# AVAILABILITY AND USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGY FACILITIES AMONG LECTURERS IN ISLAMIC FAITH-BASED UNIVERSITIES IN NIGERIA

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### Abstract

The research examined the availability and usage of information and communication technology (ICT) faciliti es in Islamic faithbased Universities inNigerian.

Three research questions and one hypothesis were posed to test the responses for the study. The participants of the study consisted of 191 lecturers incidentally selected from all private Islamic Faith-based Universities across Nigeria's six geopolitical zones. Respondents were given a 37-item questionnaire(QAUICTFLIFUN)to fill in order to collect data for the study. The instrument's reliability was tested through a pilot research. The collected data were analysed using the mean statistic for the research questions and Pearson Product Moment Correlation (PPMC) for testing the hypothesis. The findings showed that there was a significant relationship between the availability and usage of ICT facilities among academic staff of Islamic faith-based universities in Nigeria. It was recommended among other things, that there should be adequate provision of ICT facilities in all Islamic faith-based Universities in Nigeria; that the existing ICT facilities should be judiciously used for effective teaching and research purposes.

**Keywords**: Islamic faith-based universities; Information and Communication Technology (ICT); Availability and Utilization of ICT facilities.

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#### Introduction

Education in higher institutions of learning (Universities in particular) is sacrosanct to the development of knowledge, society and economy. In this regard, Education is viewed as the Cultural, Technological and Socio-economic development of any society (Alade & Ojo, 2019). Owing to the value of University Education, it becomes necessary for the government to expand access to University Education through licensing private individuals and groups to provide Tertiary Education to knowledge seekers in this category (Muhammad, 2021). Private Universities are non-public Universities that do not get funding from the government; they are usually owned, financed and managed by private individuals and groups with the intention of profit making (Muhammad, 2021). Based on the observation of Afinsulu and Scannews (2013), the capacity of Nigerian Universities need to be improved leveraging on the provision and utilization of ICT infrastructures which will allow and accommodate Electronic Administrative and Academic activities.

The rising trend in the number of private Colleges of Education, Polytechnics, and Universities in Nigeria is due to the aggressive demand for higher education, particularly University education. According to NUC report (2021) on university education in Nigeria, it is ascertained that the number of Universities in Nigeria is not sufficient considering the number of persons vying to get university education. Due to the lack of capacity to meet the collective demand for university education, private universities became a necessity to provide succor to the teeming youths intending to get University Education (Yusuf, Ganiyu, Hameed &Jimoh, 2019).

According to data gathered from the Nigeria's Universities regulating Body, (National University Commission, NUC) in 2021, there were 99 licensed private universities currently operating in Nigeria, of which six of them are Islamic faith-based, namely, Al-Hikmah University, Ilorin, Kwara State founded in 2005, Al-Qalam University in Katsina State founded in 2005, Crescent University in Ogun State founded in 2005, Fountain University in Osun State founded in 2007, Summit University in Kwara State established in 2015 and Al-Istiqamah University, Sumaila, Kano State established in 2021. Based on the above, it can be said that Islamic faith-based private universities in Nigeria have been playing an important role in complementing the effort of the public universities (Yusuf, Ganiyu, Hameed & Jimoh, 2019). To further enhance this their complementary roll, all of the aforementioned Islamic faith-based universities need to carry out their activities using ICT facilities (Yahya, 2018).

Information and Communication Technology (ICT) has been seen as an important factor for the economic and social development of a country and it has impacted many sectors in human endeavours

(Sutrisno, 2021). As the one of the sectors, the use of ICT is very important in helping the sustainability of the education system.

The provision and use of ICT facilities for pedagogical activities is paramount at the University level and it has been observed that Nigerian Universities are still inadequate in this regards (Suleiman, Surajo & Matinja, 2021). ICT facilities include all internet-enabled facilities which are widely used in recent times for acquisition of knowledge, skills and networking. Examples of these ICT facilities can be Computer software and hardware, phones and tablets, digital camera, internet, television, radio, satellite system, etc. (Ngozi & Adaora, 2021). Incorporating technology into pedagogical practices also helps in developing students' ability to use and manipulate technological vogues around their work setting (Goh & Sigala, 2020).

The growth index and advances of available ICT in the learning environment provide substantial chances for lecturers to enrich their students' learning experiences by scheming more engaging, synergetic, student-centered pedagogical patterns that can enhance students' motivation and learning outcomes (Goh & Sigala, 2020).

Above all, the merits of using ICT in classroom teaching include: conveying real world experiences, letting students participate in cognitive exercises, furnishing students with individualized feedback, stimulating students' interest, and simplifying the hunt for and formulation of content materials. Despite the merits associated with ICT, many teachers and schools in Africa (particularly in Nigeria) are reluctant to utilize ICT in their instructional delivery and resources due to various factors which are usually related to the extra time used in learning new technology and the view that utilising ICT is difficult (Osuchukwu & Ayeni, 2017).

Several socio-cultural hindrances such as institutional, individualized and technological challenges are key factors in the decision to implement ICT (Wang, Liu, & Parker, 2020). Challenges that are institutional refer to factors relating to the institution such as provision of training, provision of funding, and resources provided by the institution to support ICT incorporation. Other factors are personally driven such as lack of confidence and experience with computers, lack of time management skills and self-motivation (Fuad, Tunku & Nordin, 2014), lack of user touch and feel in their e-learning platforms (Mehmet & Kara, 2019).

The integration of ICT facilities in the instructional process have been helpful in some areas such as in providing guidance for Teachers, self-learning by students, evaluation of learners' performance and achievement, facilitating effective communication and high quality skills for productivity (Barakabitze, 2014). However, inadequate availability of ICT tools in Universities for learning activities is usually a recurrent challenge in Nigeria, though this varies among Universities and users (Balarabe & Fadip, 2020).ICT is

frequently used to support various learning and research activities. It enhances problem-solving, which leads to national progress (Osuchukwu & Ayeni, 2017). As a result, universities assemble ICT facilities (hardware and software, the internet, e-mail, teleconferencing, telefax, and CD ROMS, among others) and make them available for use (Ngozi, Adaora & Ogwuche, 2018).

Due to the disparities in the challenges posed in the availability and utilisation of ICT facilities experienced by institutions of learning in developing countries and importantly, in order to enhance productivity of students and staff in the university system (especially privately owned Islamic faith-based Universities in Nigeria), this study therefore, evaluates the available ICT facility resources, level of accessibility, usage and impacts of the usage on teaching and learning in Islamic faith-based universities in Nigeria.

## **Purpose of the Study**

The main purpose of this study is to investigating the level of availability and usage of ICT facilities by lecturers in Islamic Faith-based Universities in Nigeria.

The specific purposes of this study are to:

- i) Determine the availability of ICT facilities in Islamic Faith-based Universities in Nigeria.
- ii) Examine the frequency of usage of ICT facilities in Islamic Faith-based Universities in Nigeria.
- iii) Identify the challenges that hinder the availability and usage of ICT facilities in Islamic Faith-based Universities in Nigeria.
- iv)Determine the relationship between availability and usage of ICT facilities in Islamic Faith-based Universities in Nigeria.

## **Research Questions**

The following research Questions were posed to guide the study.

- i) What is the availability level of ICT facilities in Islamic Faith-based Universities in Nigeria?
- ii) How frequent are ICT facilities used in Islamic Faith-based Universities in Nigeria?
- iii) What are the perceived challenges hindering the availability and usage of ICT facilities in Islamic Faithbased Universities in Nigeria?

## **Research Hypothesis**

Ho: There is no significant relationship between the availability and usage of ICT facilities in Islamic Faith-based Universities in Nigeria.

## Methodology

The study is a survey of the level of availability and usage of ICT facilities by lecturers. in the six Islamic faith-based Universities in Nigeria, namely Al-Hikmah University, Ilorin, Kwara State, Al-Qalam University in Katsina State, Crescent University in Ogun State, Fountain University in Osun State, the Summit University in Kwara State and Al-Istiqamah University, Sumaila, Kano state. The total population consists of all the lecturers in these universities out of which a sample of 191 was taken through the incidental sampling technique.

The instrument used for collection of data was a 37-item adapted four Likert scaled questionnaire (QAUICTFLIFUN). The instrument was further validated by experts in Arts and Social Science Education while a confidence of 0.79 was obtained through the split half reliability method.

In answering the research questions, descriptive statistics were used to explain pattern of responses while the Pearson Product Moment Correlation Statistic formula was used to test the hypothesis at 0.05levelofsignificance through the SPSS version 24 package. The lectures' responses for the study were obtained online through social media platforms and emails to ensure massive response and convenience of the respondents.

## **Results**

**Table 1: Demographic Information of Respondents** 

Variable	Category	Frequency	Percentage
Gender	Male	139	72.77
	Female	52	27.23
University	Alhikmah	79	41.9
	Al-Qalam	33	17.5
	Fountain	32	16.9
	Crescent	25	13.2
	Summit	11	5.25
	Al-Istiqamah	11	5.25

Highest Edu. Qualification	Masters	72	21.8
	Ph.D.	119	63.1

Table 1 shows the overviewed of respondents' demographic data. Majority of the respondents (72.77%) were male while 27.23% were female. Most of the respondents (41.9%) were from Al-Hikmah University, Ilorin while in contrast, 4.7% were from Al-Istiqamah University, Kano. Moreover, 21.8% of the respondents had Master's degree while 63.1% had PhD as at the time of this study.

## Research question one:

What is the availability level of ICT facilities in Islamic Faith-based Universities in Nigeria?

Table 2: Level of availability of ICT facilities in Islamic faith based Universities in Nigeria

	Mean	Std. Deviation
Computers	3.30	.461
Mobile Devices	2.81	.850
Smart Boards	1.63	.976
Hard Disk Drive	2.56	1.034
Flash Drive	2.97	.732
Internet	2.96	.687
University Website	2.91	.895
Email	3.19	.862
Video conferencing facilities	1.21	1.105
Microsoft Office Packages	2.91	.769
Statistical Packages	2.58	.996
Graphic Packages	1.35	1.043

Grand mean 2.73

The data in table 2 revealed that all the stated ICT facilities were adequately available as at the time of the research except for smart board (mean, 1.63), Video conferencing facilities (mean, 1.21) and graphic packages (mean, 1.35) which were not adequately available in the universities under study.

## **Research question two:**

How frequent are ICT facilities used in Islamic Faith-based Universities in Nigeria?

Table 3: Frequency of usage of ICT facilities in Islamic Faith-based Universities in Nigeria

	Mean	Std. Deviation
Computers	2.61	.613
Mobile Devices	2.52	.869
Smart Board	1.20	.715
Hard Disk Drive	2.17	.866
Flash Drive	2.58	.592
Internet	2.96	.787
University Website	2.55	.595
E-mail	2.86	.519
Video conferencing facilities	1.33	.672
Microsoft Office Packages	2.73	.550
Statistical Packages	2.83	.630
Graphic Packages	1.10	.598
Grand Mean	2.55	

The data in table 3 revealed that all the stated ICT facilities were frequently used as at the time of the research except for smart board (mean, 1.20), Video conferencing facilities (mean, 1.33) and graphic packages (mean, 1.10) which were not in frequent use in the universities under study.

## **Research Question three:**

What are the perceived challenges hindering the availability and usage of ICT facilities in Islamic Faith-based Universities in Nigeria?

Table 4: Perceived Challenges hindering the availability and usage of ICT facilities in Islamic Faith-based Universities in Nigeria

	Mean	Std. Deviation
Inappropriate funding	2.71	.819
Lack of highly skilled personnel	2.69	.758
Poor ICT literacy among lecturers	3.01	.729
Unwillingness to change from the old system of data processing	2.72	.676
High cost of ICT facilities	2.69	.654
Unstable electricity supply	3.00	.871
Grand mean	2.80	

The data in table 4 revealed that all the stated items on the perceived challenges hindering ICT facilities availability and usage were confirmed valid by lecturers.

## **Test of Hypothesis**

**Ho:** There is no significant relationship between the availability and usage of ICT facilities in Islamic Faithbased Universities in Nigeria.

Table 5: Relationship between the availability and usage of ICT facilities

Correlations			
		availability	Usage
Availability	Pearson Correlation	1	.706**
	Sig. (2-tailed)		.000
	N	191	191
	Pearson Correlation	.706**	1
Usage	Sig. (2-tailed)	.000	
	N	191	191

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The analysis in table 5 shows a significant relationship between the availability and usage of ICT facilities, therefore, the hypothesis that states that there is no significant relationship between the availability and usage of ICT facilities in Islamic Faith-based Universities in Nigeria is rejected while the alternate hypothesis is upheld. Therefore, there is a significant relationship between the availability and usage of ICT facilities in Islamic Faith-based Universities in Nigeria.

## **Discussion**

In Nigeria's Islamic faith-based universities, many sorts of ICT facilities are provided. Computers, mobile devices, hard disk drives, flash drives, internet, university websites, e-mail, Microsoft office packages, and statistical packages are all adequately available except for conferencing facilities and graphic packages which are not adequately available for lecturers. This confirms Yahya (2018) who mentioned that, having ICT facilities available encourages human to human and human-machine interaction in schools. Lecturers always use ICT facilities for both personal and academic purposes. However, graphic packages, video conferencing facilities, and smart boards are not sufficient and not efficiently used by lecturers in Islamic Faith-based Universities in Nigeria. This is in agreement with Ngozi and Adaora (2018) who underlined the importance of using ICT facilities to boost academic activities in schools.

The availability and efficient use of ICT facilities are frequently hampered by persisting issues. The inadequacy of highly qualified employees to handle sophisticated ICT facilities, as well as inconsistent electricity supply are the key obstacles encountered in the usage of ICT facilities in Islamic Faith-based Universities in Nigeria. When power supply is disrupted, it is practically impossible to operate ICT facilities properly, as electricity fluctuation damages the facilities. This is in consonance with the observation of Aisha & Zeema (2017) who stated that for the efficient operation of ICT facilities and other high-tech equipment at the institution, a stable and consistent electrical supply is require

Findings from the study revealed that computers, internet, emails, university websites, and mobile devices were the mostly available facilities in all the Islamic faith-based Universities in Nigeria while facilities like smart boards, video conferencing facilities and graphic packages were not adequately available. It study revealed that computers, internet, emails, university websites, and mobile devices were the mostly used in all the Islamic faith-based Universities in Nigeria while facilities like smart boards, video conferencing facilities and graphic packages were not frequently used. This is in consonance with the findings of Muhammad et al

(2019) who consequently recommended that activities of higher institutions of learning in Africa can be improved through adequate provision of ICT facilities.

The study further revealed that inadequate funding, unstable power supply, lack of ICT literacy among lecturers, high cost of ICT facilities, etc. were the perceived challenges hindering ICT facilities availability and usage in Islamic Faith-based Universities in Nigeria. This is buttress by the findings of Apagu &Wakili (2015) that inadequate funding and unstable power supply hinder the provision and utilization of ICT facilities in public Schools.

It was also revealed in the study that there was a significant relationship between the availability of ICT facilities and usage of these facilities by lecturers of the Islamic Faith-based Universities in Nigeria. This finding aligned with that of Ribeiro & Moreira (2010) that effective use of ICT gadgets are grossly influenced by adequate provisions.

#### Conclusion

From the findings of the study, it could be concluded that to improve the academic activities in Islamic Faith based Universities in Nigeria, the availability and effective use of ICT facilities by lecturers should be ensured. Inadequate funding, epileptic power supply and low computer literacy level among lecturers are some of the factors inhibiting adequate availability and effective usage of ICT facilities in Islamic Faith based Universities in Nigeria and if Islamic Faith based Universities in Nigeria must compete favourably among other in the world, adequate provisions must be made for all needed ICT facilities and lecturers must be encouraged to use the facilities adequately for personal and academic purposes.

## Recommendations

In an attempt to tackle the perceived challenges faced by institutions in providing lecturers with, and to improve the usage of necessary ICT facilities in Islamic faith-based Universities in Nigeria, the following recommendations were raised:

- 1. Authorities of Islamic faith-based Universities should make adequate provisions for smart boards, video conferencing facilities and graphic packages just like they have done by providing for computer, internet, emails, university websites, and mobile devices etc.
- 2. Administrators of Islamic faith-based Universities should encourage the staff members especially, the lecturers, to effectively make use of smart boards, video conferencing facilities and graphic packages alongside computers, internet, emails, university website, and mobile devices etc.

- 3. Authorities of these Universities should make provisions for reliable electricity and internet services for the lecturers. This can be done by providing alternative power sources to complement the national supply to ensure consistent electricity supply.
- 4. Managers of Islamic faith-based Universities in Nigeria should ensure they employ ICT specialists and personnel who can serve as service providers in case of need.
- 5. Administrators in Islamic Faith-based institutions should provide adequate finances for the acquisition of necessary ICT facilities as well as for the maintenance of the existing ones.
- 6. Universities authorities should try to provide free or subsidized ICT facilities (particularly computers and internet data) for lecturers.
- 7. The National Policy on Information and Communication Technology in Education should go beyond mere policy statements but should be fully in practiced in the Islamic faith-based universities.
- 8. Periodic training and workshops on how to effectively use and maintain ICT facilities should be organized for lecturers in the Islamic faith-based universities to bring them up-to-date.

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