

AVAILABILITY AND USE OF ICT TOOLS FOR EFFECTIVE LIBRARY SERVICES DELIVERY IN ACADEMIC LIBRARIES IN KWARA STATE

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Abstract

This study explores the availability and utilization of Information and Communication Technology (ICT) tools to enhance the delivery of library services in academic libraries across Kwara State, Nigeria. As digital advancements continue to reshape traditional library landscapes, understanding the current state of ICT integration in academic libraries becomes crucial for fostering effective learning environments. The study was guided by three (3) research questions. The total population was one hundred and seventy-one (171). Convenience sample technique was adopted to select the sample. Questionnaire was used to collect the data. There were three questionnaires in all, one for users, one for library staff, and one for heads of libraries. Out of one hundred and seventy-one (171) questionnaires administered, one hundred and fifty (150) was returned and used for the study. The result revealed that there is availability of ICT tools in the academic libraries under study. Computers, online journals, library software, wireless internet among others were among the ICT tools and resources found to be available in the libraries. Also, the study revealed that the students have confidence in using computers and confidence in the use ICT tools for personal and professional development among other items

Keywords: *Availability of ICT Tools, ICT Tools in Library Management, Use of ICT in Libraries Academic Information Systems and Kwara State Libraries*

Introduction

In the era of rapid digital transformation, information and communication technology (ICT) has emerged as a transformative force across various sectors, including education

and libraries. Academic libraries in Kwara State, Nigeria, are crucial in supporting the academic community's learning, teaching, and research activities. To effectively serve their users, these libraries need to embrace ICT and seamlessly integrate it into their

service delivery (Adeniran & Adafin, 2022). According to Adeniran & Adafin, (2022), the availability and utilization of ICT in academic libraries have the potential to revolutionize access to information, improve efficiency, and offer innovative services. By harnessing ICT, libraries can transcend the limitations of physical collections and provide global access to a wide range of digital materials, online databases, and scholarly resources.

ICT also enables libraries to adopt user-centered approaches, personalizing services to meet the diverse needs of their patrons (Das, 2025). However, it is crucial to assess the current state of ICT infrastructure, resources, and services in academic libraries in Kwara State. This assessment will help identify gaps, challenges, and opportunities for effectively leveraging on ICT. Also, developing strategies and recommendations to overcome barriers and maximize the benefits of ICT implementation is vital for delivering high-quality library services (Adebayo, 2024). Adigun, Ajani and Enakrire (2024) stated that academic libraries have long been recognized as vital institutions for facilitating learning, research, and knowledge dissemination. In the digital age, ICT has revolutionized the accessibility, storage, and dissemination of information, offering new avenues for libraries to expand their resources beyond physical collections (Rahmanova, 2025).

However, academic libraries in Kwara State face the dual challenge of managing traditional print collections while adapting to the digital era. The availability and utilization of ICT play a crucial role in addressing this challenge and enhancing the delivery of library services. According to Eluri (2025), the dynamics of ICT in library service delivery, librarians' policymakers, and stakeholders can collaboratively develop an ICT-driven roadmap. This roadmap will enhance access to information, streamline operations, and create an environment

conducive to research and learning. This work will empower academic libraries to adapt to evolving user needs, bridge the digital divide, and contribute to the advancement of education and scholarship in Kwara State.

Library service delivery encompasses providing essential services to patrons, fostering community engagement, and advancing literacy and education. This involves tasks like procuring and categorizing diverse materials, delivering reference services, conducting information literacy programs, incorporating technology through online catalogs and digital resources, and overseeing circulation services such as borrowing and interlibrary loans Chatikobo and Pasipamire (2024). Additionally, libraries coordinate events, workshops, and outreach initiatives, collaborating with diverse communities to improve services. Effective library service delivery in today's dynamic environment requires user feedback, assessments, a commitment to accessibility, and continuous improvement through professional development and staying informed about trends. Academic libraries, affiliated with educational institutions like universities or colleges, serve to support the academic community's teaching, learning, and research requirements (Odularu, 2025). Furthermore, ICT, academic libraries in Kwara State can offer innovative services that go beyond physical limitations. Online catalog systems, digital repositories, and electronic document delivery services enable remote access to resources, enhancing convenience and expanding research possibilities. ICT also enables collaboration, resource sharing, and interlibrary loan systems, optimizing collections and broadening the range of available materials (Mojjada, 2025). It is obvious that ICT has positively impacted and improved service delivery in the library services and therefore, Rahmanova (2025) said that several African libraries and scholars have reiterated the

need for efficient and effective service delivery with aid of ICT. This can only be accomplished through availability and Use of ICT tools.

1.2 Statement of the problems

From the time immemorial, academic libraries have had disruptive behaviours as a tremendous challenge on how academic library services can effectively and efficiently use information and communication technology (ICT) to revolutionize access to information and enhance library services. This challenge varies from one library to another. In most cases the extent of the problem is so restricted that it seems non-existent, in some others; the dimension is so immense that it calls for serious concern. The findings of a study conducted by Setthasuravich and Kato (2025), on the readership in selected urban libraries in Nigeria, revealed that every library has delinquent client problem and that there is no direct correlation between the type of library and the extent of the problem.

The problem seems to be universal. Studies by Bond et al. (2024) acknowledge that, with the increasing rate of admission into higher institutions, libraries are likely to be faced with a number of problems exhibited by its users. According to Aryee and Alfa (2025), one of which is the increasing number of disruptive behavior users' exhibit that seems to occur inside the library. This implies that most libraries in the country are behind in the modern trend. It addresses several key aspects, including the availability of ICT infrastructure and resources, the utilization of digital resources and online databases, the provision of user-centered services and personalized experiences, the integration of ICT into library policies and strategies, and the identification of challenges and opportunities in utilizing ICT for effective library services.

Research Questions

The study was guided by the following research questions

1. What are the ICT tools available in academic libraries in Kwara State?
2. What is the frequency of use of ICT tools in academic libraries in Kwara State?
3. What is the ICT literacy level of users of academic libraries in Kwara State?

Review of Related Literature

Information and Communication Technology (ICT) tools encompass a broad range of technologies that facilitate the acquisition, storage, processing, and dissemination of information. These tools play a pivotal role in various sectors, including education, business, healthcare, and governance (Shittu et al. 2024). The concept of ICT tools encompasses hardware, software, networks, and digital content that enable communication and interaction. As defined by the International Telecommunication Union (ITU), ICT includes both traditional technologies (such as telephony and broadcast media) and newer digital technologies (such as the internet and mobile communication) (ITU, 2012)

The importance of ICT (Information and Communication Technology) in library services delivery cannot be overstated, especially in the context of academic libraries in Kwara State. ICT has revolutionized the way libraries operate and has become an integral part of their service delivery (Adeyemi, Sanni, Shittu, Shiru and Shittu 2025). Here are some key points highlighting the significance of ICT in library services: Access to a Wide Range of Resources: ICT enables academic libraries to expand their resources beyond physical collections. With the availability of digital materials, online databases, and scholarly resources, library users have access to a vast

amount of information, regardless of their physical location. This enhances the breadth and depth of resources available to support teaching, learning, and research activities. Enhanced Efficiency: According to Viji et al. (2024) ICT tools such as computers and technologies streamline library processes, making them more efficient and time-saving.

Viji et al. (2024) stated that online catalog systems allow users to quickly search and locate specific resources, eliminating the need for manual searching through shelves. Automation of tasks such as circulation management, cataloging, and interlibrary loan requests further improves efficiency, freeing up librarians' time to focus on user services. Personalized Services: ICT enables libraries to adopt a user-centered approach and provide personalized (Meesad and Mingkhwan, 2024). Through user profiles, preferences, and borrowing history, libraries can tailor their recommendations and notifications, offering a more personalized experience. This enhances user satisfaction and engagement, fostering a positive relationship between library and patrons (Ali, Tantawi, Nasution and Zahra 2025). Remote Access and Convenience: With ICT, academic libraries can provide remote access to resources, allowing users to retrieve information from anywhere, at any time. Electronic document delivery services, online journals, and digital repositories facilitate convenient access to scholarly materials, eliminating the limitations of physical distance and opening up opportunities for distance learners and off-campus researchers (Eluri et al, 2025).

According to Ugodu, Ibenne and Durodolu (2025) Collaboration and Resource Sharing: ICT facilitates collaboration and resource sharing among libraries, enabling them to pool their resources and provide access to a broader range of materials. Interlibrary loan systems, consortia, and digital repositories promote resource sharing, ensuring that users have access to a diverse collection of

materials, even if they are not physically housed within their home institution's library. On the other hand, digital Preservation: ICT plays a critical role in preserving and archiving valuable digital materials. Libraries can digitize rare and fragile collections, ensuring their long-term preservation and accessibility. Digital preservation practices protect against loss or damage, ensuring that valuable information is available for future generations. Overall, the effective use of ICT in library services delivery in academic libraries in Kwara State enhances access to information, improves efficiency, provides personalized services, and facilitates collaboration (Das, 2024). However, embracing ICT, libraries can adapt to the evolving needs of users, support research and learning activities, and contribute to the advancement of education and scholarship within the region.

According to Wang, Noorhidawati, Yanti Idaya and Yuan (2025), the pivotal role of academic libraries as essential resources for students, faculty, and researchers is emphasized, highlighting their support for educational and research pursuits. The review further underscores the transformative potential of ICT in revolutionizing access to information, surpassing the limitations of physical collections, and broadening the range of available resources. An in-depth analysis was conducted by Das (2024) to explore the various ICT tools and technologies that academic libraries can leverage to enhance their services. These include online catalog systems, digital repositories, electronic document delivery services, and collaborative platforms. The findings revealed that by utilizing these tools, libraries can improve information accessibility, storage, and dissemination. Similarly, Yahaya et al. (2024) explored a review that critically examines the challenges and barriers encountered by academic libraries in Kwara State when effectively implementing ICT for service

delivery. The findings revealed key challenges as insufficient ICT infrastructure, limited resources, inadequate technical expertise, and resistance to change. To address these obstacles, the review identifies best practices and successful case studies from other regions, presenting valuable insights and potential solutions for enhancing ICT utilization in Kwara State's academic libraries

The role of academic libraries in educational institutions is of utmost importance, as they serve as essential resources for students, faculty, and researchers within the academic community. These libraries play a vital role in supporting teaching, learning, and research endeavors, providing access to a wide range of information and resources (Rafiq, 2021). ICT has transformed the way information is accessed, stored, and disseminated. Academic libraries can leverage ICT tools and technologies to expand their resources beyond physical collections. Online databases, digital materials, e-books, and scholarly journals have become increasingly prevalent, offering a wealth of information that can be accessed by library users (Das, 2022).

Furthermore, ICT empowers academic libraries to adopt user-centered approaches and personalize their services. With the utilization of ICT tools, libraries can tailor their offerings to meet the diverse needs of their patrons, providing a more customized and efficient experience (Odularu, 2025). In addition, academic libraries in Kwara State have a crucial role to play in utilizing ICT for effective library services delivery. By embracing ICT, these libraries can expand

their resources, enhance access to information, and provide personalized services. By staying abreast of technological advancements and adapting to the digital era, academic libraries can continue to serve as invaluable assets within educational institutions, supporting the academic pursuits of students, faculty, and researchers (Odularu 2025). With the rapid advancements in technology, academic libraries are required to adapt and harness the potential of ICT to meet the evolving needs and expectations of library patrons.

Methodology

The study employed ex-post-facto descriptive research design. The population of the study was 250 undergraduate students that were selected using convenience sampling technique. The entire population was used because the number is manageable. Questionnaire was used to collect the data. There were three questionnaires in all, one for users, one for library staff, and one for heads of libraries. The questionnaire was validated through pretest and expert advice and had reliability co-efficient of 0.71. The data collected were analyzed by means of percentages. Data collection will be conducted both physically and electronically to maximize response rates. Out of 250 (two hundred and fifty) questionnaire administered, 230 (two hundred and thirty) were returned and used for the analysis. The collected data was analyzed using descriptive statistics (frequency, percentages, mean, and standard deviation) and inferential statistics (Chi-square and Pearson's correlation) with SPSS version 25.0.

Data Analysis

Distribution of the respondents by institution

Table 1: Demographic Characteristics of the Respondents

Gender	Frequency	Percentage
Male	82	54.7%
Female	68	45.3%
Total	150	100

Table 2: Academic Level

Academic level	Frequency	Percentage
100	14	9.3%
200	42	28.0%
300	33	27.0%
400	25	16.7%
500	36	24.0%
Total	150	100

Table 1: indicates that out of 150 respondents, 82(54.7%) were male students while 68 (45.3%) were female. This shows that male respondents who participated in the study were more than their female counterpart.

Table 2: revealed that out of 150 undergraduate students sampled, 14 (9.3) were 100 level students, 42 (28.0%) were in 200 level, 33(27.0%) were in 300 level, 25 (16.7%) were in 400 level while 36 (24.0%) were in 500 level.

Table 2: ICT tools available in academic libraries

SN	Items	Mean	Std.
1	To what extent are computers available in your academic library	3.17	1.114
2	To what extent is library staff available to help with ICT tools in your academic library	2.36	1.137
3	To what extent is high-speed internet available in your academic library	1.94	1.063
4	To what extent is wireless internet available in your academic library	2.48	1.134
5	To what extent is library software available in your academic library	2.91	1.045
6	To what extent is online journal access available in your academic library	3.01	.831
	Average mean and SD	2.69	1.062

Table 2 above reveal the ICT tools available in academic libraries. Among the ICT tools as indicated by the respondents, computer

has the highest mean (X=3.11), followed by online journal access (X =3.01), library software (X =2.91), wireless internet (X=2.48), availability of staff (X= 2.36) and

high speed internet (1.94). This tends to support the findings of Ugwoke (2011) that ICT resources are available in different proportions in academic libraries in Kwara State?

However, in some of the universities studied, some of the available ICT facilities were not functional. This situation calls for a serious concern as different ICT facilities make some valuable contributions to various aspects of educational development as effective learning through expanding access,

Research Question 3: What is the frequency of use of ICT tools in academic libraries in Kwara State?

Table 4: Frequency of use of ICT tools in academic libraries

SN	Items	Mean	Std.
1	How often do you use computers in your academic library	3.37	.855
2	How often do you use high-speed internet in your academic library	3.49	.673
3	How often do you use wireless internet in your academic library	3.36	.753
4	How often do you use library software in your academic library	3.45	.701
5	How often do you use online journal access in your academic library	3.45	.729
6	How often do you get help from library staff with ICT tools in your academic library	3.47	.564
7	How often do you use E-library in your academic endeavour	3.45	.661
	Average mean and SD	3.43	0.705

The result presented in table 3 indicates that the respondents agreed on all the items mentioned in the table. Analysis of the items above, taking the bench mark of mean as 2.50, the responses of the undergraduate students' (means) for the seven questionnaires items were above the bench

mark of 2.50 mean. The average mean and standard deviation are (M = 3.23, SD = 0.705). This indicated that the undergraduate students' frequency of use of ICT tools in academic libraries under study was at very high.

Research Question 4: What is the ICT literacy level of users of academic libraries in Kwara State?

Table 5: ICT literacy level of users of academic libraries

SN	Items	Mean	Std.
1	How confident are you in using computers	3.47	1.354
2	How confident are you in using the internet	3.33	.596
3	How confident are you in finding and evaluating information	3.15	.888

4	How confident are you in communicating and collaborating using ICT tools	3.28	.696
5	How confident are you in creating content using ICT tools	3.29	.863
6	How confident are you in using ICT tools for personal and professional development	3.37	.649
	Average mean and SD	3.32	0.841

Table 4 showed the ICT literacy level of users of academic libraries. The table revealed that the respondents have confidence in using computers and confidence in the use ICT tools for personal and professional development with mean rating of (N=4.47) and (N=4.37) respectively. The average mean and standard deviation are (N = 3.32, SD = 0.841). This indicated that the frequency of use of ICT literacy level of users in academic libraries was very high level. The result of the study is in line with the findings of O'Sullivan (2020) who stated that, academic libraries in Kwara State have a crucial role to play in utilizing ICT for effective library services delivery. By embracing ICT, these libraries can expand their resources, enhance access to information, and provide personalized services. By staying abreast of technological advancements and adapting to the digital era, academic libraries can continue to serve as invaluable assets within educational institutions, supporting the academic pursuits of students, faculty, and researchers.

Conclusion

In conclusion, based on the result of the study, it is evidently clear that there is availability of ICT tools among all the academic libraries under study. Some of the ICT tools that are found are computer, online journal access, library Software, and wireless- internet among others. It was also indicate that their frequency of use of ICT tools in academic libraries under study was very high. Furthermore, ICT literacy levels

of user's of academic libraries were revealed, they include confidence in using computers and confidence in the use ICT tools for personal and professional development among other items.

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Comment

- The abstract was not logically presented, full of junk information and did not capture the essentials of empirical research. (I have done the needful)
- The work was inconsequential and not logically presented (I have done the needful)
- About 56 in-text citation but 26 were list in the reference (I have done the needful)
- The was no discussion with literature, (I have done the needful)
- The methodology was completely not suitable, (I have changed it)
- There was no conclusion, (I have added it)