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A critical Appraisal of Information and Communication Technology (ICT) Competency Among Library Users in Private University Libraries in Edo State, Nigeria.

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Abstract:
This study appraised ICT competency among library users in private university libraries in Edo State, Nigeria. Descriptive survey research design was adopted for the study while structured questionnaire was the instrument used for data collection. Data were collected from all the four National Universities Commission (NUC)-accredited universities in Edo State, Nigeria: Igbinedion University, Okada; Benson Idahosa University, Benin; Wellspring University, Benin and Samuel Adegboyega University, Ogwa. The population of the study which is 4,224 was made up of all registered users of the private university libraries for 2018/19 academic session. A sample size of 400 library users which represented 9.5% was used for the study. However, of the 400 questionnaires circulated, 364 questionnaires (91%) were retrieved and found useable for the study. Data collected were analyzed using frequency table and percentages and graphical representation of tables. The findings reveal that most library users in private university libraries in Edo State, Nigeria are familiar with the use of some ICT devices and also competent in using the ICT devices for searching for information in the university libraries. However, the study further reveals that majority of library users in private university libraries in Edo State are not competent in the use of e-resources platforms (Ebscohost, Research4life, Jstor, etc) available in the university libraries. It is therefore recommended that Management of private university libraries should continue to acquire more ICT devices for the library users and train them to enhance their knowledge in the usage of e-resources platforms.

Keywords: ICT competency, ICT devices, e-resources, library users, private university libraries, academic staff, non-academic staff, students.

Introduction

Information and communication technology (ICT) has become a veritable tool in rendering library services today. Libraries all over, especially university libraries, are shifting from using the traditional means of providing information services to using ICT-oriented digital resources to rendering information services to its users. Emiri (2015) asserted that libraries all over the world have been faced with the evolving technological advancement, globalization, and digitization of information. These have led to library automation, digital and virtual libraries, virtual conferencing, web-cast, pod-cast, community and online learning, Web 2.0 and Library 2.0.

ICT undoubtedly has brought a wave of innovations to the way and manner library services are rendered. Little wonder Ajibero (2012) asserted that woe betide the nation that fails to build and indigenize its information infrastructure in order to exploit the immense benefits of the constantly changing ICT hardware and software. This clearly explains why many university libraries are today replacing traditional methods of rendering library services with ICT-oriented methods.

However, these ICT-oriented digital services rendered by university libraries will be of no effect if users cannot utilize them effectively and efficiently. It is expedient that library users possess the requisite ICT competence in order to effectively utilize the ICT services and resources rendered by the university library.

Competency in ICT is the ability to use digital technology, communication tools, and/or networks to define, access, manage, integrate, evaluate, create, and communicate information ethically and legally in order to function in a knowledge society (Egan, 2006). Also, according to Iyanda, Opele and Akintunde (2016) ICT competency refers to the ability to use digital technology communication tools and networks appropriately to solve information problems. ICT competency includes the ability to use technology as a tool for researching, organizing, evaluating and communicating information, and the possession of a fundamental understanding of the ethical and legal issues surrounding access and the use of information.

Owing to the proliferation of ICT-oriented devices and resources in university libraries today, particularly the subscription to electronics resources, most university libraries, have acquired ICT devices in order to render ICT-mediated services to their users. Anyaoku and Nwosu (2009) affirmed that university libraries in line with the new development in the use of information and

communication technologies (ICT) for information dissemination, now acquire computer sets and other ICT resources to provide information services for its numerous users. However, it is not just enough to acquire these ICT devices, library users must be skilled enough with the usage of these ICT devices and resources to justify the fund committed to them.

According to Iyanda, Opele and Akintunde (2016) an increasing decline in the level of library use among undergraduate students in Nigerian tertiary institutions has been observed in recent years. Besides, the ICT competency level of undergraduate students of private universities will to a great extent determine the level of utilization of the available ICT resources within the library. Today, ICT mediates most of the services rendered in university libraries.

Despite being knowledgeable in the use of the Internet and other related technologies, many university library users still lack the requisite ICT competence needed for locating, evaluating, and communicating information necessary to navigate and use the information resources available today via the various e-resources platforms and other ICT-oriented library services rendered to users.

The main objective of this study is to critically appraise ICT competency of library users in private universities in Edo State. This study will help to gain insight into the issues surrounding ICT competency of library users in private university libraries in Edo State, Nigeria, with a view to contributing to existing literature on the subject.

The general objective has been fragmented into the following specific objectives for easy assessment. These are;

i. To identify the various ICT devices undergraduate students are familiar with in private university libraries in Edo State;

ii. To evaluate the level of competence in using ICT devices and e-resources by undergraduate students in private university Libraries in Edo State;

iii. To examine the frequency in using ICT devices and e-resources by undergraduate students in private universities in Edo State;

iv. To find out the level of competence in the use of the OPAC in searching for library resources in private university libraries in Edo State;

v.   To identify the barriers to the utilization of ICT devices and e-resources among undergraduate students in private university libraries in Edo State.

Historical overview of Private Universities in Edo State

The licensing of the first set of private universities in Nigeria in 1999 by the regime of Gen. Abdulsalam Abubakar set the path for the emergence of more Private universities. According to Osagie (2009) Nigeria put a stop to public monotony on higher education in 1999 by licensing four private universities. With this broad stroke, private higher education is emerging as one of the most dynamic segments of postsecondary education at the turn of the 21st century.

Edo State was one of the states that housed the first set of private universities in Nigeria. Since 1999 when Igbinedion University was established in Okada as the pioneer private university in Nigeria, there have been three (3) other private universities established in the State. These are: Benson Idahosa University, Benin City (2002); Wellspring University, Benin City (2009) and Samuel Adegboyega University, Ogwa (2011).

The establishment of private universities in Edo State further gave rise to the corresponding increase in university libraries. The objectives of the private universities are similar, the universities being geared towards the training and production of well-informed, mature and responsible professionals in all fields of endeavor; to train teachers and academic research staff for the universities and other higher educational institutions and to promote knowledge and disseminate its results for socio-economic benefits.

The laws establishing the private universities also provide for the establishment of the university libraries to support faculties and students of the universities to achieve their objectives. According to Enahoro and Badmus (2013), the mission of universities is to promote intellectual inquiry and to generate, store and transmit specialized knowledge and sophisticated expertise, higher forms of culture and ethical bases of conduct. Consequently, the university libraries support teaching, learning, and research in ways consistent with, and supportive of, the institution's mission and goals. A visit to the private universities in Edo State reveals that all the private universities in the State have well-equipped ICT-oriented libraries that cater for the information needs of their

faculties and students. Hence the need to study the ICT competency of users in the private university libraries in Edo State.

Literature Review

Information and Communication Technologies (ICT) have indeed brought so many changes to the way library services are rendered to library users. One very important and impressive change is the improvement in the speed and span of academic information access, production, sharing and recycling. As Ezema and Anezi (2016) opined, multiple access, speed, rich content, reuse, timeliness and access to information resources anywhere are some of the features that have made the application of ICT in the library very germane.

Agreeing on a universally accepted definition of ICT has been an uphill task to information professionals. This is because the concepts, methods and applications involved are constantly and continuously evolving. However, several authors have attempted to define the term ICT, especially as it affects the library. Kolawole (2008) defines ICT as the technologies that help us record, store, process, retrieve, transfer, and disseminate recorded information. Nebeolise (2013) quoted Adeyemi (2005) as defining information and communication technology (ICT) as an electronic means of capturing, processing, storing and disseminating information. According to Ivwighreghweta (2013), ICT is the electronic means of capturing, processing, storing, and disseminating information. Lawal–Solarin (2013) defines ICT as a broad-based term that encompasses the gathering (acquisition), organization (packaging), storage, retrieval and dissemination of information that can be in textual or numerical (books, documents), pictorial and vocal forms (audio -visual) or a combination of all the above (multi-media), using a combination of computers and telecommunications telephony.

Information and Communication Technology (ICT) is therefore an umbrella term that includes any communication device for teaching and learning. Such devices according to Sivakumaren, Geetha and Jeyaprakash (2011) could be computer system, communication device, telecommunication, telephone, satellites, telex, facsimile, internet, e-mail, fax, video text and document delivery, electronic copiers, radio and television. Egharevba (2018) further asserts that

these ICT facilities are used by library users to meet their information needs and facilitate teaching and studying in libraries.

Library services and resources have undergone changes owing to the development in information and communication technology (ICT). Okewale and Adetimirin (2011) assert that ICT has brought rapid growth in the way libraries manage and disseminate their information resources. Egharevba & Anaehobi (2017) affirm that university libraries have keyed into the use of ICT resources in the provision of current information needed by their library users. Hence the need to ascertain the effective and efficient use of these ICT resources in the library by studying the ICT competency of the library users who are ultimately to benefit from the use of ICT in the library.

According to Bawden (2008), ICT competency is the set of attitudes, understanding and skills to handle and communicate information and knowledge effectively, in a variety of media and formats. Bell and Shank (2008) quoted in their work that ICT competency is the ability to use digital technology, communication tools or networks to locate, evaluate, use and create information. It is the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers. Bell and Shank (2008) also add that ICT competency is also a person's ability to perform tasks effectively in a digital environment. Obaje (2014) further states that librarians and library users must acquire relevant computer skill and competence to make them relevant in this information-driven age.

Iyanda, Opele and Akintunde (2016) assert that librarians need to liaise with library users to effectively use the computer terminals in information searching which is gradually gaining popularity. The rapid growth of information and communication technologies is changing the way academic libraries search for information today. Also, Ozoemelem's (2010) study further reveals that there is a low level of competency and skillfulness in the use of ICT among students of Nigerian tertiary institutions to search for information, as a great number of students are not equipped with basic computer operational skills.

Research Methods

The descriptive survey research design was adopted for the study. The study focuses on all library users in the private universities in Edo State, Nigeria. These are; Igbinedion University Library, Okada; Benson Idahosa University Library, Benin City; Wellspring University Library, Benin City

and Samuel Adegboyega University Library, Ogwa. The population of the study which is 4,224 is made up of all the registered library users with the private university libraries for 2018/19 academic session. A sample size of 400 library users which represented 9.5% was used for the study. The instrument used for data collection was a structured questionnaire titled **"Questionnaire on ICT competency among library users in Private University Libraries in Edo State, Nigeria".** The questionnaire was structured into two sections. Section 1 contained responses on the demographic data of respondents, while section 2 was designed to address the questions on ICT competency among library users in Private University Libraries in Edo State. Of the 400 copies of the questionnaire administered randomly to the respondents, 364 (91%) copies were returned and found useable.

The researchers were assisted by librarians in the various libraries to distribute and collect the questionnaires from the respondents. Data generated were analyzed using descriptive statistics. Simple percentage and graphs were used to analyze the research questions.

Data Analysis

Table 1. Gender Distribution of Respondents

Gender	Frequency	Percentage
Male	199	54.7
Female	165	45.3
TOTAL	364	100.0

Table 1 reveals the gender distribution of respondents, 54.7% of respondents were males while 45.3% of total respondents were females.
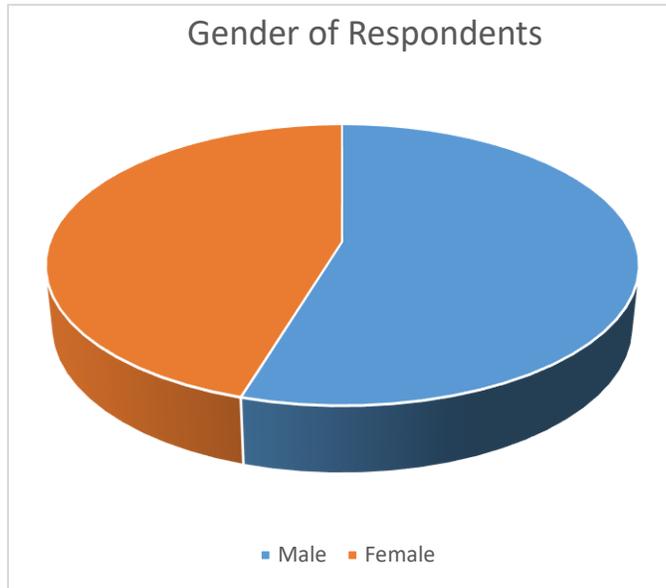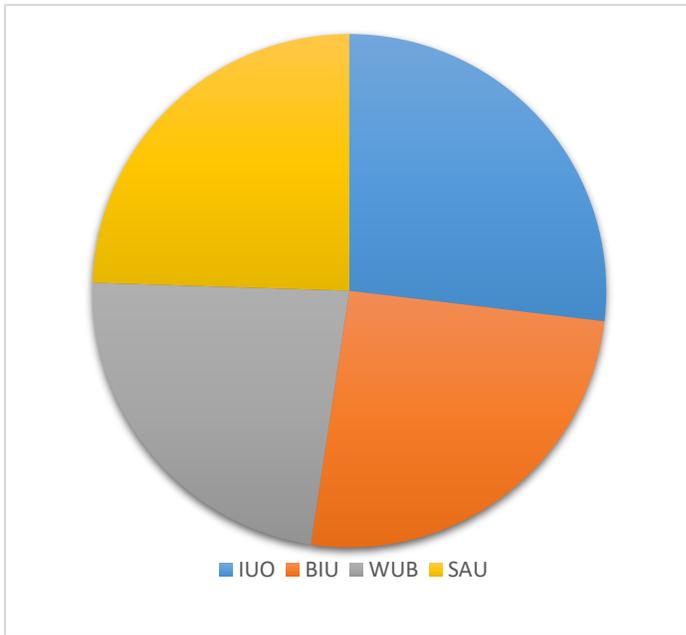

Figure 1: Graphical representation of gender of respondents

Table 2. Private University Distribution of Respondents

University	Respondents	Percentage
IUO	98	26.9
BIU	93	25.5
WUB	84	23.1
SAU	89	24.5
TOTAL	364	100.0

Table 2 shows that 98 (26.9%) of the respondents which represents the highest of the four (4) university respondents are from Igbinedion University, Okada (IUO), 93 (25.5%) are from Benson Idahosa University (BIU), Benin City. Wellsprings University, Benin (WUB) has 84 (23.1) respondents while 89 (24.5%) are from Samuel Adegboyega University (SAU), Ogwa.
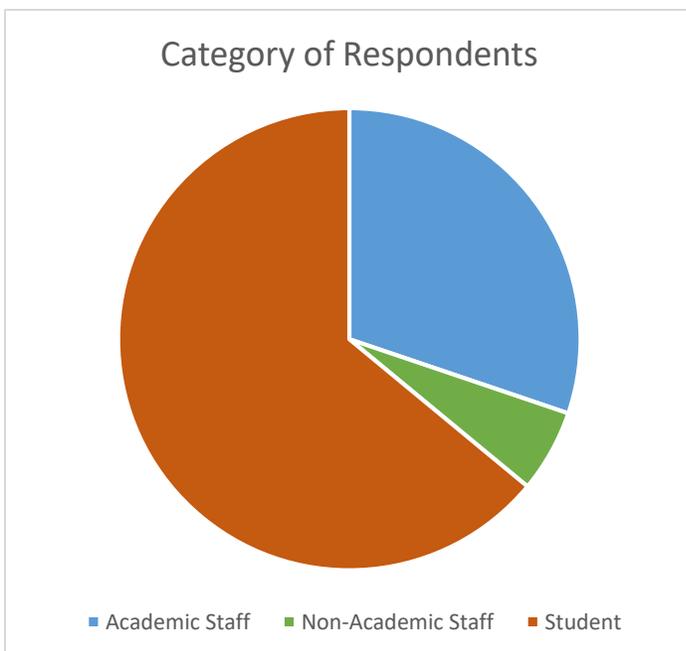
Figure 2: Graphical representation of the Private University Respondents

Table 3. **Categories of Respondents**

Categories	Respondents	Percentage
Academic Staff	110	30.2
Non-Academic Staff	21	5.8
Student	233	64.0
TOTAL	364	100.0

Table 3 reveals the categories of respondents, 110 (30.2%) are academic staff, non-academic staff 21 (5.8%) while students are 233 (64%).
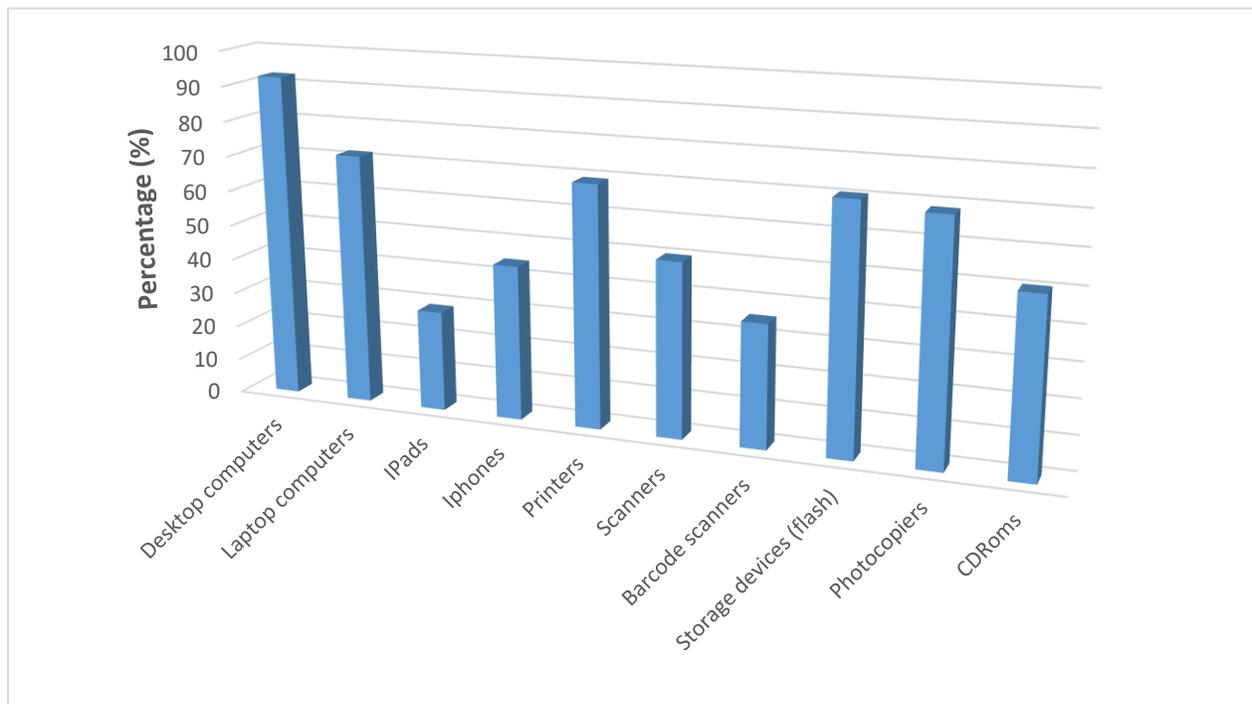

Figure 3: Graphical representation of categories of respondents

Table 4.   **Familiarity with ICT Devices in Private University Libraries (N=364)**

ICT Devices	Respondents	Percentage
Desktop computers	337	92.6
Laptop computers	261	71.7
IPads	105	28.8
IPhones	161	44.3
Printers	249	69.2
Scanners	182	50.0
Barcode scanners	129	35.4
Storage devices (flash)	257	70.6
Photocopiers	250	68.6
CDRoms	184	50.5

Table 4 reveals respondents' familiarity with ICT devices in private university libraries in Edo State. The result shows that 337 (92.6%) of the respondents indicated that they are familiar with the use of desktop computers; 261 (71.7%) are familiar with the use of laptops; 257 (70.6%) are familiar with the use of storage devices. However, only 105 (28.8%) of the respondents indicated their familiarity with the use of IPads. The overall result indicates that respondents are familiar with the use of some ICT devices in private university libraries in Edo State.
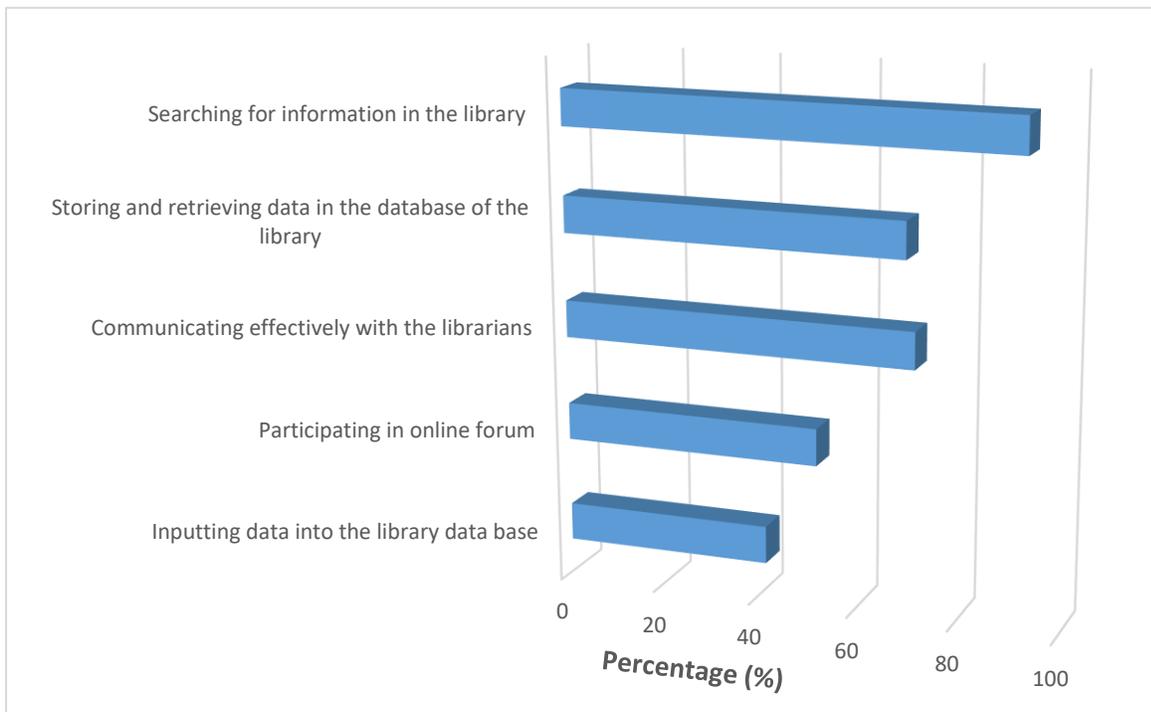

Figure 4: Graphical representation of familiarity with ICT devices

Table 5.   Competency in the Use of ICT Devices (N=364)

Competency	Respondents	Percentage
Searching for information in the library	336	92.3
Storing and retrieving data in the database of the library	253	69.5
Communicating effectively with the librarians	260	71.4
Participating in online forum	189	51.9
Inputting data into the library data base	151	41.5

Table 5 shows that most of the respondents 336 (92.3%) are competent in the use of ICT devices for searching for information in private university libraries. 260 (71.4%) of respondents are competent in the use of ICT devices in communicating effectively with librarians, 253 (69.5%) are competent in the use of ICT devices in storing and retrieving data in the database of the library, 189 (51.9%) are competent in using ICT devices in participating in online forum, while only141 (41.5%) are competent in using ICT devices in inputting data into the library data base. The overall results indicate that majority of the respondents are competent in using ICT devices.
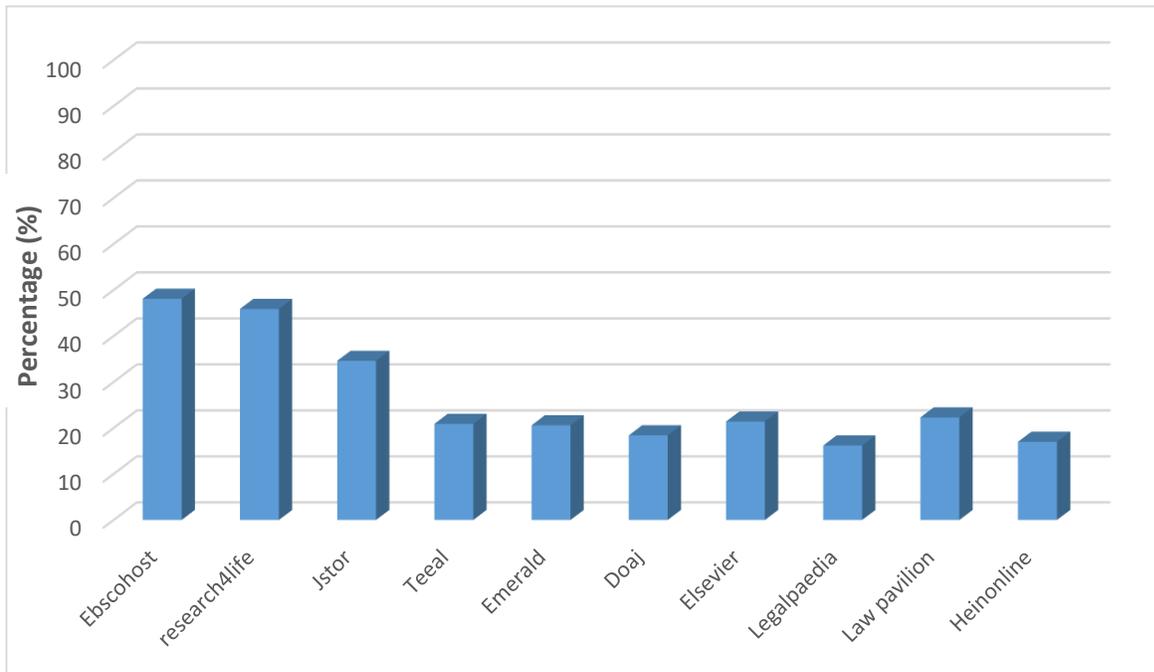

Figure 5: Graphical representation of Competency in the use of ICT

Table 6.   Competency in Use of E-resources Platforms (N=364)

e-resources platform	Respondents	Percentage
Ebscohost	175	48.1
Research4life (OARE, HINARI, ARDI, AGORA, GOALI)	167	45.9
Jstor	126	34.6
Teeal	76	20.9
Emerald	75	20.6
Doaj	67	18.4
Elsevier	78	21.4
Legalpaedia	59	16.2
Law pavilion	81	22.3
Heinonline	62	17.0

Table 6 shows that 48.1% of the respondents are competent in the use of Ebscohost, 45.9% are competent with the use of Research4life e-resources platform for searching for information in private university libraries. 34.6% of respondents are competent in using Jstor e-resources platform. From the table only 17.0% are competent in the use of Heinonline e-resources. The result from the table indicates that most private university library users are deficient in the use of e-resources platform listed.
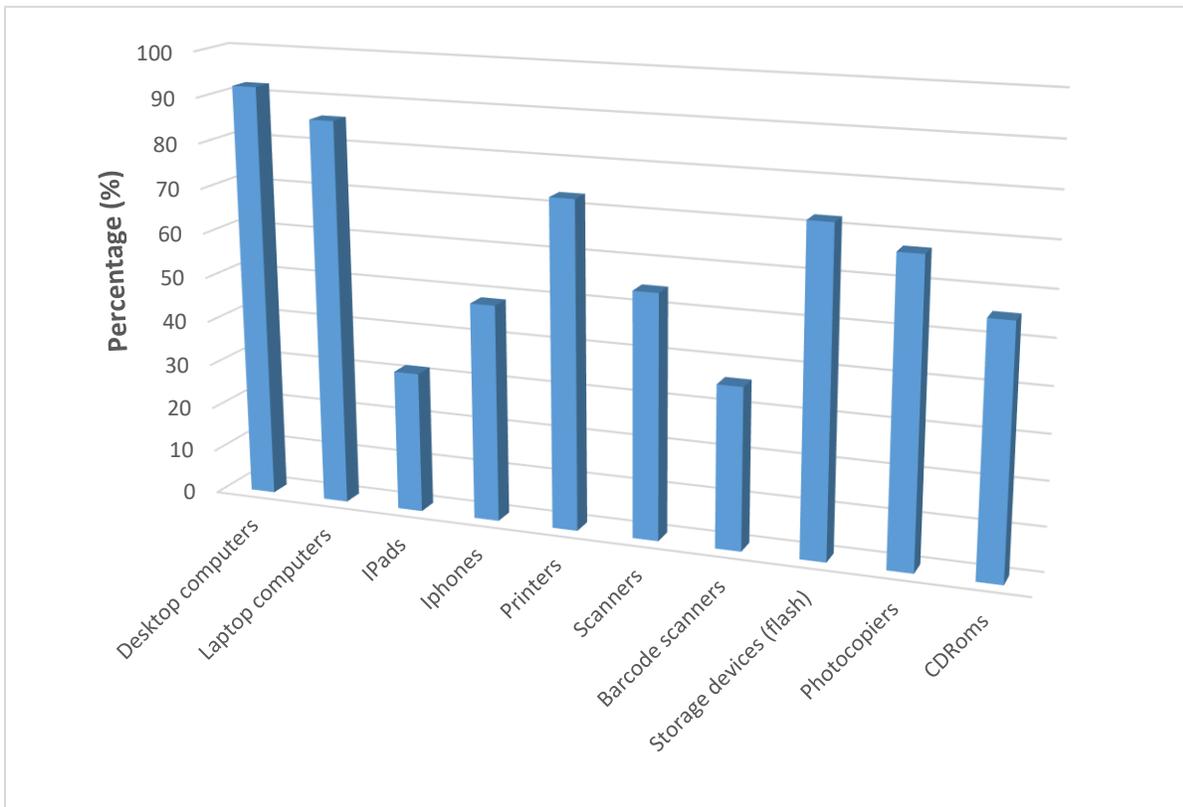

Figure 6: Graphical representation of the competency in the use of e-resources

Table 7.   Frequency of Use of ICT Devices (N=364)

ICT Devices	Respondents	Percentage
Desktop computers	336	92.3
Laptop computers	313	86.0
IPads	115	31.6
Iphones	177	48.6
Printers	266	73.0
Scanners	199	54.6
Barcode scanners	132	36.3
Storage devices (flash)	263	72.3
Photocopiers	245	67.3
CDRoms	202	55.5

Table 7 reveals the frequency of use of ICT devices by respondents' in private university libraries in Edo State. The result showed that 92.3% of the respondents indicated that they frequently use desktop computers, 86.0% of the respondents indicated that they are frequent with the use of laptops, 73.0% of the respondents are frequent with the use of printers while 72.3% frequently use storage devices. However, only 31.6% of the respondents indicated their frequency with the use of IPads. The result indicates that respondents frequently use some of the indicated ICT devices in private university libraries in Edo State.
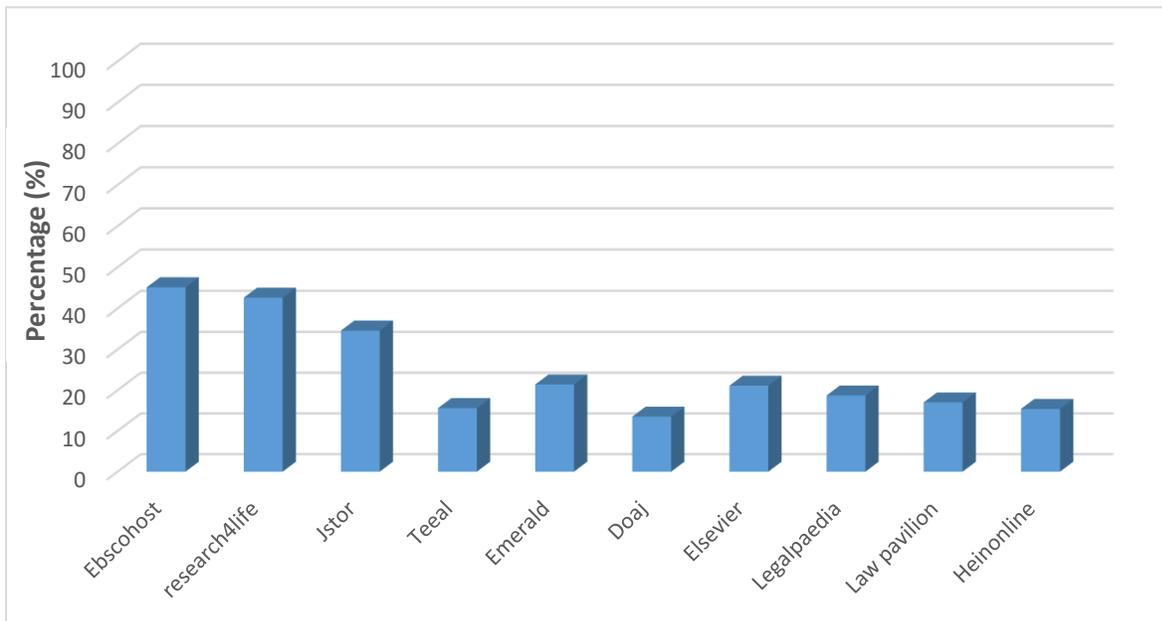

*Figure 7: Graphical representation of frequency of use of ICT devices

Table 8.   **Frequency of Use of E-resources Platforms (N=364)**

E-resources platform	Respondents	Percentage
Ebscohost	164	45.1
Research4life (OARE, HINARI, ARDI, AGORA, GOALI)	155	42.6
Jstor	126	34.6
Teeal	57	15.6
Emerald	78	21.4
Doaj	49	13.5
Elsevier	77	21.1
Legalpaedia	68	18.7
Law pavilion	62	17.0
Heinonline	56	15.4

Table 8 shows the frequency of use of e-resources platforms by respondents' in private university libraries in Edo State. The result shows that 164 (45.1%) of the respondents indicated that they frequently use Ebscohost, 155 (42.6%) of the respondents indicated that they are frequent with the use of Research4life, 126 (34.6%) of the respondents are frequent with the use of Jstor while only 56 (15.4%) of the respondents indicated their frequency with the use of Heinonline.
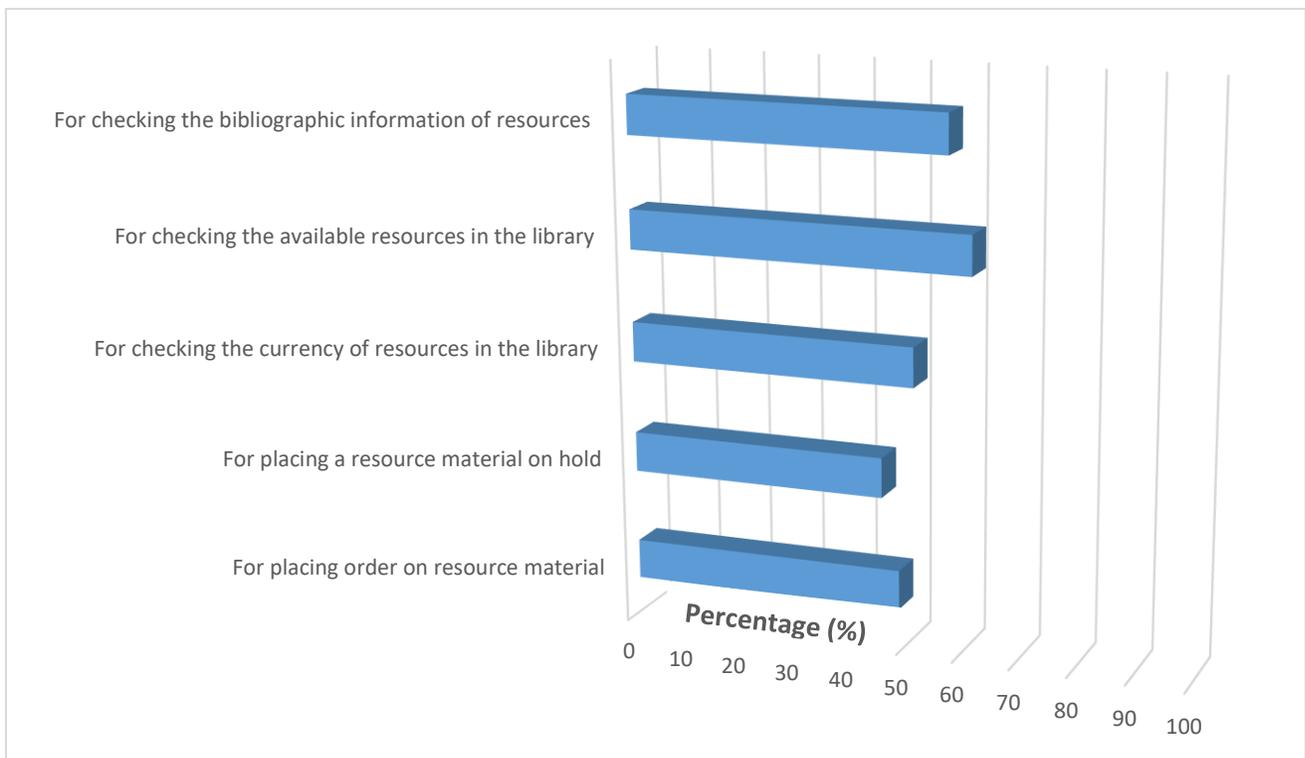

Figure 8: Graphical representation of the frequency of use of e-resources platform

Table 9.   Competency in the Use of OPAC (N=364)

Competency use of OPAC	Respondents	Percentage
For checking the bibliographic information of resources	209	57.4
For checking the available resources in the library	224	61.5
For checking the currency of resources in the library	187	51.3
For placing a resource material on hold	166	45.6
For placing order on resource material	177	48.7

Table 9 reveals the competency in the use of Online Public Access Catalogue (OPAC) by library users' in private university libraries in Edo State. The result showed that 61.5% of the respondents are competent in using the OPAC for checking the available resources in the library, 57.4% of the respondents use OPAC for checking the bibliographic information of resources, while 51.3% use OPAC for checking the currency of resources in the library. It can therefore be deduced from the result that some library users in private university libraries are competent in the usage of OPAC.
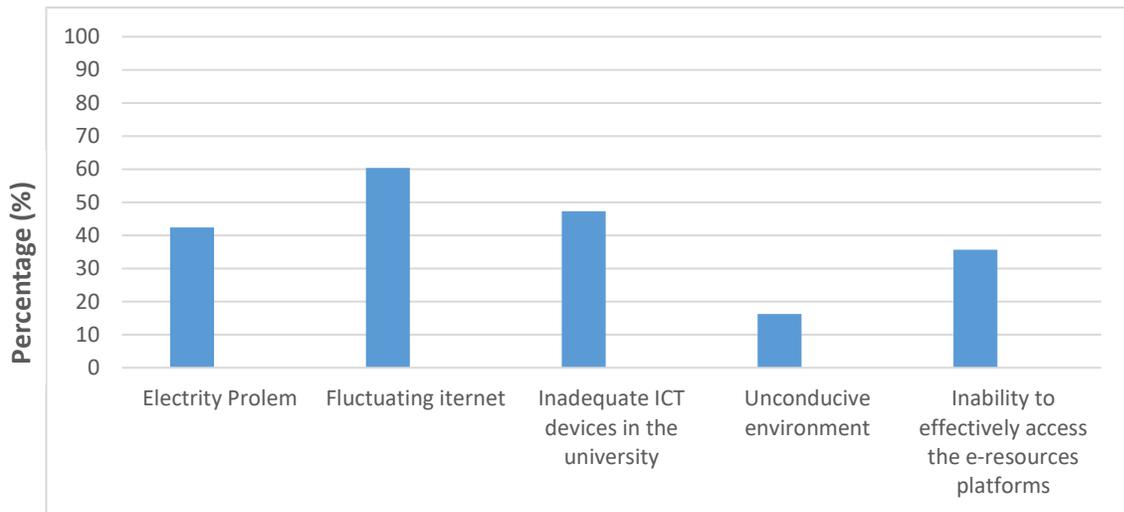

Figure 9: Graphical representation of the competency of use of OPAC

Table 10.   Barriers in Using ICT Devices and E-resources (N=364)

Barriers	Frequency	Percentage
Electricity problem	154	42.4
Fluctuating internet	220	60.4
Inadequate ICT devices in the university	172	47.3
Unconducive environment	59	16.2
Inability to effectively access the e-resources platforms	126	34.7

Table 10 reveals that 60.4% of the respondents takes fluctuating internet as the barrier to using ICT devices and e-resources in private university libraries in Edo State. 47.3% said inadequate ICT devices in the university library is the barrier they face, while electricity problem is 42.4%. Only 16.2% of the respondents said unconducive environment is a barrier. The result from the table indicates that most respondents face fluctuating internet problem in using ICT devices and e-resources.

Figure 10: Graphical representation of the barrier to using ICT devices and e-resources

Discussion of Findings

From the findings, it is revealed that most library users in private university libraries in Edo State, Nigeria are familiar with the use of some ICT devices, especially the use of desktop computers and laptops. However many are not familiar with the use of IPads and barcode scanners in accessing information resources. The users are mostly competent in using ICT devices for searching for information in the university libraries, communicating with librarians, storing and retrieving data in the database of the library and participating in online forum. Therefore, it can be concluded that majority of the respondents are competent in using ICT devices. However, same cannot be said in the use of e-resources platform. Majority of the library users indicated that they are not competent in the use of e-resources platforms (Ebscohost, Research4life, Jstor, etc) available in the university library, while only a few users indicated competency in the use of e-resources platform.

The findings from the study also reveal the frequency of use of ICT devices by library users in private university libraries in Edo State. The study shows that library users in private universities frequently use desktop computers, laptops, printers and storage devices apparently for searching for information, storing and printing the information. However, the frequency of use of e-resources platforms by library users in private university libraries in Edo State is low. The result from the study shows that library users in private university libraries in Edo State are not frequent with the use of e-resources platforms such as Ebscohost, Research4life, Jstor and other e-resources.

The study further reveals the competency in the use of Online Public Access Catalogue (OPAC) by library users. The result shows that some of the library users use the OPAC for checking the available resources in the library, for checking the bibliographic information of resources and for checking the currency of resources in the library. It can therefore be deduced from the study that some library users in private university libraries are competent in the usage of OPAC. Finally, the study reveals that most of the library users in private university libraries in Edo State are faced with the prolem of fluctuating internet, inadequate ICT devices in the university libraries as well as irregular electricity.

Conclusion

From the study, it is evident that library users in private universities in Edo State are competent in the use of ICT devices and frequently use them in searching for information resources and communicating with librarians. However, same cannot be said of e-resources platform available in the private university libraries, as only a few library users indicated competent and frequent use of Ebscohost, Research4life, Jstor and other e-resources platforms. Also from the study, some library users in private university libraries are competent in the usage of OPAC and most of the library users in private university libraries in Edo State are faced with the barrier of fluctuating internet, inadequate ICT devices in the university library as well as irregular electricity.

Recommendations

Based on the findings and conclusion from the study, the following recommendations are proffered;

1. Management of private university libraries should continue to acquire more ICT devices for library users and should continue to talk to its parent institution to invest more on ICT devices.

2. Management of private university libraries should provide training for library users so as to help enhance their knowledge in the usage of e-resources platform.

3. There should be the creation of awareness on the available e-resources platforms available in the university library and the numerous advantages derivable from the e-resources, such awareness can be created through regular issuance of library newsletter, the university's website and social media platforms.

4. More effort should be put in place to strengthen the internet services provided in private universities in Edo State by way of bandwidth expansion to facilitate internet accessibility so as to enhance the speedy access to e-resources.

5. There is need also for private university libraries management to have a clear strategic policy in relation to ICT for library service.

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