

Accessibility, Affordability and Use of the Internet Café by Students in Higher Institutions of Bauchi State, Nigeria

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Abstract

This study investigated the Internet cafe accessibility, affordability and use among students in higher institutions of learning in Bauchi state, Nigeria. The objectives of the study were to determine, the level of Internet accessibility, affordability and utilization by students. Quantitative research methodology was adopted, the population of the study comprised of students of higher institutions of learning in Bauchi state. Random sampling technique was used to sample 750, students from six higher institutions of learning in Bauchi state. A self-developed questionnaire strongly validated was the only instrument used to collect relevant data for the study. Findings of the study indicated that majority of the respondents had access and used the Internet for academic and entertainment purposes from the institutional café. Internet accessibility, level of experience on Internet utilization was high. Limitations in the Internet access time, low bandwidth, inadequate access points and power outage were the major challenges faced by students under study. To enhance and optimize students' Internet accessibility, affordability and utilization, provision of more Internet access points on campus, strong bandwidth and steady connectivity, and upward review of access time duration constitutes the major recommendations set out by the paper.

Keywords: accessibility, affordability, Internet, Bauchi State, Nigeria

1. Introduction

With the Internet, students will be in a position of greater opportunities to learn, educate and be entertained. This is to say higher education institutions can benefit tremendously from the services provided by the information and communication technologies (ICTs). Specifically, the Internet has made a laudable impact on the improvement of teaching, learning, research and the educational system in general, regardless of the location in which the institution resides. Today, the Internet has become an easier and faster avenue through which students and teachers can have access to information resources that supplement the libraries around the globe. Al-Jurf (2007) stated that advancement in information technologies (IT) have resulted in the tremendous growth of human knowledge which warrant a dramatic change in the complexity and volume of online resources that modern libraries contain. Nowadays, many colleges and high institutions of learning possess a ICTs infrastructures and Internet facilities through which they provide bewildering array of online and electronic information, databases and CD-ROMs. These infrastructures made it possible for students and teachers to have access to information through the use of different search engines and consequently make them to enjoy unlimited access to electronic resources anywhere around their institutions and colleges through the use of the Internet.

Despite this laudable impact of IT and specifically the Internet, it is worrisome to note that, students in Nigeria have been associated with lack of accessibility and affordability to the Internet (Kamba, 2008). Further expressed that the problem of accessing and harnessing information on the Internet in developing countries like Nigeria has been a subject of concern for the Internet users including institutions of learning, and the government. Ajegbomogun (2011) stated that financial constraints on the part of higher institutions to provide 24 hours daily and 7 days a week Internet network connectivity, the deplorable infrastructural facilities, insufficient Internet facilities, low bandwidth and limited computers terminals among others, are added obstacles compounding meaningful access to information on the Internet and utilization by students. Therefore, it is against this background that this study seeks to investigate the Internet accessibility, affordability and use of the Internet cafes for academic activities among students of tertiary institutions in Bauchi State, Nigeria.

In view of the above the study aims to achieve the following objectives:

1. To find out the extent to which students of higher institutions of learning in Bauchi State have access to the Internet Cafes
2. To find out the extent to which Internet services are affordable to the students of higher institutions of learning under study.
3. To find out the extent to which students of higher institutions of learning in Bauchi State use the Internet for academic activities.

2. Review of Related Literature

The Internet is a network that consists of millions of similar domestic, business and government networks which together carry various information resources and services electronically. The Internet involved the use of e-mail,

telnet, File Transfer Protocols, world wide web services, social networking sites etc. It also contained applications such as search engines in the likes of Yahoo, Google, HotBot, Alta Vista, Excite, Mamma and Infoseek, etc which make things easy in getting information on the Internet. The Internet is accessible to all kinds of people comprising those in academic, military, business, students etc. Through the Internet, one can have access to full text of researches reports, journals, bibliographies, databases, library catalogues on OPAC, electronic mails, newspapers, magazines etc.

Ajebomogun (2011) observed that there is increase in the Internet awareness, access, skills and technical manpower which gradually increase the Internet accessibility. Today, access to the Internet has become the fastest, easiest, and cheapest means of accessing the necessary information the world over. It is therefore expected that Internet availability and accessibility would stimulate regular use and minimize perceived barriers to its use and information resources. Further revealed that accessibility to information is one of the prerequisites of information utilization. More so, the intention of use, users' characteristics, and the environment in which information is being used; medium of communication, infrastructural facilities and equipment, cost of acquisition and time also influence utilization of information resources particularly with regards to the use of the Internet.

Although access to the Internet was originally for sharing information among military, scholars researchers, however, it has turned out to be a tool that facilitate and support educational and academic endeavors, in tertiary institutions of learning. Today, electronic books, journals, reference materials, online databases, online catalogues, bibliographies and information resources on various media are available and accessible on the Internet. These can be accessed through the use of search engines which are designed to enable browsers locate information and media on the Internet. Hence, different search engines are provided to help users to easily access information by searching databases, indexes etc interactively. However, the fact is, no single search tool or search engine is eloquent enough in searching the Internet (Kamba, 2008). Therefore one has to be conversant with different search engines, so as to efficiently search for variety of information resources from the Internet.

At different capacity, frantic effort was made by Nigerian government to make digital information available and accessible to students especially in higher institutions. Internet literacy then becomes another hindering factor for students to effectively utilize the information resources available on the Internet. Okon (2007) equally noted that along with study skills, effective information search and utilization become essential for students success in their overall academic endeavor. Further stressed that accessing relevant and appropriate information from the Internet is a task. For that, all information users including students need to develop skills for searching, evaluating and managing information if they are to be effective and critical consumers of information particularly in academic institutions and on the use of the Internet.

In a similar review, Eyitoto (2006) also established that African countries including Nigeria are trying within their capability in the provision of Internet facilities specifically for the educational purpose. This has been the case even at the moment; efforts are being made for the provision of Internet facilities for access to students especially at higher institutions both on and off campus, including even those in the remote areas. Although studies conducted by Eyitoto 2006; Tella 2007; and Jagboro; 2003) fundamentally investigated obstacles to Internet access and utilization and found that the problem was facially not addressed.

As observed by Abdussalami (2005), Faboyinde (2007), Iheaturo et al (2006), and Esievo (2009) Internet access in libraries is common practice in modern librarianship, more libraries and information centers are becoming available on the net day by day, pointing out that already many libraries in the developed countries are on the Internet, reaching out to remote users. Interestingly, Libraries in the developing countries have started joining the trend. Taking Nigeria for example, few high institution libraries are now available on the net. One beauty about the Internet is the fact that besides providing access to remote users, it provides opportunity to libraries to easily and more easier update and expand their collections, hence providing wider access to information resources and the sharing of the resources to users and among the libraries.

A number of studies have tried to explain the availability and added value of ICT and the Internet in particular on learning and research, even though some of the studies did not reflect on the driving force behind students' access, affordability and use of the Internet cafes. Eyitoto's (2008) study for instance centered on the major Internet search engines, information services and the various websites areas. On his own part, Opalake (2008) identified the major range of services offered by the Internet which comprises of electronic mail, online chat, file transfer, retrieving and disseminating information to and from computers on the net, remote logging, index programme, video and teleconferencing and the interlinked web as well as either documents of the world wide web, Wide Area of Information Services (WAIS) newsgroups, talk service, and the two most patronized services are the e-mail and world wide web search amongst others.

DeBell and Chapman, (2006) revealed that approximately 87% of American youths use the Internet on a daily basis. Children of the age of 3 and over and in nursery school through grade 12 use computers, about 59 percent (35 million persons) use the Internet. They mostly use Internet over other electronic and conventional

information resources, unlike in the developing countries where Internet is still considered as luxury as a result of challenges in technology etc. Tella (2007) associated the low Internet usage in the developing countries to restriction pertaining the time of access. While Ojedekum (2001) cited by Tella (2007) relates it to lack of adequate computers with Internet facilities. In comparison, cited Jagboro (2003) and Robinson (2005) studies on students access and use of the Internet. Jagboro's study revealed that only 22% of the students accessed Internet on daily basis and 25% spent an average time of half an hour daily, i.e. approximately 5 hours per week, while Robinson found that African American College, Michigan students spent an average of 2 hours per day on line. Eyitoyo (2008) however contended that there is a growing awareness in Africa about the quality of information on the net which the students, academics and researchers found very useful.

More studies have reported that the academic environment is making optimum use of the Internet services. For instance Internet use for educational and research purposes was documented by Mashra, Yadav & Bisht (2005) who found that majority of students use the Internet and most of them use the Internet for studies. Kumar and Kaur (2005) and Armah (2009), agree with Mishra et al (2005) finding. In her study of IT services provide in the universities in Ghana, Armah (2009) discovered an overwhelming number of students from the Universities, use the Internet services for their studies. Similarly studies on the use of the Internet by Teachers in United State, Australia and Librarians in Malaysia revealed that majority of users, use the Internet to access information resources for preparing their lesson and for work related purpose respectively INFLIBNET (2004) and Loong (2012).

In of the above review, it is pertinent to note that the Internet is a great asset to tertiary institutions, however, findings from other studies shows that the issue of accessibility and use is still not been addressed by the governments of the developing countries including Nigeria. It is based on this premise that this paper has investigated the Internet accessibility, affordability and use of Internet cafes for academic activities among students of tertiary institutions in Bauchi State, Nigeria.

3. Methodology

Quantitative research methodology using cross-sectional survey design was adopted for the study. The population of the study comprised of all tertiary institutions and their students in Bauchi state, this include Abubakar Tarawa Balewa University Bauchi, School of Nursing and Midwifery Bauchi, Federal Polytechnic Bauchi, College of Education Azare, College of Arabic & Islamic Studies Misau and School of Health. Random sampling technique was used to sample out seven hundred and fifty students (750) that participated in the study. A self-developed questionnaire with strongly validated with high reliability index was the only instrument used for data collection. Descriptive analysis was used to analyze the data.

4. Findings

A total of 750 copies of questionnaire were distributed to respondents under the study. Out of which only 680 (90.7%) were returned and found usable. The high response rate achieved from this study was attributed to the self-administration of the questionnaire and enlightenment given to the students on the importance of the research for their academic development.

4.1. Demographic information of the respondents

This section provides the demographic information of the respondents which include age, gender, and literacy of using the Internet.

4.1.1 Respondents Gender

As indicated in table 1 majority (404 59.4%) of the respondents were male, while 269 (39.6%) were females and 7 (1.00 %) did not indicate their gender. The finding shows that with the exception of College of Nursing and Midwifery, Bauchi, all other institutions male were in majority than the female. This could be attributed to the fact female are more required in the field Midwifery and nursing than their male counterpart. While in all other institutions it was male students who dominated the larger population of the respondents which is in line with the findings of other studies in Nigeria and Africa in general.

Table 1: Gender of the Respondents

Gender	Frequency	Percent %
Male	404	59.4
Female	269	39.6
Not indicated	7	1.0
Total	680	100.0

4.1.2 Respondents Age

Table 2, indicated that, majority 478 (70.1%) of the respondents were between the age of 21 – 30 years, followed by 123 (18.1%) who were between the age of 16- 20 years, 67 (9.8%) were between 31-40, and only 12 (1.8%) were between 41 and above years. This revealed that majority of the students in tertiary institutions in Bauchi

belonged to the age bracket between 16- 30 years of age amounting to 88. 2%. This shows youths in Bauchi state are attending high institutions than any particular group of people in the state. This has been the ideal situation to happen in any part of the world.

Table 2: Respondents Age

Age (years)	Frequency	Percentage %
16- 20	123	18.1
21- 30	478	70.1
31- 40	67	9.8
41 and above	12	1.8
Total	680	100

4.2 Accessibility of the Internet Cafes

Respondents were asked whether the institutions they attended provided them with access to Internet cafes. Majority of the respondents (614 90.2%) indicated that the institutions provided them with Internet cafes and services, while only 6.3% respondents answered no. It is obvious to note that the issue of the Internet accessibility is not only restricted to the institutions' cafes, but also augment internet cafes outside the institutions i.e. commercial internet cafes. Because observations have shown that some of the students had access to the Internet outside their institution.

Table 3: Access to the Internet Cafes by institutions

Accessibility	Frequency	Percentage %
Yes	614	90.29
No	43	6.32
Not responded	23	3.38
Total	680	100

4.2.1 Location and Access point to the Internet Cafes

Respondents were asked to indicate the location and points where they had access to the Internet cafes. Table 4, revealed that less than half 197 (32.08%) and 137 (22.31%) of the respondents had access to the Internet using their modems and mobile phones and Internet cafes owned by the institutions respectively. This followed by 119 (19.38%) of the respondents who had access to the Internet through the internet cafes own outside their institutions, while 85 (13.84%) and 43 (7.0%) of the respondents indicated that they had access to the Internet through commercial cafes own by commercial vendors within the institutions and the internet cafes own by the library respectively, and only 33 (5.37%) of the respondents indicated they had access to the internet cafes attached to the hostels. It was however, noted that few among the respondents indicated multiple type of access point. The result pointed out that majority of the respondents had access to the Internet both within and outside the institutions; however, most of the access points were not owned by the institutions they were either owned by the students themselves or by the commercial vendors.

Table 4: Location and Access point to the Internet Cafes

Location and Access Point	Frequency	Percentage %
Internet café own by the institution	137	22.31
Internet café own by the library	43	7.00
Internet cafes own by commercial vendors within the institutions	85	13.84
Internet café attached to the hostels common rooms	33	5.37
Self-own Internet service using modem	197	32.08
Internet Cafes outside the Institutions	119	19.38
Total	614	100

4.2.2. Frequency of Access to the Internet Cafes

Respondents were asked to indicate the frequency at which they had access to the Internet cafes. The result in table 5 shows majority 400 (65.15%) had access to the internet cafes for less than 1 hour per day, followed by 95 (15.47%) who had 2-3 hours access to the internet cafes per day. 57 (9.28%) of the respondents had access to the internet cafes between 3 - 4 hours a week, and only 23 (3.75%) had access to the internet cafes for 5 hours and above a week, while 39 respondents did not responded to the question. This mirrors that majority of the respondents spend little time having access the Internet cafes as a result of lack affordability due to cost.

Table 5: Frequency of Access of the Internet cafes

Extent of Access	Frequency	Percentage %
Less than 1 hour a day	400	65.15
2 - 3 hours a day	95	15.47
3 - 4 hours a week	57	9.28
5 hours and above a week	23	3.75
Not responded	39	6.35
Total	614	100

4.2.3. Level of satisfaction with the services of the Internet Cafes

Respondents' opinions on satisfaction or dissatisfaction on the Internet access/ was sought. The findings revealed majority 476 (77.52%) of respondents indicated that were not satisfied with the services and connectivity of the Internet cafes, while 138 (22.47%) represent those who indicated that they were satisfied with the level of services and connectivity of the Internet cafes. The results reveals that the satisfactory level of the students on the access to the internet cafes was very low, taking into consideration that modern half of the respondents were unsatisfied with the services and connection of the Internet services they got. This can be associated with the uneasy manner through which the respondents access the Internet cafes from their institutions and outside the institutions. This can be attributed to poor Internet connectivity and inadequate Internet facilities that is the main problem of internet access and use in Nigeria.

4.3 Affordability of the Internet Cafes

Respondents' opinions on the affordability of the Internet cafes in terms of cost and efficiency. The findings revealed majority 401 (65.31%) of respondents indicated that the cost of accessing the Internet cafes was not affordable to them, followed by 57 (9.28%) of the respondents who indicated that the cost of accessing the Internet cafes was average in terms of affordance, 94 (15.47%) indicated that the cost of accessing the Internet café was affordable to them and 35 indicated that the accessibility to the internet cafes was very difficult to be afford, while 27 respondents did not responded to the question.

4.4 Use of Internet Cafes

Respondents were asked to indicate the level at which they use the Internet cafes. that less than half (31.08%) and (23.31%) of the respondents use the Internet using their modems and mobile phones and Internet cafes owned by the institutions respectively. This followed by (20.38%) of the respondents used the internet cafes outside their institutions, while (12.84%) and (5.0%) of the respondents indicated that they use the commercial cafes within the institutions and the internet cafes own by the library respectively, and only (7.37%) of the respondents indicated they use the Internet cafes attached to the hostels. The result pointed out that majority of the respondents used the Internet cafes within and outside their institutions.

5. Discussion and Conclusion

From the findings, it was could be seen that the level of accessibility to Internet cafes by the respondents was high. Majority of respondents from all institutions indicated that they had Internet cafes where they had access to the Internet services. However, the finding shows that respondents accessed the Internet through the use of the modem and mobile phones, commercial vendors' internet cafes etc. This finding supports Ajegbomogun's (2011) study which observed increase in Internet accessibility in Nigeria. This could be attributed to recognition of the significance of ICTs in education by Government and Non-Governmental Organizations (NGOs). Government intervention through the ETF has provided ICTs and Internet facilities to universities including other tertiary institutions in Nigeria as well as some NGOs have augmented Internet access in the institutions of learning in most of the states in Nigeria. This could be attributed to limited number of the Internet facilities as well as limited access point own by the institutions. It was however, noted that few among the respondents indicated multiple type of access point.

The result pointed out that majority of the respondents had access to the Internet both within and outside the institutions; however, most of the access points were not owned by the institutions they were either owned by the students themselves or by the commercial vendors. The findings of this study, thus upheld the study of Tella (2007) who associated the low Internet usage in the developing countries to restriction pertaining the time of access and lack of adequate computers with Internet facilities. The findings also show that majority of the respondents do not had access to the internet cafes for long period of time. This reinforced the findings by Jagboro (2003) which revealed that only 22% of the students had access to the Internet on daily basis in Nigerian tertiary institutions. The results of the study further reveals that the satisfactory level of the students on the access to the internet cafes was very low, taking into consideration that modern half of the respondents were unsatisfied with the services and connection of the Internet cafes. This can be associated with the uneasy manner through which the respondents access the Internet cafes from their institutions and outside the institutions . This

can be attributed to poor Internet connectivity and inadequate Internet facilities that is the main problem of internet access and use in Nigeria.

The findings further indicated majority of the respondents revealed that the cost of accessing the Internet cafes was not affordable to them. Observation have shown that majority of the students had very low income. In most cases the students are dependent on their family with very few earning salary that is very meagre. Taking into consideration the economic adversity in the country, only very few among the students can afford personal computer and use of modem to access Internet services or constantly afford commercial Internet services. Hence the accessibility satisfactory level was facial.

6. Recommendations

1. The authorities of the higher institutions should as matter of urgency provide mode and access points of internet cafes at various convenient places within the campuses i.e. the departments, libraries and students' hostels. To achieve this, the authorities should initiate partnership with government and non-governmental agencies such as TETFUND, NUC, Federal Ministry of Education, Philanthropists and GSM services providers.
2. The stakeholders should approach the public to make huge investments on the establishment of Internet cafes closer and within the institutions.
3. Authorities of higher institutions should provide solar power supply to Internet cafes in the institutions, to curtail power outage which greatly affects the smooth the Internet services.
4. The authorities of the higher institutions should develop clear ICT policy framework that will support the adequate provision and utilization of Internet at their institutions.
5. Moreover, it should be ensured that the communities of the higher institutions are exposed to training so that they will continue to have up to date techniques of using the Internet cafes to access the information resources.

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