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UTILIZATION OF DIGITAL LIBRARY RESOURCES AND SERVICES BY LIS STUDENTS OF FEDERAL UNIVERSITY DUTSIN-MA, KATSINA STATE, NIGERIA

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ABSTRACT

This study is set out to investigate the challenges to the utilisation of digital library resources and services by Library and Information Science (LIS) students, Federal University, Dutsin-Ma, Katsina-Nigeria. In order to achieve this, three (3) research questions were formulated. A survey method was employed in the conduct of this study while the population comprised 590 library and information science students, FUDMA. A well-structure questionnaire was administered to 40% of 590 which is 236 for data collection. The data collected for the study were presented and analysed using descriptive statistics, frequency distribution tables and simple percentages for the data analysis. It was found that FUDMA Digital Library apps, KOHA Digital management software, online databases (open and closed access), Calibre E-library management software and DSpace were the type of the available Digital Library Resources and services respondents were aware of, and were being utilized by LIS respondents. LIS students search and utilized Digital Library Resources and services through library website, search through OPAC, Institutional Repositories and through FUDMA Digital Library apps. Slow Internet connectivity in the institution, lack of wireless network on campus, lack of computer literacy skills, erratic power supply were the major challenges faced by the respondents in using the FUDMA Digital Library Resources and Services. Hence, the study recommended that the university management should take a leading role to address the issue of power supply and Internet connectivity across the university community and in order to increase the level of utilization of FUDMA Library resources and services, that, the management should organize more sensitization training and workshop on use and customization of FUDMA digital library.

Keywords: Assessment, Utilization, Challenges, Digital library, Resources, Services, FUDMA, Katsina

Introduction

Library is a vital component of any university or educational institution which is not left behind in terms of upgrading and advancing its services in order to keep pace with the fast-moving technological train. Digital Library is usually established as a result of this. The library began to gradually incorporate ICT operations in its resources and services. The online version of a physical library is known as a digital library. It was created with the goal of providing users with seamless access to online information remotely and simultaneously while reducing the typical workload of librarians in physical libraries (Ani, et al., 2016). The library services become more globalized than they are physically, with the adoption and use of digital library. This allows information users to access the library resources from the comfort zone of their homes and offices, rather than physically visit the library. Researchers have noted that the introduction of ICT into the library world has resulted in a significant shift from the traditional library model to digital library services

which focus on the information stored in digital formats, and the way user's access information as well as how libraries provide and manage resources and services (Dang, Felix & Ibrahim, 2018).

In academic settings such as universities, having a digital library is a critical effort. Digital library services have advanced and grown beyond just an online access or pointer in the twenty-first century, with a variety of other services such as interactive mediums between librarians and information users. This is because an open access to library resources and documents, as well as being incorporated and appropriated to enhance teaching, learning, and research paradigm in universities (Anunobi & Emezie, 2016). University Universities' digital libraries play an important role in simplifying users' access to the needed information in an easy and efficient manner. Digital libraries have a lot of potentials to improve a variety of services, from boosting access to knowledge and obtaining needed information to improve quality education (Adeniran & Unuigboje, 2018; Igboechesi & Dang, 2019). Similarly, the study of sediyangsih, et al., (2023) revealed that metaverse technology platform is very important in the discharge of digital library services and resources, and therefore encouraged its use by academic libraries. Suffice to say, metaverse is a new innovation that can be incorporated in the services of digital library among academic libraries for information sharing, accessibility and scholarly communication. A digital library is an important part of any library because it acts as the library's online presence. As a result, it is crucial to perform regular evaluations to see if the library's stated goals are being met.

With paradigm shift in education especially in the university systems, one can say no university can develop and achieve its global visibility without a standard digital library system and services of which the top ranking universities used their libraries as "Learning common", "Knowledge economy", "Digital library", Knowledge sharing center" "Maker space", "Research clinic center", which aid their visibility and ranking, globally. This has to do with the availability of information resources and services. Libraries are committed to giving all information needed by users, whether they utilize print or electronic media, access to limitless information resources and services in the twenty-first century (Emaka, 2014). Similarly, Tuzi (2010) opines that academic libraries serve one of the most crucial functions in meeting the information demands of university communities by providing free access to information services, creating digital platforms, and products. Through the creation and sharing of knowledge, these tools help connect people locally and globally.

By providing users with relevant information resources, the university digital libraries have significantly increased research activities and academic excellence in universities. The digital library collects, stores, and organizes information in digital form, encourages collaborative efforts in research resources, promotes efficient delivery of information to all users at a low cost, and uses communication networks to strengthen communication and collaboration between or among academic researchers (Anyim, 2018). However, preliminary observation revealed that the e-resources and services in the Federal University Dutsin-Ma (FUDMA) digital library department have not been completely exploited by the students as a result of access and retrieval challenges, necessitating reform and innovation in order to maintain acceptable patronage. It is against this background that this research was designed to investigate the Challenges in the Utilization of Digital Library Resources and Services by the students of library and information science students in FUDMA.

Research Questions

The following research questions guided this study:

1. What types of Digital library resources and services are available for use by the LIS students of FUDMA?
2. How do the LIS Students of FUDMA utilize the available digital library resources and services?

3. What are the challenges faced by the LIS students while utilizing the available digital library resources and services in FUDMA?

Review of Related Literature

Utilization of Digital Library Resources and Services

The ICT and digital revolution have a big impact on libraries. Academic libraries must quickly offer content in any format, at any location and time, to satisfy users' information need. Due to ICT's quick development, libraries and information centers now serve new purposes. In addition to PDF and HTML papers, photo, music, video files are also made available as information systems and resources. In this rapid changing environment, academic libraries and librarians should play a vital role in administering these digital information resources and systems (Dhanavandan, 2011). ICT has made it easier than ever to provide and make information available and accessible. Similarly, the study of Mehta and Wang (2020) described how digital library services and resources are utilized to satisfy end-users via initiatives and best practices during covid-19 pandemic. Digital library utilization is concerned with the use of variety of digital information resources and services for teaching, learning and research paradigm.

On the same note, the findings of Omeluzor, Akibu and Akinwoye (2016) revealed that electronic information resources are utilized at various levels by the respondent e-journal, e-database web OPAC and repositories recoding high usage. Khalid and Hafeez (2010) found that digital library or electronic information resources (online/offline) are used for the purpose of conducting scientific research, learning, teaching and community development etc.

Types of Digital resources and Services

Digital library resources include but not limited to the use of digital content, online books, journals, theses, and dissertations, online newspapers, magazines, indexes/abstract, internet based, online databases, online encyclopedia and dictionaries (Kato, Kisingiri and Kaijage, 2021). Utilizing various information resources for teaching, learning, and research activities falls under the category of using digital information resources. Online newspapers, magazines, encyclopedias, dictionaries, journals, theses, and dissertations are a few examples of these resources (Ukashatu, 2014). Ukashatu and Zakari (2014) found that online factor such as easy access reduced physical visit to library. The user-friendly features of online resources offer a comfortable platform for participants to use e-books, e-journals, e-magazines, e-newspapers, e-theses, and e-dissertations. Many academics in universities rely on online information resource as their sources of information because they provide many advantages over the traditional printed resources.

Challenges of utilizing Digital Library Resources and Services

Abdullahi and Haruna (2008) instituted that lack of basic knowledge of ICT is the second major constraint after the problem of erratic power supply to the use of ICT in the university libraries in Nigeria. This was corroborated by Abdurrahman (2008), though the percentage that represents the hypothesis is low as compared to other constraints such as erratic power supply, networking and availability of equipment. Hafeez (2006) identified various problems the users face while using Arabic electronic resources. Slow internet connectivity, Poor ICT facilities, lack of access to low cost of printing in the library, using advanced search strategy of most databases, and lack of awareness of most of the e-resources are significant contributors for the low patronage of customers. However, Urbano and Borrego (2004) discovered that the user's difficulties to access e-resources are due to lack of standardization in the usage of collecting data and difficulty in recognizing the value of a particular title.

In another study, Borrego (2007) suggested that users should be supported with more training in order to enhance their information seeking skills while using electronic resources. Ukashatu (2016) found that slow

Internet connectivity in the institution, erratic power supply, insufficient computer skill and lack of information literacy skill were the major challenges in the utilization of online Arabic information resources by the academics in Ahmadu Bello University Zaria and Bayero University Kano, respectively. The result falls in line with Hafeez (2010), who identified various problems users face while using Arabic electronic resources. Similarly, the study of Yakubu, Muhammed and Nassarawa (2022) revealed that relentless transformations in technology and impromptu institutional stakeholders' decision for adoption, lack of policy statement, incessant power/network failure, scarcities of training/expertise coupled with patrons' adamant to blend to the new paradigm shift are part of the challenges of ICT in Nigerian academic libraries. The authors suggested a need to design and implement ICT policy, alternative power supply, and subscription of sufficient bandwidth to avert network problem, upward review of library budget, among others. Equally, investigation of Omeluzor, Akibu and Akinwoye (2016) indicated lack of awareness, lack of training, unreliable internet connectivity, inadequate e-resources and unavailability of e-resources on 24/7 etc. as challenges in Federal University of Petroleum Resources, Effururn Library, Nigeria.

Methodology

The survey method was adopted for this study and the population of this study comprised 590 Library and Information Science Students, FUDMA. Since the population is large which is not manageable by the researchers, 40% were used as population for the study. Morgan and Krejcie (1970) stated that in a population of 7,500 a sample size of 5%, amounting to 375, suffices. This is in line with Nwanna, cited in Agbonmiewalen (2007), who recommended that 'when the population runs into few hundreds, use 40% or more; when several hundreds, use 20%; when thousands, use 10%; and when several thousands, use 5% or less'. In view of this, the sample size for this study is 40% of 590 which is 236. The questionnaire was the instrument used for data collection and the data collected were analyzed using frequency and simple percentage.

Data Analysis and Findings

Data analysis and results are presented below. The response rate was high because out of 236 copies of questionnaire distributed, 206 were returned while 200 were found useful for the study.

Types of the Available Digital Library Resources and Services to the Respondents

The study aimed at identifying the various types of available digital library resources and services for LIS students in Federal University Dutsin-Ma Library. In order to achieve this, a list of digital library resources and services was outlined for the respondents to tick as many as available in the institution. Table 1 below shows the available types of resources and services aware of and being utilized in FUDMA.

Table 1: Available Digital Library Resources and Services at FUDMA, Dutsin-Ma

Types of digital library resources and services	Frequency	Percentage (%)
FUDMA Digital Apps	69	75.8%
Online Databases (open and closed Access)	41	45.1%
E-journal	29	31.9%
E-book apps	29	31.9%
Digital thesis	16	17.6%
KOHA	48	52.7%
Calibre e-library management software	48	52.7%
DSPACE	48	52.7%
ARDI	1	1.1%

Table 1 shows that FUDMA Digital Library apps, KOHA Digital management software, online databases (open and closed access), Calibre E-library management software and DSPACE were the type of the available Digital Library Resources and services aware of, and are being utilized by LIS students of FUDMA with highest Frequency of over 52.7% and 75.8% response rate respectively. Whereas respondents rarely used ARDI as it received less than 2.0% response rate. The aforementioned findings are not surprising, given that FUDMA Library now offers 24/7 library services and has full-text online databases available, leading to the highest possible resource consumption.

Table 2: Utilisation of Available Digital Library Resources and Services at FUDMA, Dutsin-Ma

Digital library resources and services	Frequency	Percentage (%)
Through library website	69	75.8%
Direct from Online Databases (open and closed Access)	29	31.9%
Through E-journal Link	29	31.9%
Through E-book apps	29	31.9%
Through Digital archive	16	17.6%
Search through OPAC	69	75.8%
Through Calibre e-library management software	48	52.7%
Institutional Repositories	69	75.8%
Through FUDMA Digital Library apps	69	75.8%

Table 2 revealed that LIS students, Federal University Dutsinma utilized Digital Library Resources and services through library website, Search through OPAC, Institutional Repositories and Through FUDMA Digital Library apps with highest Frequency of over 68 (75.8%) response rate. Whereas Through Digital archive discovered the least frequency with less than 16 (17.6%) response score respectively.

On the challenges faced by the LIS students in accessing and utilising DLRS, the respondents were asked to identify the challenges faced by LIS students in accessing and utilizing FUDMA digital library resources and services. In doing this, a list of challenges was outlined for the respondents to tick as many challenges as applicable. Table 3 presented the responses of the respondents.

Table 3: Challenges faced by the Respondents in Accessing and Utilising DLRS

Challenges	Frequency	Percentage (%)
I'm not computer literate	23	25.3%
Slow internet connectivity in the institution	63	69.2%
Erratic power supply	63	69.2%
Poor ICT facilities at takeoff campus	63	69.2%
Insufficient access to needed journals	9	9.9%
Lack of information literacy skill	17	18.7%
Lack of computer literacy skill	13	14.3%
Lack of wireless network within the campus	63	69.2%

Table 3 discovered that slow internet connectivity in the institution, lack of wireless network within the campus, erratic power supply and poor ICT facilities at takeoff campus were the major challenges faced by LIS Student of FUDMA with the highest frequency of 63 (69.2%) response scores. Whereas insufficient access to needed journals and lack of computer literacy skill was discovered to be with less frequency of 9.9% and 14.3% response rate, respectively.

Discussion of Findings

Findings of this study reveals that FUDMA Digital Library apps, KOHA Digital management software, online databases (open and closed access), Calibre E-library management software and Dspace were the type of the available Digital Library Resources and services aware of, and are being utilized by LIS students of FUDMA. These findings are in line with that of Kato, Kisingiri and Kaijage (2021); Omeluzor, Akibu and Akinwoye (2016) as well as Ukashatu (2016) on the utlisation of digital library resources in various universities in Nigeria. These include use of digital content, online books, journals, theses, and dissertations, online newspapers, magazines, indexes/abstract, internet based, online databases, online encyclopedia and dictionaries.

On the other hand, the study disclosed that LIS students, Federal University Dutsin-Ma utilized Digital Library Resources and services through library website, Search through OPAC, Institutional Repositories and Through FUDMA Digital Library apps. With respect to challenges, the findings of Yakubu, Muhammad and Nassarawa (2022), Omeluzor, Akibu and Akinwoye (2016) corroborate this study concerning challenges of utilizing DLRS by LIS students of FUDMA, such as slow internet connectivity in the institution, lack of wireless network within the campus, erratic power supply and poor ICT facilities at takeoff campus. Others are insufficient computer skills and lack of information literacy skill in the utilization of online Arabic information resources by the academics in Ahmadu Bello University, Zaria and Bayero University, Kano respectively (Ukashatu, 2016). who discovered that slow internet connectivity in institutions, erratic power supply, insufficient computer skill and lack of information literacy skill were the major challenges in the utilization of online Arabic information resources by the academics in A.B.U., Zaria and Bayero University, Kano, respectively.

Conclusion

Based on the findings, the study concludes that the use of DLRS for accessing and utilization among the LIS students is common. As an ICT- driven institution, it provides both traditional and digital resources and services to the users as LIS students are not an exception. The improvement of digital library resources and services enhances global visibility, team work or research collaboration.

Recommendations

Based on the findings, the study recommends that:

1. The university management should take a leading role to address the issue of power supply and Internet connectivity across the university community and in order to increase the level of utilization of digital resources and services in FUDMA.
2. The management should organize more sensitization training and workshop on use and customization of FUDMA digital library.
3. Government and the management should provide sufficient funds in order to procure adequate ICT facilities to boost the utilization of digital library resources and services.
4. There should be provision of sufficient bandwidth so as to boost wireless network connectivity on campus.

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