

## THE USE OF KNOWLEDGE AND COMMUNICATION TECHNOLOGY IN ACADEMIC LIBRARIES IN NIGERIA: A CASE STUDY OF KWARA STATE UNIVERSITY LIBRARY, MALETE, NIGERIA

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### To cite this article:

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**Abstract:** Nigerian libraries have added value to the services they provide through information and communication technology (ICT). This study used a survey research method on the use of ICT in Nigerian libraries: a case study of the Kwara State University library. The respondents were students and faculty members from the university. The results show that the Kwara State University library has an abundance of computers connected to the Internet using the Millennium web program. Students and Faculty Members Use Online Public Access (OPAC) to Iron out Material on Shelves. The study reveals several reasons for the use of the Internet by participating faculty and students. But the least use of ICT has been electronic databases. The faculty members surveyed with the highest frequency were of those, 50 (83%) use the Internet to update knowledge, while the highest respondents 179 students (66%) use the Internet to complete projects. However, proper training of library staff will increase the use of electronic databases.

**Keywords:** ICT, Kwara State University, faculty, students, libraries, Nigeria.

## 1.0 Introduction

The effectiveness of the library as a tool for education is determined by its success, which the library is able to provide and meet the user's information needs. In the 21st century, it is considered the era of the information revolution. Advances in information technology have led to long-term developments in the higher education sector. An example of this is the application of digital information in learning. Libraries and information centers in Nigeria are not only equipped with materials in traditional form but also in electronic form; they offer users a wide range of information sources.

Before the advent of ICT, the work of libraries in Nigeria was stressful and a waste of time without making room for flexibility. However, with the introduction of information and communication technology in Nigeria, particularly in higher

education institutions such as Kwara State University, there is a simultaneous access by many users, which helps bridge the global information gap and creates a brighter future for students (Omagbemi, Akintola, and Olayiwola, 2004).

Information and Communication Technology, commonly abbreviated as ICT, is often used as an expanded synonym for information technology (IT). In Bappah (2010), Wirsy and Shafack define "ICT" as a broad term that includes the aggregation (acquisition), organization (encapsulation), storing, and retrieving (dissemination) of information that may be present in text or digital forms (books, documents), graphics, audio (audio and visual), or a combination of all of the above (multimedia), using a combination of computers and telephony distance learning.

### 1.1 Objective of Study

The main objective of the study is to use of knowledge and

communication technology in academic libraries in Nigeria. While the specific objectives of this study are:

1. To examine the availability of ICT in KWASU University Library
2. To identify the ICT resources used by library staff and students
3. To determine the frequency of the ICT resource usage.
4. To identify the purpose of using ICT resources
5. To identify the Problems encountered while using ICT resources

## 2.0 Literature Review

Academic libraries are seeing greater improvements in the areas of teaching and learning, research activities, and society. Iwu and Yusuf (2010) confirmed that 61.9% of students at Covenant University use the OPAC to locate items on shelves. In a similar study by ILO and Ifijeh (2010), 94% of Covenant University final year students indicated the presence of the Internet had a greater impact on their projects. Also, Nwezeh (2010) in a study on the use of ICT in Nigerian universities found that 78% of staff and 85% of students at Obafemi Awolowo University use the Internet for their projects. Moreover, the results of Krubu and Osawaru (2011) define ICT resources and the use of resources available at John Harris and Benson Idahosa University Libraries as a search engine, the Internet, CDs, an Internet database, and the World Wide Web. These resources are used to obtain, store, process, retrieve, and disseminate information. It has information and communication technology. It allowed Nigerian academic libraries to use the Internet for search engines such as Yahoo, Google, email, etc. and access to online digital resources like Amazon, Wikipedia, etc.

Both academic and public libraries play a major role in the development of the workforce in any country. Public libraries must serve the public's information needs. But Emojorho (2010) in a study on ICT and collection management in public libraries found that only a few public libraries in the South, South and Nigeria are computerized and make use of the Internet. Moreover, it is not sufficiently funded. Computers are unavailable, and libraries lack a sophisticated workforce. But private libraries in Nigeria are aware of the economic value of ICT in the growth and development of their businesses, and therefore have computers connected to the Internet. Abubakar (2010) in a study of the availability and use of ICT in six Nigerian university library schools, the availability of computers, the Internet, CDs, e-mail, microfilm, microfiche, video tapes, and slide projectors were identified as available resources

and that they used the resources exclusively for education and training.

Africa's university libraries are the hub, and research for development activities requires internet connectivity to be applicable in this age of ICT. Etim (2004) notes in Okon(2005) that technological development has led to a shift from the traditional information environment to an electronic environment such as CDs, online services, and online databases. Bandwidth, according to Alhasan and Adepoju (2007), is the amount of data that a computer network can transfer in a certain time period. Omekwe and Echezona (2008) pointed out that the digital divide between the North and South is relatively skewed against Africa, making global access to information faster, broader, and more diversified in Europe and America than in Africa. Kamba (2008) explored the problem of information technology, especially Internet use in Nigeria's libraries, to include inadequate and weak information infrastructure.

Krubu and Osawaru (2011) reveal some of the factors hampering the impact of ICT in Nigerian university libraries, such as lack of research skills, epileptic power supplies, expensive software and hardware, and huge amounts of money spent on fuel generators. Oketunji (2004) asserts that the Internet and other ICTs provide a golden opportunity for the provision of value-added services by libraries. Cataloging, abstracting, publishing, and digitizing local research are ways to facilitate learning. Aina (2004) identified the negative non-interference attitude of lecturers, students, and libraries as other factors preventing the development and use of ICT in university libraries in Nigeria. Furthermore, Aina acknowledges the high cost of ICT training but believes that library staff and users should do something themselves to improve their IT skills. Finally, Allison (2007) suggests the continuation of information literacy programs because he has found that users are not aware of the information sources available in libraries or do not know how to access them.

## 3.0 Methodology:

Survey research methodology was used for the study. The study population consisted of 4650 library users, 4530 registered students, and 120 faculty members at KWASU University. 350 library users (270 students and 80) faculty members were sampled from this cohort using a random sampling technique. Of these, 350 questionnaires were submitted, of which 330 were duly completed. Of the 350 questionnaires completed, 270 (82%) and 60 (18%) are students and faculty members, respectively. The instrument adopted for the study was a two-part questionnaire that was

**IJO- INTERNATIONAL JOURNAL OF SOCIAL SCIENCE AND HUMANITIES RESEARCH****( ISSN 2811-2466 )****Abdrahman Atanda Moustapha1\***<https://ijoournals.com/>**Volume 08 || Issue 10 || October, 2025 ||****"THE USE OF KNOWLEDGE AND COMMUNICATION TECHNOLOGY IN ACADEMIC LIBRARIES IN NIGERIA: A CASE STUDY OF KWARA STATE UNIVERSITY LIBRARY, MALETE, NIGERIA."**

sent to respondents within the library premises. Section A of the questionnaire collected basic information, while Section B contains the availability, use, and services of ICT provided by the Kwara State university library to students and faculty. Validated, tested for facial validation, and administered personally by the researcher with the help of library staff. The data was analyzed using frequency tables and percentages.

Table 1 shows that 60 (18%) of the respondents are faculty members, while the remaining 270 (82%) of the respondents are students.

**3.1 Results and Discussions****Table 1: Status of Respondents**

Respondent	Frequency	Percentage
Faculty	60	18%
Students	270	82%
Total	330	100%

**Table 2: KWASU's ICT Resource Availability**

Variables	Faculty		Students	
	Freq.	%	Freq.	%
The library provides internet service	35	58	155	57
The Library subscribes to electronic databases.	29	48	97	36
The online public access catalogue (OPAC) is available in the library and on the campus network.	33	55	194	72
Provision of adequate computers for staff and students	41	68	198	73
The Library provides binding and printing services.	33	55	156	58
Audio & Video services are available for staff and students	41	68	198	73

Table 2 indicates that both students and faculty use all the resources in the Kwara State University library. The respondents of the faculty indicated that the provision of suitable computers is the highest, with a frequency of 41 representing 68%, while the student respondents indicated that the provision of binding and printing services is the highest, with a frequency of 198 representing 73%. The respondents of the faculty indicated the use of the Internet in the library at a rate of 35, with a rate of 58%, while the respondents of the students indicated that they used the Internet at a rate of 155, representing 57% of the expected because only final year students are allowed to use the multimedia library. The least use of ICT for both faculty members 29(48%) and students 97(36%) was the use of electronic databases subscribed to by the library. The reason may be the lack of awareness of both faculty and students. Of 194 student respondents, 72% indicated the use of the OPAC maintained by the library. This confirms the study by Iwu and Yusuf (2010) on the means of finding library materials in the Covenant University library; the study revealed that 61.9% of the students used the OPAC.

**Table 3: Reasons for Using Internet Service**

Variables	Faculty		Students	
	Freq.	%	Freq.	%
Updating knowledge	50	83%	186	69%
In-depth research work	33	55%	173	64%
Consult the reference materials	30	50%	165	61%
Browsing the web	32	53%	197	73%
Prepare for the examination	34	57%	155	57%
Complete project work.	25	42%	179	66%
Communication	34	57%	146	54%
Leisure/recreation	21	35%	130	48%

Table 3 reveals reasons for using the internet by both faculty and students. The faculty respondents, with the highest frequency of 50 representing (83%) using the internet in the library to while the majority of students, 179 (66%), use the internet to complete project. This is followed by 34 (57%) of the faculty respondents who use the internet for 197 (73%) of student respondents use the internet to surf the web. The internet is used by the fewest number of faculty respondents, 15 (representing 35%). A total of 130 students responded, accounting for (48%) of the total. use the internet for leisure or recreation. Table 3 reveals that 66% of the student respondents use the internet to complete the project.

**Table 4 shows the frequency with which ICT is used at KWA SU.**

PERIOD	FACULTY		STUDENTS	
	Freq.	%	Freq.	%
Very Often	15	25%	80	30%
Sometimes	19	32%	64	24%
Rarely	16	27%	59	22%
Never	10	16%	67	24%
Total	60	100%	270	100%

Table 4 indicates that the majority of faculty (19, 32%) and students (64, 24%) at Kwara State University sometimes use ICT in the university library, while 15 (25%) of faculty respondents use ICT very often and 80 (30%) of student respondents use it very often, 16 (27%) of faculty. Although 59 (22%) of student respondents rarely use it, 10 (16%) of faculty members never use ICT in the university library, while 67 (24%) of students do. Respondents never use it. One could deduce from table 4 that students use ICT in the library most. This is expected. Because faculty members have limited time. Moreover, they have PCs in their offices that are connected to the internet. Nwezeh (2010) in a similar study on the use of ICT at Obafemi Awolowo University reveals that 71% of faculties use the internet in their offices.

**Table 5: What are the problems encountered by faculty and students?**

Problems	Faculty		Students	
	Freq.	%	Freq.	%
Epileptic power supply	21	35	135	50
Lack internet connectivity	30	50	155	57
Time constraint	40	67	89	33
Inadequate training of library staff	38	63	144	53
Uncooperative attitude of library staff	15	25	157	58

Table 5 above reveals the problems encountered by both faculty and students. 40 The respondents, representing 67% of faculty, have the highest challenge for the use of the library. While 157 (58%) of the student respondents indicated an uncooperative attitude of library staff, A notable number, 38(63%), of the faculty respondents indicated inadequate training of library staff. 155 (57%) of student respondents indicated lack of internet connectivity as problem. A total of 21 (35%) and 135 (50%) of faculty and student respondents, respectively, indicated One of the challenges is epileptic power supply. This is in line with the findings of Krubu and Osawaru (2011) reveals some factors hindering the impact of ICT in Nigerian university libraries. Lack of search skills, epileptic power supply, expensive software and hardware, and huge amount of money spent on fuel generators.

**Table 6: Assessment of library resources and services**

Assessment Rating	Library Resources		Library Services	
Excellent	55	17%	30	9%
Very Well	185	56%	69	21%
Well	75	23%	171	52%
Fair	15	4%	60	18%
Total	330	100%	330	100%

Table 6 shows the assessment of the library resources and services by both faculty and students. The resources were rated very well by faculty and students, with a frequency of 185, representing 56%, while 55, representing 17%, rated it excellent. Library services were rated badly compared to the rating for library resources. 30 of the respondents, representing 9%, rated library service as excellent, while 69, representing 21%, rated the service as very good. The highest rating for the library services was 171 representing 52% and it was rated while that of library resources was 185 representing 56% and it was rated very well. This implies that the library services rendered at Kwara State University library should be improved upon.

## 4.0 Discuss of results.

According to the results regarding the availability of ICT



resources and services for use by both faculty and students, it was found that KWASU library has very good ICT resources and Internet service has greater use. This is in line with the findings of Ilo and Ifijeh (2010), that 94% of Covenant University final year students found internet use beneficial for their projects. These findings also confirmed the findings of Nwezeh (2010) in a study on the use of ICT in Nigerian universities, which found that 78% of employees and 85% of students at Obafemi Awolowo University use the Internet for their projects. Also, the results show that 32% of the faculty and 24% of the students in KWASU sometimes use ICT in the university library. Furthermore, 63% of faculty members cited insufficient training of library staff as a problem facing library use, while 58% of student respondents indicated an uncooperative attitude of library staff. However, what students perceive as the uncooperative attitude of the library staff cannot be separated from some of the shortcomings shown by the library staff. Essentially, both students and

faculty saw insufficient training for library staff as a hindrance in their quest to benefit from the services offered by the library. This is consistent with the findings of Krubu and Osawaru (2011), which identified some of the factors hampering the impact of ICT in Nigerian libraries, such as lack of research skills, epileptic power supply, etc. Energy Source is the least challenging, with 21 (35%) recurrences by faculty and 135 (50%) by student respondents. This shows that despite the overall challenge of intermittent and unreliable electricity supply in Nigeria, the KWASU Library has made a breakthrough in uninterruptible power supply, thus ensuring unimpeded access to its ICT resources. However, training and retraining of librarians is essential to make them better serve the library's users.

## 5.0 Recommendations.

1. In as much as the Federal Government should be commended for integrating ICT into the mainstream of the education system, it should strive to ensure that the power supply is uninterrupted across the country. This is the only way in which the government can ensure the use of ICT in Nigerian libraries.

2 The problems faced by both students and faculty members in using ICT resources show that library users need to be more encouraged to use the library by better serving them. Hence, it is recommended that the library management conduct a regular evaluation of the performance of all the library staff so that the instances of users' dissatisfaction with the provision of the service are reduced to a minimum. Thus, the weaknesses, strengths, and capabilities of the library staff will be identified in order to strengthen them for better performance.

3. Finally, regular and up-to-date training on the use of ICT resources available in Nigerian libraries and their benefits for both library users and academics is recommended.

## 5.1 Conclusion

It is clear from the study that ICTs have brought Nigerian libraries access to a greater range of resources. The use of the Internet and its resources as an integral part of ICT has added value to the services provided by Nigerian libraries. Access

to current and usable information services through the use of ICT is expected to facilitate the development of society. Community development can only be enhanced by eliminating all barriers and providing ICT facilities in all the libraries located in Nigeria.

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