

Management of Academic Libraries and Client Satisfaction Towards Digital Utilization: Basis for Monitoring Library Operations in SOCCSKSARGEN Region.

Leofel A. Regalado and Adonis S. Besa

Kudarat State University, ACCESS, EJC Montilla, Tacurong City.

DOI: <https://doi.org/10.51583/IJLTEMAS.2026.150500002>

Received: 24 April 2026; Accepted: 29 April 2026; Published: 22 May 2026

ABSTRACT

This study assessed the management of academic libraries and client satisfaction toward digital utilization as a basis for monitoring library operations in the SOCCSKSARGEN Region. A total of 144 respondents from six academic institutions—Mindanao State University, Sultan Kudarat State University, University of Southern Mindanao, Glan Institute of Technology, Malapatan College of Science and Technology, and Makilala Institute of Science and Technology participated in the study. Employing a descriptive-correlational design and guided by CHED Memorandum Order No. 22, series of 2021, the research focused on evaluating the effectiveness of academic library management and its correlation with digital service satisfaction.

Findings revealed a high extent of academic library management ($M = 3.99$, $SD = 0.97$), particularly in the area of library personnel ($M = 4.33$), indicating strong institutional support and staff competence. Client satisfaction with digital utilization was also high ($M = 3.73$, $SD = 1.10$), with perceived usefulness scoring the highest ($M = 3.74$), suggesting that digital resources are considered valuable in supporting academic work. A statistically significant and strong positive correlation ($r = 0.868$, $p < 0.05$) was found between library management and client satisfaction, highlighting the importance of effective library operations in enhancing user experiences.

While respondent profiles such as age, gender, type of institution, and job position did not significantly influence perceptions of library management ($p = 0.080$), these factors were found to significantly influence perceptions of client satisfaction toward digital utilization. A major issue identified was weak technological infrastructure, particularly internet and power connectivity, which hinders full digital transformation.

The study concludes that strong academic library management is essential to enhancing digital utilization and user satisfaction. However, addressing technological barriers remains a critical concern for improving library services in the region.

Keywords: Academic library management; client satisfaction; digital utilization; digital services; user satisfaction; technological infrastructure

Background of Study

In the 21st century, academic libraries have undergone a profound transformation from traditional repositories of printed materials into dynamic centers of digital knowledge and learning. This shift has been largely driven by rapid technological advancements and the increasing demand for instant access to information. As a result, academic institutions have embraced digital innovations to enhance the delivery of library services and improve the overall user experience. The integration of digital resources has not only changed how information is stored and accessed but has also redefined the role of libraries in supporting teaching, learning, and research.

Globally, academic libraries are increasingly adopting digital technologies to improve efficiency, accessibility, and service quality. Digital utilization now encompasses a wide range of services, including e-books, online journals, institutional repositories, and virtual reference systems. These innovations are designed to meet the

evolving needs of modern users, who are often technologically adept and expect seamless, fast, and reliable access to information. Studies have shown that the effective use of digital tools in academic libraries enhances access, education, and service delivery, as emphasized by Rahmanova (2025) in her study on the evolution of libraries in the digital era. significantly contributes to improved academic performance and higher levels of client satisfaction. As such, the ability of libraries to manage digital resources effectively has become a critical factor in determining their relevance and success in the modern educational landscape.

At the international level, higher education institutions continue to invest heavily in digital infrastructure to support the evolving functions of academic libraries. The International Federation of Library Associations and Institutions (IFLA, 2024) emphasizes the need for library management to align with emerging digital trends and user expectations.

In developed countries such as the United States, the United Kingdom, and Australia, academic libraries have implemented advanced systems and user-centered services that prioritize accessibility, digital literacy, and continuous system improvement. These institutions highlight the importance of skilled library personnel, updated technological infrastructure, and responsive service delivery in achieving high levels of user satisfaction. Consequently, effective academic library management has been consistently associated with positive user experiences and enhanced academic outcomes.

In the Philippine context, the Commission on Higher Education (CHED), through CHED Memorandum Order No. 22, series of 2021, has established specific standards for academic library management. These guidelines cover essential components such as library personnel, collection management, service delivery, physical infrastructure, and information and communication technology (ICT) integration.

The implementation of these standards has become increasingly important with the rapid shift toward digital learning, particularly during and after the COVID-19 pandemic. Many academic libraries in the Philippines have transitioned to hybrid or fully digital service models to support remote learning and ensure the continuity of academic activities.

Despite these developments, several challenges persist in the effective implementation of digital library services in the country. Issues such as limited funding, inadequate technological infrastructure, unequal access to digital resources, and varying levels of digital literacy among users continue to hinder full digital transformation.

While well-established institutions in urban centers may have the resources to implement advanced digital systems, those in less urbanized regions often struggle to meet these standards. This disparity underscores the need for localized assessments to better understand the unique conditions affecting academic libraries across different regions.

Region XII, also known as SOCCSKSARGEN, is composed of a diverse group of higher education institutions, including state universities, private colleges, and local institutions. While efforts have been made to enhance digital library services in the region, many institutions continue to face constraints such as unstable internet connectivity, outdated systems, insufficient technological resources, and limited staff training in digital tools.

Additionally, users may have varying levels of digital literacy, which can affect their ability to fully utilize available digital resources. These challenges highlight the importance of evaluating both the management practices of academic libraries and the level of client satisfaction with digital services.

A critical aspect of this evaluation is determining how well academic libraries adhere to established standards, particularly those outlined in CHED Memorandum Order No. 22, series of 2021. Effective management of library resources, including personnel, collections, services, facilities, and ICT infrastructure—plays a vital role in shaping the quality of digital services provided to users.

At the same time, client satisfaction serves as an essential indicator of how well these services meet user's needs and expectations. Factors such as accessibility, usability, relevance of content, and responsiveness of support services all contribute to the overall satisfaction of library clients in a digital environment.

Although several studies have examined digital library services and user satisfaction at global and national levels, there remains a noticeable gap in research focusing on the relationship between academic library management and client satisfaction toward digital utilization in Region XII.

Existing studies often address either institutional management practices or user satisfaction independently, without fully exploring how these elements interact within a localized context. Furthermore, limited research has considered the influence of demographic factors such as age, gender, type of institution, and user role on perceptions of library management and satisfaction.

Given these gaps, there is a need for a comprehensive study that examines both the management of academic libraries and client satisfaction in relation to digital utilization within the SOCCSKSARGEN region. Such an investigation will provide valuable insights into the effectiveness of current library practices and identify areas for improvement, particularly in addressing technological and operational challenges.

By analyzing the relationship between management practices and user satisfaction, this study aims to contribute to the enhancement of academic library services and support the ongoing digital transformation of higher education institutions in the region.

Ultimately, this study seeks to provide a data-driven basis for monitoring and improving library operations in Region XII. By aligning institutional practices with national standards and addressing user needs, academic libraries can better fulfill their role as essential partners in education, research, and knowledge dissemination in the digital age.

METHODOLOGY

Research Design

This study employed a **descriptive-correlational research design** to examine the relationship between the management of academic libraries and client satisfaction toward digital utilization in Region XII. Descriptive research was used to present the current status of academic library management and user satisfaction, while correlational analysis determined the degree of relationship between the independent and dependent variables. Survey questionnaires served as the primary data collection tool, allowing the researcher to gather quantifiable data from respondents. This design is appropriate for identifying patterns, associations, and predictive relationships without manipulating variables.

Locale of the Study

The study was conducted in six (6) higher education institutions in Region XII (SOCCSKSARGEN), consisting of three (3) State Universities and Colleges (SUCs) and three (3) Local Universities and Colleges (LUCs). The region includes the provinces of South Cotabato, Cotabato, Sultan Kudarat, and Sarangani, as well as the cities of General Santos, Koronadal, Tacurong, and Kidapawan.

These institutions were selected due to differences in funding sources, institutional maturity, and access to digital resources. SUCs are funded by the national government and are generally more established, while LUCs depend on local government funding and are relatively newer institutions. This provided a balanced representation of academic libraries in the region.

Respondents of the Study

The respondents consisted of administrators, librarians, support staff, faculty members, and students. Each institution contributed one (1) administrator, one (1) librarian, two (2) support staff, ten (10) faculty members, and ten (10) students, resulting in a total of 144 respondents.

Table 1 Distribution of Respondents

Academic Institution	Administrators	Librarians & Staff	Faculty	Students	Total
Glan Institute of Technology	1	3	10	10	24
Malapatan College of Science and Technology	1	3	10	10	24
Makilala Institute of Science and Technology	1	3	10	10	24
Mindanao State University – General Santos	1	3	10	10	24
Sultan Kudarat State University	1	3	10	10	24
University of Southern Mindanao	1	3	10	10	24
Total	6	18	60	60	144

Note. Each institution contributed an equal number of respondents.

Sampling Technique

The study utilized **purposive sampling**, a non-probability sampling technique in which respondents were selected based on their knowledge and involvement in academic library services. This method ensured that participants had relevant experience in digital library utilization and management.

Data Gathering Instrument

The primary instrument used in this study was a structured survey questionnaire developed based on CHED Memorandum Order No. 22, series of 2021. The instrument consisted of four parts:

- Part I: Respondent Profile
- Part II: Management of Academic Libraries
- Part III: Client Satisfaction Toward Digital Utilization
- Part IV: Issues and Concerns

A **5-point Likert scale** was used to measure responses.

Table 2 Scale for Academic Library Management

Rating Mean Range Verbal Description Interpretation

5	4.20–5.00	Very High	Very strong library management
4	3.40–4.19	High	Strong library management

3	2.60–3.39	Moderate	Fair library management
2	1.80–2.59	Low	Weak library management
1	1.00–1.79	Very Low	Very weak library management

Table 3 Scale for Client Satisfaction Toward Digital Utilization

Rating Mean Range Verbal Description Interpretation

5	4.20–5.00	Very Satisfied	Extremely useful and satisfactory
4	3.40–4.19	Satisfied	Very useful and satisfactory
3	2.60–3.39	Neutral	Moderately useful
2	1.80–2.59	Dissatisfied	Minimally useful
1	1.00–1.79	Very Dissatisfied	Not useful

Validation of Research Instrument

The research instrument underwent expert validation by professionals in librarianship and research. Reliability testing was conducted using Cronbach's alpha.

Table 4 Reliability Test Result

Cronbach's Alpha Number of Items

0.983 87

Note. The value of 0.983 indicates excellent internal consistency.

Data Gathering Procedure

The researcher secured approval from the Graduate School and relevant authorities.

Endorsements were obtained from CHED Region XII and participating institutions. Questionnaires were personally distributed and retrieved after completion. The collected data were encoded and prepared for analysis.

Statistical Treatment

The following statistical tools were used:

- **Frequency and Percentage** – for respondent profile
- **Mean and Standard Deviation** – for library management and satisfaction levels
- **Pearson r Correlation** – to determine relationships
- **Analysis of Variance (ANOVA)** – to test differences
- **Regression Analysis** – to determine influence of variables

- **Ranking and Frequency Counts** – for issues and concerns

RESULTS AND DISCUSSION

This section presents the findings of the study, including the demographic profile of respondents, the extent of academic library management, client satisfaction toward digital utilization, and the statistical relationships among variables.

The demographic profile of the respondents consists of 144 individuals drawn from six higher education institutions in Region XII, including three State Universities and Colleges (SUCs) and three Local Universities and Colleges (LUCs). In terms of gender, female respondents dominated the sample, accounting for 96 individuals or 66.67%, while male respondents comprised 48 or 33.33%. This indicates a higher representation of females, which may reflect the actual composition of academic communities, particularly in library and education-related fields.

Regarding age distribution, the majority of respondents fell within the 15–25 age bracket, comprising 43.75% of the total population. This suggests that a large portion of participants were students or young individuals at the early stages of their academic or professional careers. In contrast, older age groups were minimally represented, with only 4.86% aged 46–55 and 2.08% aged 56–65, indicating limited participation from senior personnel.

In terms of institutional affiliation, the respondents were evenly distributed between colleges and universities, with 72 respondents (50%) from each type. This balanced representation strengthens the validity of comparisons across institutional categories.

As to roles or positions, students formed the largest group with 61 respondents (42.36%), followed closely by faculty members with 60 respondents (41.67%). Library staff accounted for 17 respondents (11.81%), while administrators comprised only six respondents (4.17%). This distribution highlights strong representation from primary users of library services, particularly students and faculty.

The extent of academic library management in Region XII was found to be generally high, with a grand mean of 3.99 (SD = 0.97). This indicates that institutions demonstrate strong management practices across key domains. Among the five components, library personnel obtained the highest mean score ($M = 4.33$, $SD = 0.82$), interpreted as very high. This reflects strong staffing competence, professionalism, and responsiveness, suggesting that human resources serve as a key strength of academic libraries in the region.

On the other hand, services and utilization recorded the lowest mean ($M = 3.74$, $SD = 1.07$), as supported by Chopra, Misra, and Bhaskar (2024), who emphasized that service quality and utilization are closely linked to perceived usefulness and user satisfaction in digital library environments although still within the high category.

This relatively lower score suggests variability in service delivery, possibly due to differences in access to advanced digital platforms, interlibrary services, or user awareness. The higher standard deviation also indicates inconsistencies among institutions. The rating for physical facilities ($M = 4.08$, $SD = 0.96$) is supported by the findings of Akinyemi, Ajayi, and Afolabi (2024) and collection management (M

$= 3.99$, $SD = 0.90$) were rated high, indicating adequate infrastructure and relevant collections. Information technology infrastructure and services ($M = 3.81$, $SD = 1.11$) also received a high rating, though the result suggests the need for improved digital systems and more consistent technological integration.

Client satisfaction with digital utilization yielded a grand mean of 3.73 ($SD = 1.10$), interpreted as satisfied. This indicates that users generally have positive perceptions of digital library services, consistent with the findings of a study conducted by Azib et al. (2025). Among the eight dimensions, perceived usefulness received the highest rating ($M = 3.88$, $SD = 1.08$), suggesting that users recognize the value of digital resources in supporting academic tasks. This finding emphasizes the importance of functionality and relevance in driving user

satisfaction.

Conversely, accessibility of digital resources recorded the lowest mean ($M = 3.51$, $SD = 1.18$), indicating some challenges in accessing digital platforms. Issues such as login difficulties, connectivity problems, and inconsistent system performance may contribute to this result. Other dimensions, including relevance and quality of content, support services, and responsiveness, all received relatively high and equal ratings ($M = 3.81$), reflecting user satisfaction with both content and assistance provided by library personnel.

User experience ($M = 3.73$), user training ($M = 3.70$), and frequency of use ($M = 3.56$) were moderately rated, which aligns with the findings of Eiriemiokhale (2021), who emphasized that frequency of use and awareness of electronic databases significantly influence user engagement and satisfaction in digital library systems, suggesting opportunities for improvement in usability, training programs, and user engagement.

The correlation analysis revealed a strong positive relationship between academic library management and client satisfaction toward digital utilization ($r = 0.868$, $p < 0.05$). This indicates that improvements in library management are closely associated with increased user satisfaction, which is supported by the findings of Fagyan et al. (2023) on the impact of library use frequency on student satisfaction. As a result, the null hypothesis of no significant relationship was rejected, confirming that effective management practices significantly influence user perceptions and experiences.

Further analysis using ANOVA showed a statistically significant difference in the management of academic libraries across institutions ($p < 0.05$). The use of the Bonferroni post hoc test confirmed that specific institutional groups differ significantly from one another. This implies that variations in management practices exist among SUCs and LUCs, likely influenced by differences in resources, funding, and institutional priorities.

Regression analysis examining the influence of respondents' profiles on library management revealed a strong model ($R = 0.735$, $R^2 = 0.540$), indicating that 54% of the variance in management perceptions is explained by factors such as position, type of institution, gender, and age. The model was statistically significant ($p = 0.004$), suggesting that demographic and professional characteristics play a substantial role in shaping perceptions of library management.

In contrast, the regression model for client satisfaction showed a weaker relationship ($R = 0.284$, $R^2 = 0.080$), although still statistically significant ($p = 0.045$). This indicates that while demographic factors influence satisfaction, they account for only a small portion of its variability, suggesting that other factors—such as system quality, accessibility, and user experience—may have a stronger impact.

Finally, the study identified key issues in the digitalization of academic libraries. The most prominent concern was weak technological infrastructure, as supported by Bakari and Ali (2023), who emphasized similar challenges in ICT integration and implementation. Open particularly unstable internet connectivity and power supply, reported by the majority of respondents. This highlights a critical barrier to effective digital service delivery. Conversely, outdated computer equipment was the least reported issue, though still a concern for many users. Other challenges included limited institutional support, insufficient staffing, and low digital literacy among personnel.

Overall, the findings indicate that academic libraries in Region XII demonstrate strong management and generally satisfactory digital services, which is consistent with the study of Iqbal and Rafiq (2023) on the determinants of overall user success in an academic digital library environment. However, addressing infrastructure limitations, improving accessibility, and enhancing user training are essential to achieving more effective and inclusive digital library systems.

CONCLUSION

Based on the findings of the study, the following conclusions were drawn regarding the assessment of academic library management and client satisfaction toward digital utilization in Region XII:

The demographic profile shows that the respondents are predominantly female and belong to the younger age group, particularly within the 15–25 range, indicating a strong representation of students and early-career individuals. Equal distribution between colleges and universities ensures balanced institutional representation, while the dominance of students and faculty provides a comprehensive perspective from primary users of library services. However, the relatively small number of administrators suggests limited representation of higher-level decision-makers.

Academic libraries in Region XII are generally well-managed, with library personnel identified as the strongest component. Competent and responsive staff significantly contribute to efficient service delivery and user satisfaction. Nevertheless, inconsistencies were observed in areas such as service utilization, digital integration, and information technology infrastructure. These gaps indicate disparities among institutions and suggest that available resources are not fully maximized, possibly due to limited user awareness and uneven levels of digital literacy.

In terms of client satisfaction, users are generally satisfied with digital library services, particularly in perceived usefulness, content quality, and support services. This implies that digital platforms effectively support academic activities. However, accessibility received the lowest rating, reflecting challenges such as connectivity issues, login difficulties, and system reliability. Moderate ratings in user training and frequency of use further suggest that some users lack confidence or awareness in navigating digital resources. While the overall satisfaction remains positive, these concerns highlight the need for continuous improvement in accessibility and user engagement.

The study confirms a strong and significant relationship between academic library management and client satisfaction toward digital utilization. Improved management practices—particularly in staffing, resource allocation, and service delivery—are associated with higher levels of user satisfaction. This finding underscores the importance of effective management in enhancing digital library experiences and supports the rejection of the null hypothesis.

Significant differences were also found in the management of academic libraries across institutions. Variations in personnel, collections, services, facilities, and IT infrastructure indicate uneven implementation of library standards. These disparities suggest differences in funding, administrative priorities, and institutional capacity, which affect the quality and consistency of library services in the region.

Furthermore, respondents' profiles, including position, institutional type, gender, and age, were found to significantly influence perceptions of library management. These variables explain a substantial portion of the variability in management practices, indicating that different stakeholders bring diverse perspectives and experiences that shape how library services are viewed and implemented.

In contrast, while respondents' profiles also significantly influence client satisfaction, their impact is relatively weak. This suggests that satisfaction is more strongly affected by other factors, such as system usability, accessibility, quality of digital content, and the effectiveness of support services, rather than demographic characteristics alone.

Finally, the study identified several key issues affecting the digitalization of academic libraries in the region. The most critical concern is weak technological infrastructure, particularly unreliable internet connectivity and power supply, which limits access to digital resources. Additional challenges include limited funding, resistance to technological adoption, insufficient staffing, outdated equipment, and low digital literacy. These issues highlight both structural and operational barriers that hinder the full implementation of digital library systems.

Overall, while academic libraries in Region XII demonstrate strong management and satisfactory digital services, their continued development depends on addressing infrastructure limitations, improving accessibility, and strengthening institutional support to achieve more effective and sustainable digital transformation.

REFERENCES

1. Akinyemi, T. F., Ajayi, I. A., & Afolabi, O. A. (2024). Physical facilities and library situation as correlates of academic staff job performance in Southwest Nigerian universities. *Euro Global Contemporary Studies Journal (EGCSJ)*, 4(6), 1–10. <https://doi.org/10.5281/zenodo.14546977zenodo.org>
2. Azib, N. A., Abu, R., Rafie, S. K., & Tokiran, N. S. M. (2025). Evaluating user satisfaction with digital library services: A study of academic libraries in higher education institutions.
3. *International Journal of Research and Innovation in Social Science*, 9(1), 4511–4517. <https://dx.doi.org/10.47772/IJRISS.2024.8120379>
4. Bakari, A. D., & Ali, M. M. (2023). Introduction of ICT subject in Zanzibar primary education: Challenges and opportunities. *Social Sciences & Humanities Open*, 8(1), 100522. <https://doi.org/10.1016/j.ssaho.2023.100522>
5. Chopra, G., Misra, P., & Bhaskar, P. (2024). Evaluation of digital library continuous usage: Role of digital library overall quality, perceived usefulness, and user satisfaction. *International Journal of Information Systems and Change Management*, 17(1), 30–53. <https://doi.org/10.1504/IJISCM.2024.138086>
6. Commission on Higher Education. (2021). CMO No. 22, s. 2021: Requirements for higher education institutions (HEIs) common to all programs. Commission on Higher Education. <https://www.ched.gov.ph>
7. Eiriemiokhale, K. A. (2021). Frequency of use and awareness of electronic databases by university lecturers in South-west Nigeria. *Library Philosophy and Practice*. <https://digitalcommons.unl.edu/libphilprac/4106/>
8. Fagyan, C. K., Macalingay, M. B., Abellada, A. P., Munar, B. B., Depnag, M. C., & Kitani, A. B.
9. M. (2023). The impact of library use frequency on student satisfaction: An evaluation of resources, services, and facilities. *Iconic Research and Engineering Journals*, 7(1), 339–346. <https://www.irejournals.com/paper-details/1704885>
10. International Federation of Library Associations and Institutions (IFLA). (2024). IFLA Trend Report 2024: Facing the future of information with confidence. <https://repository.ifla.org/items/ae4dfcc0-8def-4318-8c4c-7f0507d15609>
11. Iqbal, M., & Rafiq, M. (2023). Determinants of overall user success in an academic digital library environment: Validation of the integrated digital library user success (IDLUS) model. *The Electronic Library*, 41(4), 387–418. <https://doi.org/10.1108/EL-10-2022-0230>
12. Rahmanova, A. (2025). Evolution of libraries in the digital era: Redefining access, education, and cultural preservation. *Library Archive and Museum Research Journal*, 6(1), 23–38. <https://doi.org/10.59116/lamre.1540>