

## CHALLENGES AND MEASURES TO ENHANCE E-LIBRARY IN PUBLIC UNIVERSITIES IN ANAMBRA STATE

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### Abstract

This study investigated the challenges and measures to enhance e-library in public universities in Anambra state. The study was guided by two research questions. Descriptive survey research design was employed for the study. The instrument for data collection was questionnaire administered to 457 students. The instrument was duly validated by three experts and subjected to the test of internal consistency using Cronbach aloha. Data collected were analyzed using frequency, percentage, mean and standard deviation. The results of study revealed among others that the challenges of e-library in public universities in Anambra State were: insufficient computer facilities in library, poor internet connectivity, erratic power supply, inaccessibility of the library resources, shortage of technical skills to manage e-library, high cost of computer facilities, high cost of maintenance of digital devices and expensive software for operating e-library.. Based on the findings, it was recommended among others that Management of University should make annual budgetary provision for up-dating e-library with modern resources for effective functioning.

**Keywords:** Challenges, Measures, E-library, Public Universities

### 1. Introduction

University is the apex of tertiary institutions of education where activities are geared towards teaching, learning, research and community development. Anunobi and Nwankwo (2020) averred that universities are set up to encourage and promote scholarship and research in every field of learning and human endeavors. According to Quadri, Adetimirin and Idowu (2014), universities are established primarily to support and cater to the teaching, learning and research activities of the staff and students. Continuing, Quadri et al (2014) posited that university students visit the libraries to retrieve accurate, adequate, relevant and current information.

Technological advancement has brought changes in the library by presenting innovative approaches to gathering, storing, retrieving and providing information. Similar to this, Mshelia, Harazeem and Bello (2019) noted that with the rapid evolution of Information and Communication Technology (ICT), libraries have experienced an unprecedented level of changes over the past decade. In the same vein, Wanyonyi, Odin and Sikolia (2018) asserted that

e-library in institutions of higher learning requires modern ICT facilities such as computers, servers, scanners, photocopiers, software as well as subscribe to online/offline resources such as e-journals, e-books and digital books among other resources. Adesanya and Idogwu (2015) stressed that the management of universities is now investing heavily in the electronic library (e-library) where users are exposed to various electronic resources to enhance their learning.

E-library is the use of digit devices to collect and manage information resources in educational institutions of learning. According to Adesanya and Idogwu (2015), an e-library is a library in which collections are stored in digital formats and accessible by the use of computers. In an e-library, information resources are gathered, stored, retrieved and accessed through computer and internet facilities. Baro, Eze and Nkanu (2013) defined an e-library as a library in which collections are stored in digital formats as opposed to print, microforms, or other media. E-library can be accessed only through laptops, computers, or even mobile phones. In the conceptualization of Ajibola (2019), e-library refers to collections of digital resources consisting of text, audio, visual, graphics and animations in nature that are accessible through the aid of technologies.

E-library plays an essential role in supporting teaching, learning and researches in public universities. Magaji (2015) pointed out that e-library materials can be accessed from anywhere on the globe provided electricity and network are available. The University e-library is aimed at broadening the range of available information within the library and adding value to the content by making them accessible through digital means so that students, researchers, and the entire members of the university community can access them anytime and anywhere (Olajide and Adio, 2017). E-library requires very little physical space to accommodate information resources. Adesanya and Idogwu (2015) stressed that the lack of a national fiber network backbone infrastructure is a major issue in the successful implementation of the electronic library. Continuing, Adesanya and Idogwu pointed that bandwidth and connectivity for higher education institutions and their Internet service providers are deployed using expensive technology like the VSATs, thereby reducing the number of higher education institutions that can benefit from the electronic library resources sharing as well as eliminating its advantages. Quadri, Adetimirin and Idowu (2014) asserted that the undergraduates are expected to read further after class instructions to collect relevant information for class assignments, seminars, term papers, dissertations, thesis, and projects through retrieving information from the e-library.

The use of e-library is aided by various modern resources. Ogugua, Unegbu and Esievo (2019) asserted that e-library contains slides, films, audiotapes, audio-cassettes, video cassettes, computers and accessories, which are electronic media and they contain backup facilities such as diskettes, CD-ROM, magnetic tapes and punched cards. Mshelia, Harazeem and Bello (2019) stressed that the benefit of e-library is that simultaneous users could access library resources at the same time and regardless of location and time of the day. There is a high cost of procuring computers, software and digital facilities to set up an e-library. The successful implementation of an e-library requires a constant electric power supply. The erratic electric power supply in Nigeria Universities seems to hinder e-library usage. Bizi (2021) asserted that the infrastructure needed for the virtual library is not fully in place, networks exist in some of but access to the internet is limited in many tertiary institutions in Nigeria. Given this background, the study investigated the challenges and measures to enhance e-library in public universities in Anambra state.

### 1.2 Purpose of the Study

The main purpose of the study was to determine the challenges and measures to enhance e-library in public universities in Anambra state. Specifically, the study sought to:

1. Find out the challenges of e-library in public universities in Anambra State.
2. Determine the measures to enhance e-library in public universities in Anambra State.

### 1.3 Research Questions

The following research questions guided the study

1. What are the challenges of e-library in public universities in Anambra State?
2. What are the measures to enhance e-library in public universities in Anambra State?

## 2. Method

A descriptive survey research design was adopted for the study. The study was carried out in public universities in Anambra State. The population of the study comprised all the undergraduates in public universities in Anambra State. The sample size of the study was 457 undergraduates drawn using through judgmental sampling technique.

The instrument for data collection was a questionnaire titled “Challenges and Measures to enhance E-library Questionnaire (CMEQ)” CMEQ contains 20 items arranged in two parts namely: I and II. Part I contains 10 items on challenges of e-library, while cluster II has 10 items on measures to enhance e-library. All the items are structured on a four-point rating scale of Strongly Agree (SA), Agree (A), Disagree (D); Strongly Disagree (SD) weighted 4, 3, 2 and 1 respectively. The instrument was subjected to face validation by three experts in Library and Information Science from Nnamdi Azikiwe University. The internal consistency of the instrument was determined using Cronbach alpha. This yielded a reliability coefficient of 0.79 and 0.82 for the two clusters respectively and the overall coefficient of the instrument was 0.81.

The study utilized a primary source of data collected from the 457 undergraduates using a structured questionnaire administered to them. A total of 457 copies of the questionnaire were distributed, and 431 copies of the questionnaire were successfully retrieved, indicating a 94% return rate. The data collected were analyzed using, frequency, percentage, mean and standard deviation. The decision rule is that the mean ratings that fall below 2.50 were taken as disagreement, while the mean rating of 2.50 and above were taken to indicate agreement.

## 3. Results

The demographic characteristics of the farmers consisted of their sex, marital status and age.

**Table 1: Distribution of Respondents based on Gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Male</b>	<b>204</b>	<b>47</b>
<b>Female</b>	<b>227</b>	<b>53</b>
<b>Total</b>	<b>431</b>	<b>100</b>

**Source:** Researcher’s Field Survey and Computation, 2021

As shown on Table 1, 47% (204) of the students are male, while 53% (227) are female showing that there are more female students than the males.

**Table 2: Distribution of Respondents based on Age**

Age	Frequency	Percentage (%)
Below 18 years	87	20
19 – 25	267	62
26 and above	77	18
<b>Total</b>	<b>431</b>	<b>100</b>

**Source:** Researcher’s Field Survey and Computation, 2021

The result on Table 2 show that majority 62% (267) of the undergraduates are between 19-25 years of age, 20% (87) of the respondents are below 18 years, while 18% (77) of the respondents are 26 years and above.

**Research Question One:** What are the challenges of e-library in public universities in Anambra State?

Table 3: Mean and Standard Deviation Scores of Undergraduates on the Challenges of E-Library

S/ N	ITEMS									
		N	SA	A	D	SD	$\bar{x}$	SD	Decision	
1	Insufficient computer facilities in library	431	139	146	102	44	2.88	0.98	Agree	
2	Poor internet connectivity	431	162	115	97	57	2.89	1.06	Agree	
3	Erratic power supply	431	157	118	120	36	2.92	0.99	Agree	
4	Inaccessibility of the library resources	431	121	131	110	69	2.71	1.05	Agree	
5	Resistance to change	431	101	109	81	140	2.40	1.17	Disagree	
6	Shortage of technical skills to manage e-library	431	94	173	101	63	2.69	0.97	Agree	
7	High cost of computer facilities	431	110	125	130	66	2.65	1.02	Agree	
8	Low readiness of students to use e-library	431	101	88	128	114	2.41	1.11	Disagree	
9	High cost of maintenance of digital devices	431	114	119	79	119	2.53	1.15	Agree	
10	Expensive software for operating e-library	431	121	109	104	97	2.59	1.12	Agree	
<b>Cluster Mean</b>							<b>2.67</b>	<b>1.06</b>	<b>Agree</b>	

Data Analysis presented on Table 3 revealed that the students recorded mean scores above the cut-off mean of 2.50 for all items except 5 and 8 indicating agreement with the statement as the challenges of e-library in public universities in Anambra State. The overall standard deviation score of 1.06 are closer to the mean indicating similarity in their responses in each cluster. The

cluster mean of 2.67 indicated agreement with the statement as the challenges of e-library in public universities in Anambra State

**Research Question Two:** What are the measures to enhance e-library in public universities in Anambra State?

Table 4: Mean and Standard Deviation Scores of Undergraduates on the Measures to enhance E-Library

S/ N	ITEMS	N	SA	A	D	SD	$\bar{x}$	SD	Decision
11	Supply of computer facilities to library	431	114	103	101	113	2.51	1.14	Agree
12	Expansion of network bandwidth in university	431	138	141	103	49	2.85	1.00	Agree
13	Regular supply of electric power in university	431	130	117	92	92	2.66	1.12	Agree
14	Offering wireless internet access to students for e-library	431	107	127	110	87	2.59	1.07	Agree
15	Orientation of staff to embrace e-library	431	104	139	71	117	2.53	1.13	Agree
16	Regular training of librarians to acquire technical skills	431	110	133	90	98	2.59	1.10	Agree
17	Subsidizing the cost of computer facilities to university management	431	120	111	107	93	2.60	1.11	Agree
18	Enlightening of students on the benefits of e-library	431	130	108	88	105	2.61	1.15	Agree
19	Recruit of technicians to maintenance digit devices of e-library	431	115	122	104	90	2.61	1.09	Agree
20	Subsidizing the cost of software for operating e-library to university management	431	124	110	79	118	2.56	1.17	Agree
<b>Cluster Mean</b>							<b>2.61</b>	<b>1.11</b>	<b>Agree</b>

As revealed on Table 4, all items have mean scores above the cut off mean of 2.50 and this indicates their agreement with the items as the measures to enhance e-library in public universities in Anambra State. The overall standard deviation score of 1.11 indicated that the respondents are homogeneous in their responses. The cluster mean of 2.66 indicated that the items are the measures to enhance e-library in public universities in Anambra State.

#### 4. Discussion of the Findings

The finding of the study indicates that there are many challenges of e-library in public universities in Anambra State. These challenges were: insufficient computer facilities in library, poor internet connectivity, erratic power supply, inaccessibility of the library resources, shortage of technical skills to manage e-library, high cost of computer facilities, high cost of maintenance of digital devices and expensive software for operating e-library. This is agreement with the finding of Bizi (2021) who reported that the challenges that are associated with e-library in tertiary institutions were: lack of manpower, ICT literacy among library staff, lack of constant power supply among others. This is in conformity with the finding of Mshelia, Harazeem and Bello (2019) which reported that the challenges of e-library include: lack of resources, lack of resources, compatibility of format, security, poor internet connectivity and irregular power supply. This is also in support of the finding of Tofi and Onuminya (2019) which reported that the challenges of library are absence of relevant information materials, high cost of library resources, electric power shortage and poor funding. The electric power supply in Nigeria is erratic and worrisome which adversely affects the operation of modern equipment to aid the practice of e-library in public universities. The cost of computer hardware and software for operation and development of e-library is too expensive for management of public universities to afford. This situation is worsening by increasing exchange rate of Naira to US Dollar. It has brought inflation and escalating prices of ICT hardware and software to improve e-library. The cost of data require for internet service for enhancing e-library is too cost for students and management of university to afford.

The result of the study indicated measures to enhance e-library in public universities in Anambra State. These measures were: supply of computer facilities to library, expansion of network bandwidth in university, regular supply of electric power in university, offering wireless internet access to students for e-library, orientation of staff to embrace e-library, regular training of librarians to acquire technical skills, subsidizing the cost of computer facilities to university management, enlightening of students on the benefits of e-library, recruit of technicians to maintenance digit devices of e-library and subsidizing the cost of software for operating e-library to university management. This is line with the finding of Bizi (2021) who reported that the solution to the challenges associated with e-library were as follow: provision of technical and physical infrastructure, arranging in-house training for library staff, allocation of sufficient fund to initiate e-library project and develop digital library software in tertiary institutions among others. Subsidizes and more grants from government to public universities is required to procure c computers, printers, photocopying machines, scanners and subscriptions to internet for sustainable development of e-library. Regular training of Liberians through annual workshops and seminars is crucial to enable them acquire skills for ICT facilities usage for e-library. More enlightenment and orientation of students can help them achieve the dreams of utilizing e-library.

## **5. Conclusion**

Based on the findings, it is concluded that there are many challenges of e-library in public universities in Anambra State. No meaningful development can be made in the development of e-library without making sufficient funds for procurement of computer facilities, maintenance of the available e-library resources and training and orientation of staff. The improvement of e-library in Nigeria universities requires committed of government, non-governmental organization and individuals in procuring and maintenance of digital devices in the library.

## 6. Recommendations

Based on the findings, it was recommended that:

1. National Universities Commission should formulate policy that encourages the implementation of e-library in universities across the country.
2. Management of University should make annual budgetary provision for up-dating e-library with modern resources for effective functioning.
3. Management of University should constitute committee to annually orient students on e-library usage and oversee the uses by students.
4. Government should regularly train and retrain academic librarians on information and web development technologies through annual seminars, workshops and conferences.

## 7. References

- Adesanya, O.O. & Idogwu, K.U. (2015). The evolution of e-library in Nigerian academic libraries: Challenges and way forward. *Asian Journal of Education and e-Learning*, 3(4), 271-276.
- Ajibola, S.G. (2019) The electronic library services and its patronage among undergraduates in the Faculty of Health Sciences, Osun State University, Osogbo, Osun State, Nigeria. *International Journal of Library and Information Science Studies*, 5(1), 41-54.
- Anunobi, C.V. & Nwankwo, N.G. (2020). Awareness and extent of use of library information resources by university undergraduates in Anambra State. *International Journal of Library and Information Studies*, 10(3), 136-145.
- Baro, E.E., Eze, M.E. & Nkanu, W.O. (2013). E-library services: Challenges and training needs of librarians in Nigeria. *International Digital Library Perspectives*, 29(2), 101-116.
- Bizi, M.K. (2021). Exploring e-library challenges in the north east of Nigeria tertiary institutions library. *International Journal of Scientific Engineering and Applied Science*, 7(1), 137-145.
- Magaji, S. (2015). Digital library education: Global trends and issues. *Journal of Education and Practice*, 6(17), 66-70.
- Mshelia, P.Y., Harazeem, A.O. & Bello, R.A. (2019). Bookless library in Nigeria: Current trends and issues. *International Journal of Library and Information Studies*, 9(2), 121-130.

- Ogugua, J.C., Unegbu, M.C. & Esievo, L.O. (2019). Availability and utilization of school library resources by students in senior secondary schools in Owerri West LGA Imo State. *International Journal of Library and Information Science Studies*, 5(4), 13-23.
- Olajide, O. & Adio, G. (2017). Effective utilization of University library resources by undergraduate students: A case study of Federal University Oye-Ekiti, Nigeria. *Library Philosophy and Practice*, 15(3), 1-16.
- Tofi, S.T. & Onuminya, L.A. (2019). Availability and utilization of school library resources in selected secondary schools in Makurdi Metropolis. . *Library Philosophy and Practice*, 1(1), 1-31.
- Wanyonyi, M. S., Odin, C. & Sikolia, G. S. (2018). Effect of adequacy of information resources on user satisfaction at Pwani university library. *The Strategic Journal of Business & Management Change*, 5(3), 935-951.
- Quadri, G.O., Adetimirin, A.E. & Idowu, O.A. (2014). A study of availability and utilization of library electronic resources by undergraduate students in private universities in Ogun State, Nigeria. *International Journal of Library and Information Science*, 6(3), 28-34.