed into a broader strategic management system in 1996 for translating organisational vision and strategy into objectives, measures, targets, and initiatives. The BSC provides a multidimensional approach to performance assessment by recognising that organisational performance cannot be adequately represented by financial measures alone. According to Kaplan and Norton (1996), long-term organisational success depends on the interaction between financial performance, customer relationships, internal processes, and organisational learning and growth. This multidimensional character makes the BSC potentially relevant to academic libraries, where organisational effectiveness involves several interconnected dimensions, including financial resource management, user satisfaction, service efficiency, staff development, technological capacity, and innovation.

The BSC is traditionally structured around four major perspectives: **financial, customer, internal business processes, and learning and growth** (Kaplan & Norton, 1996). These perspectives provide a balanced basis for assessing organisational performance and help managers examine the relationship between resources, organisational capabilities, service processes, and outcomes. Although, academic libraries are generally not profit-oriented organisations, university libraries is pivotal to providing supports for teaching, learning, research and community development hence, depend on the four perspectives to achieve library goals.

The **financial perspective** considers how effectively an organisation manages and utilises its financial resources. Although academic libraries are generally not profit-oriented organisations, financial performance remains important because libraries depend on institutional funding to acquire information resources, maintain infrastructure, support electronic resources, and provide quality services. In this context, relevant measures may include budget utilisation, cost efficiency, resource mobilisation, expenditure on electronic resources, and the cost-effectiveness of library operations.

The **customer perspective** focuses on users' needs, expectations, satisfaction, and perceptions of service quality. In academic libraries, the principal users include students, lecturers, researchers, and other members of the university community. Measures under this perspective may include user satisfaction, accessibility of information resources, responsiveness of library services, quality of reference services, and users' perceptions of the usefulness of library resources. This perspective is particularly relevant to user-centred assessment because it encourages libraries to evaluate performance from the users' point of view rather than relying exclusively on internal activity measures.

The **internal business process perspective** focuses on the processes through which an organisation delivers its services. In academic libraries, these processes include collection development, acquisition, cataloguing and classification, circulation, reference services, electronic resource management, digitization, institutional repository management, information literacy programmes, and research support. Effective internal processes can improve the speed, reliability, accessibility, and quality of library services. Consequently, performance indicators within this perspective should consider both the efficiency of library operations and their contribution to strategic objectives.

The **learning and growth perspective** addresses the organisational capabilities required to achieve sustainable improvement. Kaplan and Norton (1996) identify employee capabilities, information systems, and organisational culture

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

as important foundations for organisational learning and development. In academic libraries, this perspective can include staff training, professional development, digital competence, technological infrastructure, innovation, knowledge sharing, and organisational learning. Investment in these areas can strengthen the capacity of library staff to respond to technological changes and evolving user expectations.

The four perspectives are interconnected rather than independent. Kaplan and Norton (1996) explain that improvements in learning and growth can strengthen internal processes, which can subsequently improve customer outcomes and contribute to financial or resource-related outcomes. Applied to academic libraries, investment in staff development and technological infrastructure can improve internal service processes, which may increase user satisfaction and demonstrate greater value to the university. This cause-and-effect relationship is one of the major strengths of the BSC because it enables organisations to connect resources and capabilities with service outcomes.

The application of the BSC in academic libraries, however, requires contextual adaptation. The original framework was developed for business organisations, and its indicators cannot simply be transferred directly to university libraries. Library managers need to adapt the four perspectives to reflect the library's mission, the strategic priorities of the university, the expectations of users, and the operational environment. In Nigerian university libraries, for example, performance indicators may need to reflect issues such as funding adequacy, electronic resource provision, internet connectivity, staff capacity, technological infrastructure, user satisfaction, accreditation requirements, and support for teaching, learning, and research.

Recent literature on the BSC continues to highlight its usefulness as a multidimensional framework for linking organisational objectives with performance indicators. For instance, Al-Hosaini et al. (2023) and Broady-Preston and Felice (2022) emphasized the continuing relevance of balanced performance measurement for assessing organisational performance across different dimensions. Its application to academic libraries can therefore provide a structured basis for moving beyond traditional activity-based measures towards a more strategic assessment of library performance. In this regard, the BSC offers a useful conceptual foundation for strategic performance management in Nigerian university libraries. When appropriately adapted, it can help library managers align resources and activities with institutional objectives, monitor performance across multiple dimensions, identify service gaps, support evidence-based decision-making, and demonstrate the contribution of libraries to teaching, learning, and research. The framework can consequently serve as an important mechanism for strengthening accountability, organisational learning, and continuous improvement within the academic library environment.

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

A BSC framework for Library SPM



Figure 1: A BSC framework for Library SPM by the Author 2026

Balanced Scorecard Perspectives in Nigerian University Libraries

The Balanced Scorecard (BSC) has emerged as one of the most influential strategic management and performance measurement frameworks for both private and public sector organizations. Developed by Kaplan and Norton (1992), the framework was designed to enable organizations to translate their vision, mission, and strategic objectives into measurable performance indicators that facilitate effective strategy implementation and organizational improvement. Unlike traditional performance measurement systems that emphasize financial outcomes alone, the Balanced Scorecard integrates financial and non-financial indicators to provide a comprehensive assessment of organizational performance. This according to Oluwagbemiga and Ajibike (2021) provides holistic approach which recognizes that sustainable organizational success is driven by a combination of financial stewardship, customer satisfaction, efficient internal processes, and continuous learning and innovation.

In the context of Nigerian university libraries, the Balanced Scorecard has become increasingly relevant due to the growing demand for accountability, improved service delivery, digital transformation, and effective utilization of limited resources (Camilleri, 2020). Modern university libraries are expected not only to acquire and organize information resources but also to support teaching, learning, research, innovation, and community engagement. However, Aina (2014) found out that they face numerous challenges such as inadequate funding, obsolete collections, insufficient technological infrastructure, shortage of skilled personnel, and increasing user expectations. On the other hand, Niven (2008) stated that the application of the Balanced Scorecard enables libraries to systematically evaluate their performance, align activities with institutional goals, and improve service quality. Thus, within the context of university libraries, particularly in Nigeria, the Balanced Scorecard provides a practical framework for aligning library operations

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

with the strategic goals of their parent institutions. The Balanced Scorecard addresses this need by organizing performance measurement into four interrelated perspectives: the financial perspective, the customer perspective, the internal business process perspective, and the learning and growth perspective. Each perspective captures a critical dimension of library performance and collectively provides a balanced evaluation of organizational effectiveness.

The **financial perspective** focuses on the prudent management and efficient utilization of library resources. It examines how organizations manage and utilize financial resources to achieve strategic objectives. Although, according to Adenariwo and Sulyman (2022), university libraries are generally service-oriented rather than profit-making organizations, financial performance remains important because it reflects the institution's ability to utilize available funds effectively. The reason according to Ibrahim et al. (2021) is that Nigerian university libraries depend largely on government allocations, university budgets, grants from intervention agencies such as the Tertiary Education Trust Fund (TETFund), and support from donor organizations. Despite these sources, inadequate and inconsistent funding continues to affect library development in many Nigerian universities.

The rising cost of books, electronic databases, internet subscriptions, and technological infrastructure has increased the financial burden on university libraries. In many cases, libraries struggle to acquire current information resources and maintain modern facilities due to limited budgets. Consequently, strategic financial management becomes necessary to ensure that available resources are effectively utilized. Thus, according to Niven (2008), the Balanced Scorecard helps library managers monitor financial efficiency and justify budgetary requests through measurable indicators. Possible financial performance indicators in Nigerian university libraries include budget utilization efficiency, cost per library user, expenditure on digital resources, amount of external funding secured, and cost-effectiveness of library services. Budget utilization efficiency measures how effectively allocated funds are spent on priority services and resources (Zarita et al., 2025). Cost per library user helps determine whether services are being delivered economically. Expenditure on digital resources reflects the extent to which libraries invest in electronic databases, e-books, and online journals to support modern learning and research needs.

External funding secured is another important indicator because many libraries rely on grants and partnerships to supplement inadequate institutional funding. For example, Madu and Adeniran (2005) affirmed that TETFund interventions have significantly supported digital library projects, infrastructure development, and acquisition of academic resources in Nigerian universities. By monitoring these financial indicators, library administrators can demonstrate accountability, support evidence-based budgeting, and advocate for increased funding from university management and government agencies. Furthermore, effective financial management contributes to sustainability and improved service delivery. Therefore, according to Poll and Boekhorst (2007), libraries that strategically allocate resources are better positioned to maintain updated collections, provide internet-enabled services, and support research activities within their institutions.

The **customer perspective** emphasizes the extent to which the library satisfies the needs and expectations of its users, including students, academic staff, researchers, and external patrons. The customer perspective focuses on user satisfaction, service quality, and the ability of the organization to meet customer needs and expectations (Kaplan & Norton, 1996). In academic libraries, customers include undergraduate students, postgraduate students, lecturers, researchers, administrative staff, and external users. The primary goal of university libraries is to provide access to relevant and reliable information resources that support teaching, learning, and research.

In recent years, advances in information and communication technologies have substantially transformed the expectations of users of Nigerian university libraries. Students and researchers increasingly require convenient and timely access to electronic databases, digital repositories, e-books, online reference services, and reliable wireless connectivity. In response, university libraries must regularly assess user satisfaction and adapt their services to changing information needs in order to remain relevant within the contemporary digital environment (Oakleaf, 2010). High levels of user satisfaction reflect the extent to which library resources and services effectively support academic activities and, consequently, contribute to the perceived value and institutional standing of the library.

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

Within the Balanced Scorecard framework, the customer perspective provides a basis for assessing indicators such as user satisfaction, library visitation, electronic resource utilization, participation in information literacy programmes, and response time to reference enquiries. Hernon and Altman (2010) observed that user satisfaction surveys provide useful evidence regarding the quality and accessibility of resources, staff responsiveness, service effectiveness, and adequacy of library facilities. Similarly, Stevens (2010); Sahabi and Unobe (2024) argued that patterns of library use, including physical visits and engagement with electronic resources, can provide evidence of the library's relevance and accessibility to its users.

Information literacy participation is another important indicator because such programmes develop users' abilities to locate, evaluate, and effectively use information for academic purpose. ACRL (2016) indicated that assessing participation and outcomes may provide evidence of the library's contribution to students' learning and research competencies. In addition, the timeliness of responses to reference enquiries is an important measure of service effectiveness, particularly in an environment where users expect prompt access to information and professional assistance. Collectively, these indicators enable university libraries to evaluate their responsiveness to users, identify areas requiring improvement, and strengthen their contribution to the academic community. A sustained focus on user needs can consequently enhance the library's institutional value and support stronger engagement with students, researchers, and university management.

The **internal processes perspective** focuses on the efficiency and effectiveness of organizational operations that enable the institution to deliver quality services (Kaplan & Norton, 1996). In university libraries, internal processes include collection development, acquisition, cataloguing, classification, circulation, information retrieval, preservation, digitization, and management of electronic resources. Efficient internal operations are essential for timely access to information resources and effective service delivery. Delays in cataloguing or acquisition processes can limit access to newly acquired materials, thereby affecting teaching and research activities. Similarly, poor management of digital resources may reduce user satisfaction and hinder academic productivity.

According to Yusuf et al. (2022), the Balanced Scorecard enables Nigerian university libraries to evaluate operational performance using indicators such as average cataloguing turnaround time, speed of information retrieval services, digital repository growth, efficiency of interlibrary loan services, and system uptime for electronic resources. Average cataloguing turnaround time measures how quickly newly acquired materials are processed and made available to users. Faster turnaround times improve accessibility and enhance user satisfaction. The speed of information retrieval services is particularly important in the digital age where users expect immediate access to information. Libraries must therefore ensure that search systems, databases, and online catalogues function effectively. Digital repository growth is another important indicator because institutional repositories help preserve and disseminate scholarly output such as theses, dissertations, journal articles, and conference papers (Lynch, 2003). A growing repository reflects increased research visibility and institutional productivity.

Interlibrary loan services also contribute significantly to information access, especially when local collections are inadequate. Kerrie (2010) revealed that measuring the efficiency of these services helps determine how effectively libraries collaborate to meet users' information needs. System uptime for electronic resources is equally critical because frequent downtime may disrupt access to online databases and negatively affect research activities. Adegbore and Sadiku (2023) maintained that monitoring internal processes allows library managers to identify operational inefficiencies, improve workflow systems, and enhance productivity. Automation and integrated library systems have significantly improved internal operations in many Nigerian university libraries. However, challenges such as inadequate infrastructure, unstable electricity supply, and poor internet connectivity still affect operational efficiency in some institutions.

The **learning and growth perspective** emphasizes staff development, organizational culture, innovation, and technological advancement as essential drivers of long-term institutional performance (Kaplan & Norton, 2004). In university libraries, continuous professional development is particularly important because librarians must respond to rapid technological changes and evolving user expectations. Nigerian university libraries increasingly require

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

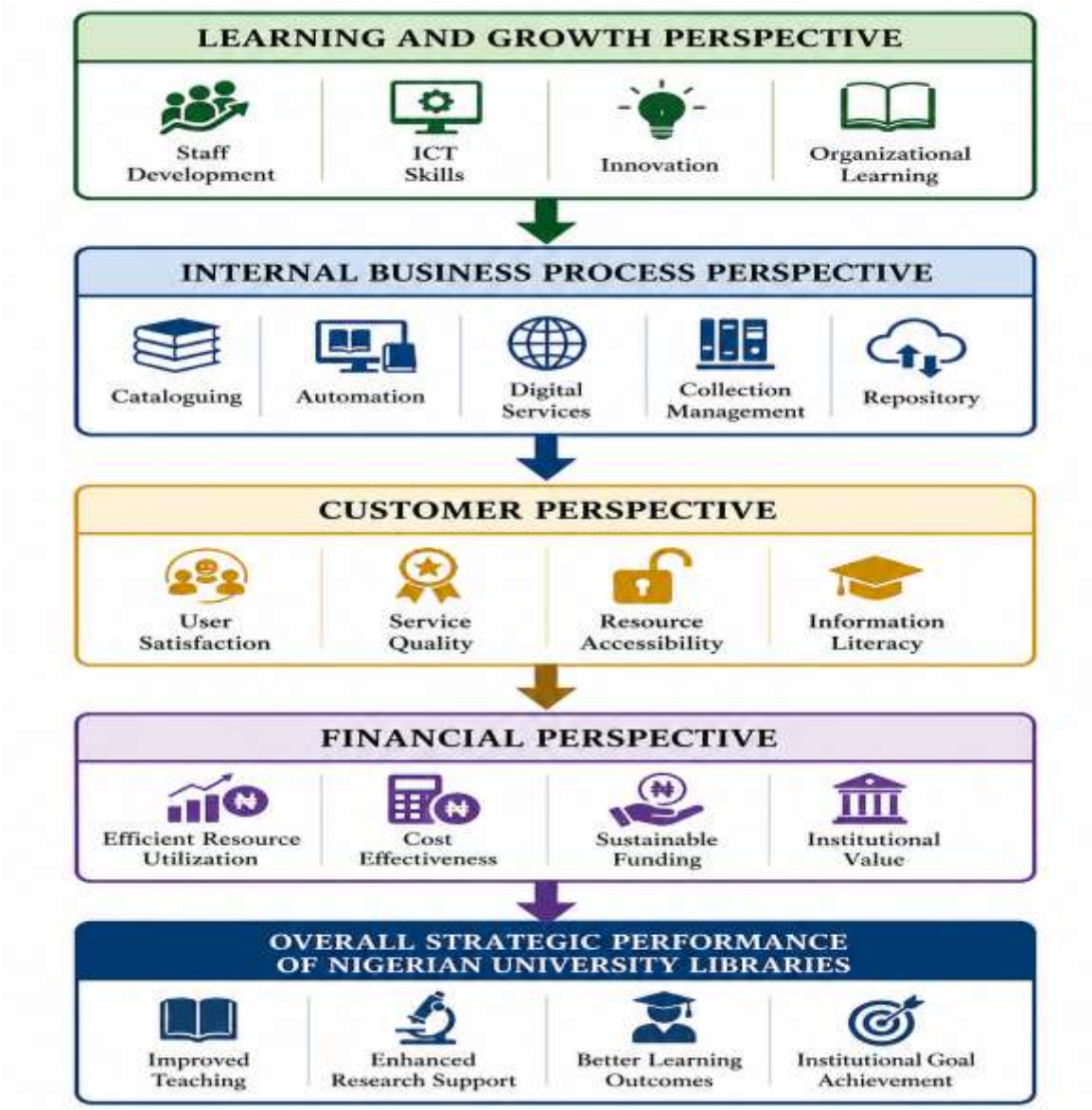
competencies in information technology, database management, digital librarianship, data analytics, and electronic resource management (Mbajiorgu et al., 2021).

Within the Balanced Scorecard, learning and growth can be assessed through indicators such as staff training, digital competencies, adoption of emerging technologies, research productivity, and service innovation. Madu and Adeniran (2005) viewed in their study that professional development strengthens staff capacity in areas such as digital cataloguing, institutional repository management, and information literacy, thereby improving service delivery. Similarly, Hernon and Altman (2010) added that the adoption of technologies such as artificial intelligence, cloud computing, and digital repositories enhances the library's ability to respond to changing information needs. Research productivity and innovations such as virtual reference services, mobile applications, online user education, and remote access further demonstrate organizational development. Ultimately, investment in staff capacity and technological capability strengthens the library's adaptability, effectiveness, and long-term sustainability.

Proposed Conceptual Framework

The conceptual framework for this study is based on the premise that the four Balanced Scorecard perspectives are interdependent and collectively contribute to strategic performance in university libraries as shown in Figure 2

Figure 2: **Proposed Conceptual Framework**



© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

International Journal of Science, Strategic Management and Technology
Volume **02** Issue **11** November-2026 | ISSN: **3108-1762 (Online)** | Impact Factor: 3.8
An International, Peer-Reviewed, Open Access Scholarly Journal Indexed in recognized academic databases

Explanation of the Balanced Scorecard Framework

The Balanced Scorecard (BSC), developed by Kaplan and Norton (1992, 1996), serves as the theoretical foundation for this study. It is a strategic management and performance measurement framework that recognizes that organizational success cannot be evaluated solely through financial indicators. Rather, the BSC provides a multidimensional approach by assessing performance across four interrelated perspectives: financial, customer, internal business processes, and learning and growth. By integrating these perspectives, the framework enables organizations to translate their vision and strategic objectives into measurable outcomes, monitor performance, and drive continuous improvement.

The Balanced Scorecard is particularly relevant to Nigerian university libraries because it provides a comprehensive framework for evaluating their contribution to institutional goals. As university libraries operate in an environment characterized by rapid technological advancements, increasing demand for digital information resources, financial constraints, and changing user expectations, traditional performance measures such as collection size, expenditure, or circulation statistics are no longer sufficient. The BSC expands performance evaluation by incorporating both financial and non-financial indicators that capture the library's contribution to teaching, learning, research, and community engagement. The illustration of the BSC matrix is shown in **figure 3.**



Figure 3. Diagram showing BSC for Nigerian Universities by the Author.

A major strength of the Balanced Scorecard is its integration of four interrelated perspectives through a cause-and-effect relationship. Improvements in staff competencies, organizational learning, and technology enhance internal processes, leading to better service quality and user satisfaction. These outcomes strengthen the library's institutional value and support efficient resource utilization, thereby improving overall strategic performance.

Accordingly, this study adopts the Balanced Scorecard as its guiding framework because it provides a systematic basis for aligning library activities with institutional objectives. By integrating financial management, user satisfaction, operational efficiency, and organizational learning, the framework supports effective performance assessment,

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

accountability, and continuous improvement while strengthening the contribution of Nigerian university libraries to teaching, learning, research, and community engagement.

Benefits of the Balanced Scorecard in Nigerian University Libraries

The Balanced Scorecard (BSC) provides a useful mechanism for aligning library activities with the strategic priorities of the parent university, including teaching, learning, research, innovation, and community engagement. It enables university libraries to translate institutional priorities into measurable objectives and targets. For example, where research excellence is prioritized, libraries can focus on expanding scholarly databases, strengthening institutional repositories, providing research consultation and citation support, and promoting digital scholarship. In conjunction with this, Akintola and Muhammed-Lawal (2025) remarked that institutional emphasis on digital transformation can guide libraries towards expanding digital collections, improving remote access, and strengthening information literacy programmes. Such alignment ensures that library activities contribute directly to institutional goals.

The BSC also strengthens accountability and transparency by establishing clear performance indicators through which library activities and resource utilization can be assessed (Reid, 2011). In an environment of limited funding and increasing demands for accountability, performance evidence enables libraries to demonstrate how financial, human, technological, and information resources contribute to teaching, research, student learning, and community engagement. Such evidence can strengthen the confidence of university management, governing bodies, accreditation agencies, and funding organizations while extending accountability beyond financial reporting to include service quality, user satisfaction, staff productivity, innovation, and operational efficiency.

Furthermore, the BSC supports evidence-based decision-making by providing managers with integrated information on financial performance, user satisfaction, internal operations, and organizational learning (Nwankwo et al., 2026). Rather than relying on assumptions or isolated statistics, library managers can use performance data to identify weaknesses, recognize opportunities, address operational bottlenecks, and determine appropriate interventions. Such information also supports strategic planning, budgeting, policy development, resource allocation, risk management, and long-term organizational development.

Another important contribution of the BSC is its capacity to promote continuous improvement and innovation. Yusuf et al. (2022) suggested that regular monitoring of performance indicators encourages libraries to identify areas for improvement, adopt emerging technologies, and develop services that respond to changing user expectations. This according to Mbajiorgu et al. (2021), may include artificial intelligence-assisted reference services, institutional repositories, digital preservation, research data management, virtual reference services, and open educational resources. The customer perspective similarly promotes service quality by encouraging libraries to assess user satisfaction, resource accessibility, response time, internet reliability, and information literacy services. These measures provide evidence for improving user experiences and strengthening the library's relevance within the university community (Maesaroh et al., 2024).

In addition, the BSC facilitates more effective allocation of scarce financial, technological, and human resources. Huang and Song (2010) averred that performance evidence enables library managers to prioritize expenditure according to demonstrated needs and outcomes rather than relying solely on traditional budgeting practices. It can also guide staffing decisions through information on workload, service demand, and productivity, while providing evidence to support requests for additional institutional or external funding. At the same time, Kapatel and Vaja (2025) and Reid (2011) viewed that the Learning and Growth perspective emphasizes staff competence and professional development. Thus, regular performance assessment can reveal training needs and encourage investment in professional certification, digital literacy, research skills, leadership development, and emerging technologies, thereby improving staff productivity, innovation, teamwork, and job satisfaction.

The BSC further improves internal processes and operational efficiency by enabling libraries to monitor activities such as acquisitions, cataloguing and classification, circulation, digitization, institutional repository management, interlibrary

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

loan, and reference services. Assessing workflow efficiency, processing time, service turnaround, equipment utilization, and system reliability can help reduce delays and improve operational performance (Yusuf et al., 2022; Maesaroh et al., 2024). In addition, systematic performance documentation can support quality assurance and accreditation by providing evidence of collection development, staffing, technological infrastructure, user services, and continuous improvement initiatives.

Ultimately, the Balanced Scorecard can contribute to the sustainability and competitiveness of Nigerian university libraries by integrating strategic planning, performance measurement, accountability, innovation, and continuous improvement. According to Peters and Prakashe (2025), a strategically managed library is better positioned to support research productivity, academic excellence, digital scholarship, institutional visibility, and broader university objectives. The BSC therefore positions the university library not merely as a support unit but as a strategic partner in achieving institutional goals.

Challenges of Implementing the Balanced Scorecard

Despite its advantages, implementing the Balanced Scorecard in Nigerian university libraries may face several challenges. One major challenge is limited managerial capacity for strategic performance management. Many library administrators are accustomed to traditional evaluation methods and may require training to adopt the BSC framework. Another challenge is inadequate technological infrastructure for collecting and analyzing performance data. Effective implementation requires integrated information systems capable of tracking service metrics. Resistance to organizational change may also hinder adoption. Staff members may perceive the framework as an additional administrative burden. Finally, limited financial resources may restrict the ability of libraries to invest in staff training and technological upgrades required for successful implementation.

Strategies for Effective Implementation

Successful implementation of the Balanced Scorecard in Nigerian university libraries requires adequate preparation and institutional commitment. Library administrators should first provide relevant training to help staff understand strategic performance management and their roles in implementing the framework. The BSC should also be incorporated into the library's strategic planning process so that its objectives and performance indicators are clearly linked to the broader goals of the university. In addition, the use of digital tools can simplify the collection, management, and analysis of performance data. Collaboration among university libraries can further support implementation by creating opportunities for sharing experiences, knowledge, and effective practices.

Conclusion

The changing higher education environment requires university libraries to adopt performance management approaches that demonstrate their contribution to institutional goals. Traditional measures alone do not adequately reflect the diverse ways in which libraries support teaching, learning, research, and other academic activities. The Balanced Scorecard offers a broader approach by combining financial and non-financial measures across four perspectives: financial, customer, internal business processes, and learning and growth.When appropriately adapted to Nigerian university libraries, the framework can strengthen accountability, improve service delivery, guide resource allocation, and align library activities with institutional priorities. However, its implementation may be affected by challenges such as inadequate funding, technological limitations, and resistance to organizational change. These challenges can be addressed through effective planning, staff development, appropriate technological support, and sustained commitment from university management. Overall, the Balanced Scorecard provides a practical basis for strengthening strategic performance management and enabling Nigerian university libraries to respond more effectively to the changing demands of the academic and information environment

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

Recommendations

Based on the conceptual analysis, the following recommendations are proposed to strengthen the application of the Balanced Scorecard (BSC) framework for strategic performance management in Nigerian university libraries.

1. **Adoption of the Balanced Scorecard Framework:** University libraries should adopt the Balanced Scorecard as an integrated framework for strategic planning, performance measurement, and continuous improvement. The framework should be adapted to the specific goals, operational conditions, and institutional priorities of each university library rather than applied as a uniform model.
2. **Alignment of Library Goals with Institutional Objectives:** Library strategic plans should be linked to the broader teaching, learning, research, and community engagement objectives of their parent universities. Performance indicators should demonstrate how library resources and services contribute to institutional priorities and academic outcomes.
3. **Development of Relevant Performance Indicators:** University libraries should establish measurable key performance indicators (KPIs) across the four BSC perspectives: financial, customer, internal processes, and learning and growth. Financial indicators may include budget utilisation and expenditure on electronic resources; customer indicators may cover user satisfaction and accessibility of information resources; internal process indicators may assess cataloguing turnaround time, reference services, and digital service availability; while learning and growth indicators may measure staff training, ICT competence, and professional development.
4. **Improvement of Funding and Resource Management:** University management and library administrators should strengthen financial planning and resource allocation to support library operations, digital infrastructure, electronic information resources, and staff development. The financial perspective should emphasise value for money, efficient resource utilisation, and the sustainability of library services rather than financial expenditure alone.
5. **Strengthening User-Centred Services:** Libraries should regularly assess the information needs and satisfaction levels of students, academic staff, and researchers through surveys, consultations, usage statistics, and feedback mechanisms. The findings should inform service improvements, resource acquisition, information literacy programmes, and the development of accessible digital services.
6. **Investment in Technology and Process Improvement:** University libraries should improve their technological capacity through library automation, institutional repositories, electronic databases, reliable internet connectivity, and appropriate digital platforms. Routine assessment of service delivery processes should identify operational bottlenecks, reduce delays, and improve users' access to information resources.
7. **Staff Capacity Development:** Library management should prioritise continuous professional development in strategic management, performance measurement, digital librarianship, data analysis, and information technology. Staff development indicators should assess not only participation in training but also the application of acquired skills to service delivery and organisational improvement.
8. **Establishment of a Performance Monitoring and Reporting System:** Each university library should establish a systematic process for collecting, analysing, and reporting performance data. Periodic reviews should compare actual performance with agreed targets, identify gaps, and guide corrective action. Performance reports should inform management decisions, budget proposals, and institutional quality assurance processes.
9. **Promotion of Stakeholder Participation:** The implementation of the BSC should involve university management, library staff, academic departments, students, and other relevant stakeholders. Their participation would encourage shared responsibility, improve the relevance of performance indicators, and strengthen institutional support for library development.
10. **Contextual Adaptation and Empirical Validation:** Since Nigerian university libraries operate under different funding arrangements, technological conditions, staffing levels, and institutional priorities, the BSC framework should be adapted to local circumstances. Further empirical studies should test its applicability across federal, state, and private university libraries to determine which indicators are most useful, identify implementation challenges, and assess its contribution to strategic performance management.

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

Overall, the successful application of the Balanced Scorecard in Nigerian university libraries requires more than the introduction of performance indicators. It depends on the integration of strategic objectives, adequate resources, staff commitment, stakeholder participation, and regular performance evaluation. When appropriately adapted and consistently implemented, the framework can provide a structured basis for improving accountability, strengthening decision-making, and aligning library operations with the teaching, learning, and research objectives of Nigerian universities.

References

Abdullahi, K., & Darma, A. S. (2026). Policy, leadership, and strategic foresight as drivers of anticipatory resilience in Library and Information Science (LIS) institutions. Global Review of Library and Information Science (GRELIS), 22(1), 1–13

Adegbore, A. M., & Sadiku, S. A. (2023). Assessing use of integrated library management systems in selected Nigerian university libraries. Sokoto Educational Review (SER), 22(1). https://www.sokedureview.org

Aina, L. O. (2014). Library and information science text for Africa (3rd ed.). Third World Information Services.

Akintola, I. A., Usamotu, B. O., & Muhammed-Lawal, A. A. (2025). Global university rankings and Nigerian higher education: Implications, challenges, and opportunities. African Journal of Educational Management, 26(1).

Ashikuzzaman, M. (2026). User-centered library services: Concepts, practices, and emerging trends. LIS Education Network. https://www.lisedunetwork.com/user-centered-library-services-concepts-practices-and-emerging-trends/

Association of College and Research Libraries. (2016). Academic library impact on student learning and success: Findings from assessment in action team projects. Association of College and Research Libraries.

Bangladesh, H., & Islam, M. (2021). Planning a user-centered process improvement for academic libraries: A pathway of satisfying users' needs. Library Philosophy and Practice.

Biondi, L., & Russo, S. (2022). Integrating strategic planning and performance management in universities: A multiple case-study analysis. Journal of Management and Governance, 26(2), 417–448. https://doi.org/10.1007/s10997-022-09628-7

Broady-Preston, J., & Felice, J. (2022). Balanced scorecard implementation in academic libraries: A strategic management approach. Library Management, 43(6/7), 456–471.

Camilleri, M. A. (2020). Using the balanced scorecard as a performance management tool in higher education. International Journal of Educational Management, 35(1). https://doi.org/10.1177/0892020620921412

Corrall, S. (2015). Capturing the contribution of subject librarians: Applying strategy maps and balanced scorecards to liaison work. Library Management, 36(3), 223–234. https://doi.org/10.1108/LM-09-2014-0100

Corrall, S. (2021). Strategic planning and performance management in academic libraries. Journal of Academic Librarianship, 47(5), 102378.

De Jager, K. (2017). Approaches to impact evaluation in academic libraries: A review of a new ISO standard. IFLA Journal, 43(3), 228–235. https://doi.org/10.1177/0340035217696321

Ebiwolate, P. B. (2025). Funding of academic libraries: The present trend in Nigeria. Lafia Journal of Library and Information Science, 1(1), 10–19. https://lalibjournals.org/index.php/LJLIS/article/view/71

Edgar, B. (2022). The university library's strategic process: Competing through plans, positions, and resources. Libri, 72. https://doi.org/10.1515/libri-2021-0150

Eromosele, G. O., & Kayode, A. I. (2026). Transforming Nigerian university libraries with Calibre e-book management. Library Hi Tech News, 43(3), 16–20. https://doi.org/10.1108/LHTN-09-2025-0158

Fahmi, F. Al-Hosaini, Ali, B. J. A., Baadhem, A. M., Jawabreh, O., Bani Atta, A. A., & Ali, A. (2023). The impact of the balanced scorecard (BSC) non-financial perspectives on the financial performance of private universities. Information Sciences Letters, 12(9), 2903–2913. http://dx.doi.org/10.18576/isl/12090

Hernon, P., & Altman, E. (2010). Assessing service quality: Satisfying the expectations of library customers (3rd ed.). American Library Association.

Huang, R., & Song, L. (2010). Application of balanced scorecard in library management and evaluation. https://www.researchgate.net/publication/251955029

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

Ibrahim, R. T., Godfrey, V., & Efe, B. U. (2021). Contributions of donor agencies to the development of library resources in specialized libraries in Nigeria. Niger Delta Journal of Library and Information Science, 2(1), 70–80.

Kapatel, P. N., & Vaja, B. (2025). Empowering libraries through SWOT analysis: A pathway to growth and innovation. Multidisciplinary Cosmopolitan Journal of Research, 3(6).

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard—Measures that drive performance. Harvard Business Review, 70(1), 71–79.

Kaplan, R. S., & Norton, D. P. (1996). The balanced scorecard: Translating strategy into action. Harvard Business School Press.

Kaplan, R. S., & Norton, D. P. (2004). Strategy maps: Converting intangible assets into tangible outcomes. Harvard Business School Press.

Kotso J.A., & Dauda A. I. (2024). Impact of Accounting Information on Decision-Making Effectiveness in Academic Libraries, British Journal of Multidisciplinary and Advanced Studies: Business and Management Sciences, 5(1),116-130

Lynch, C. A. (2003). Institutional repositories: Essential infrastructure for scholarship in the digital age. portal: Libraries and the Academy, 3(2), 327–336. https://doi.org/10.1353/pla.2003.0039

Madu, E. C., & Adeniran, T. N. (2005). Information technology uses and preservation of resources in libraries and information centres. Evi-Coleman Publications.

Maesaroh, I., Haddow, G., Kholis, N., & Mujib, A. (2024). Librarian expertise, responsiveness, and virtual reference service quality: Do communication channels matter? TEM Journal, 13(3), 2036–2045. https://doi.org/10.18421/TEM133-31

Marr, B. (2022). Strategic performance management: Leveraging and measuring your intangible value drivers. Routledge.

Mbajiorgu, O. F., Ezeani, C. N., Ezema, I. J., & Asogwa, B. E. (2021). Skills and training requirements of librarians for management of digital libraries in Nigerian universities. Trends in Libraries, Information Science and Technology: A Journal of Nigerian Library Association Enugu State Chapter, 1(1), 82–92.

Murphy, K., & DeNisi, A. (2023). New approaches to dealing with performance management: Getting rid of performance appraisals is not the answer. Industrial and Organizational Psychology. (Complete volume, issue, page numbers, and DOI should be added if available.)

Musaigwa, M., & Kalitanyi, V. (2026). Leadership, communication, and employee commitment in digital transformation: An integrated review. International Journal of Applied Research in Business and Management, 7(1). https://doi.org/10.51137/wrp.ijarbm.488

Mutesi, D., & Githiru, M. K. (2025). Internal business processes and organizational performance in Sonarwa Insurance Company in Rwanda. Journal of Research Innovation and Implications in Education, 9(3), 394–406.

Nitecki, D. A., & Hernon, P. (2020). Measuring service quality and impact in academic libraries. Performance Measurement and Metrics, 21(3), 143–157.

Niven, P. R. (2008). Balanced scorecard: Step-by-step for government and nonprofit agencies. John Wiley & Sons, In

Nuut, A. (2006). Evaluation of library performance: Current developments in Estonia. Performance Measurement and Metrics, 7(3), 163–172. https://doi.org/10.1108/14678040610713129

Nwankwo, N. G., Uwaechina, C. G., Suleiman, I. O., & Onyekwena, C. S. (2026). Integrating the balanced scorecard model to improve strategic collection development in academic libraries. International Journal of Social Sciences and Humanities Reviews, 16(1), 135–140.

Oakleaf, M. (2010). The value of academic libraries: A comprehensive research review and report. Association of College and Research Libraries.

Okogwu, F. I., Achebe, N. E. E., & Nwafor-Orizu, O. E. (2023). Electronic information resources and services in academic libraries: A review of trends and challenges. Library Philosophy and Practice, 2023, 1–16.

Oluwagbemiga, O. E., & Ajibike, A. O. (2021). Adoption of balanced scorecard and non-financial performance of tertiary institutions in Nigeria. Management & Accounting Review, 20(1), 177–214.

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.

Orner, S. (2023). Data visualization for collection analysis: Using Tableau to visualize an academic library collection. Pennsylvania Libraries: Research & Practice, 11(1). https://doi.org/10.5195/palrap.2023.278

Osisanwo, T. A., Simisaye, A. O., Awonusi, S. O., & Adegbilero-Iwari, I. (2025). Knowledge utilisation in teaching effectiveness among lecturers in library schools in Southwest, Nigeria. African Journal of Library, Archives & Information Science, 35(2), 59. https://doi.org/10.5281/zenodo.17851371

Otike, F., Barát, Á. H., & Kiszl, P. (2022). Innovation strategies in academic libraries using business entrepreneurial theories: Analysis of competing values framework and disruptive innovation theory. The Journal of Academic Librarianship, 48, 102537.

Parmenter, D. (2020). Key performance indicators: Developing, implementing, and using winning KPIs(4th ed.). Wiley.

Peters, G. S., & Prakashe, V. A. (2025). Role of library-related criteria in ranking of universities: A study. IOSR Journal of Humanities and Social Science, 30(9, Series 5), 35–40.

Poll, R. (2001). Performance measures for libraries. Library Trends, 49(4), 709–724.

Poll, R., & Boekhorst, P. T. (2007). Measuring quality: Performance measurement in libraries (2nd ed.). K. G. Saur.

Redding, S., & Layland, A. (2015). Strategic performance management: Organizing people and their work in the SEA of the future. San Antonio, TX: Building State Capacity and Productivity Center.

Reid, M. M. (2011). Is the balanced scorecard right for academic libraries? The Bottom Line, 24(2), 85–95. https://doi.org/10.1108/08880451111169106

Sahabi, M. K., & Unobe, E. S. (2024). Exploring user satisfaction with library services in Kaduna State University. Lafia Journal of Library and Information Science, 5(1). https://lalibjournals.org/index.php/LJLIS

Sahu, M. K. (2015). Strategic management in academic libraries with reference to users' perspective. International Journal of Advanced Library and Information Science, 3(Special Issue), 192–200. https://doi.org/10.23953/cloud.ijalis.248

Shimray, S. R., Subaveerapandiyan, A., & Ahmad, N. (2025). Digital transformation in academic libraries: E-resources, OPACs and AI in information discovery. Reference Services Review, 53(2), 238–255. https://doi.org/10.1108/RSR-12-2024-0078

Soria, K. M., Fransen, J., & Nackerud, S. (2022). Academic library uses and student success: A review of recent research. College & Research Libraries, 83(1), 23–39.

Stevens, K. (2010). Introduction to library metrics: Statistics, evaluation and assessment. The ANZTLA EJournal, 5, 58–70.

Tran, Q. H. N. (2025). Validation and reliability of performance management's scale on academic libraries. Library Management, 46(6–7), 438–451. https://doi.org/10.1108/LM-02-2025-0024

Yakubu, S. M., & Tornyeva, K. (2025). Analyzing the impact of learning and growth perspective metrics on organizational performance indicators and the moderating role of management support: A thorough exploration of Ghana's oil and gas and telecommunication sectors. International Journal of Research and Innovation in Social Science, 9(4). https://doi.org/10.47772/IJRISS.2025.90400400

Yusuf, A. O., Olajide, M. F., & Bello, Y. (2022). Uses of balance score card (BSC) for effective service delivery in Nigerian academic libraries. Lafia Journal of Library and Information Science, 1(1). https://lalibjournals.org/index.php/LJLIS

Zarita, S. S., Agustian, K., Muhammad, Novriza, F., & Saputra, H. (2025). Assessing the effect of budget efficiency on educational staff performance in public universities of West Aceh Regency. Tadbir: Jurnal Studi Manajemen Pendidikan, 9(2), 703–734. https://doi.org/10.29240/jsmp.v9i2.14864

© Author(s). This work is peer-reviewed, openly published, and permanently archived
This article is openly accessible and reusable with proper attribution.