Availability and Utilizations of Information and Communication Technology Facilities and Users' Satisfaction among Students in Abak Local Government Area, Nigeria

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Abstract
This Study examined availability and utilisation of information and communication technology facilities and users' satisfaction among students in Abak Local Government area, Nigeria. Two objectives were formulated for the study which formed the research questions and hypotheses. The instrument used for data collection was a researchers – developed questionnaire titled "Availability and Utilization of ICT facilities and users' satisfaction among students in Abak Local Government Area". The survey research design was adopted for the study. The population of the study was 400 students that visited each of the four internet service centres in Abak Local Government Area. A simple linear model was formulated for the data analysis. The beta coefficient was used for the test of hypotheses which revealed in the findings that there is a negative relationship between the independent variables and the dependent variable. The findings indicated that email services and internet services showed a negative and insignificant relationship with school leavers' satisfaction in Abak. This could be due to the insignificant presence of the number of internet services providers and ICT training centres in Abak Local Government Area.

Keywords: Availability Utilizations Information and Communication Technology Facilities, Users' Satisfaction,

Introduction

Several information and communication technology facilities are available for everyone whether in the public institutions or private organizations. Most universities, polytechnics and Colleges of education throughout the world have established their presence on the internet, thereby making it possible for researchers to access past and present information on courses being offered by institutions as well as their admission requirements. These services are accessible through various ICT facilities that are available for utilization. The revolution in Information and Communication Technology (ICT) and particularly the internet has exerted profound effect on young school leavers most especially in the conduct of Computer Based Test (CBT), by the Joint Admission and Matriculation Board (JAMB) which is the body that examines and admits secondary school leavers into tertiary institutions of their choices upon passing their examinations. Information and Communication Technology facilities like the

computer and internet have helped in developing young school leavers especially in the areas of academic research.

Concept of ICT Facilities

Information and Communication Technology (ICT) Facilities have become the rave of the moment in global socio economic affairs. It has become so important that every country, organization or institution no matter how highly or lowly placed would love to identify and embrace it. The world presently is knowledge driven and information age has taken the centre stage in virtually everything. Utilization of ICT facilities is therefore a sine qua non for qualitative service delivery in an organization. Information and Communication Technology is an extended term for information technology (IT) which stress the role of unified communications.

The term ICT is also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system. There are a large economic incentives (huge cost savings due to elimination of telephone network) to merge the telephone network and computer network system using a single unified system of cabling, signal distribution and management.

However, ICT has no universal definition, as "the concepts, methods and applications involved in ICT are constantly evolving on an almost daily basis". The broadness of ICT covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form example, personal computers, digital television, email, robots. The present researchers therefore see ICT facilities as simply all the hard and soft wares that could facilitate good and rapid communication between parties. Hence, for the purposes of this study, these facilities are limited to Internet services and electronic e-mails.

Electronic Mail (email) or email services are methods of exchanging messages between people using enabled electronic devices like the computer. These messages are computer stored messages and are usually encoded in American Standard Code for Information Interchange (ASCII) text. Electronic mail can be referred to the information stored on a computer that is exchanged between two users over telecommunications. More plainly, e-mail is a message that may contain text, files, images, or other attachments sent through a network to a specified individual or group of individuals. . These messages are stored in the 'cloud' and cannot be lost unless completely deleted or detached by the user. Also, sending an email does not require paper, pen, card board, or packing tape, thereby conserving resources and also being environmental friendly.

Email has been widely accepted by business, government and nongovernmental organisations in the developed world, and it is one of the key parts of an 'e-revolution' in workplace communication (with the other key plank being widespread adoption of high-speed internet). A sponsored 2010 study on workplace communication found 83% of United States knowledge workers felt email was critical to their success and productivity at work. It has some key benefits to business and other organizations including facilitating logistics, helping with synchronisation, reducing cost, increasing speed and creating a written record in firms and organizations. Young school leavers engage in the use of electronic mail to share information because of its various advantages. These advantages include free delivery. To this end, Quintana (2018) , concluded that a variety of technologies are currently being used to deliver education on the Internet which include the use of the World Wide Web (WWW) for online lecture notes, newsgroups for collaborative discussions and class announcements, e-mail correspondence between students and instructors, interactive video over the Internet for remote participation in classes and discussions, and virtual reality for exploring three dimensional scenes.

The utilization of internet facilities plays a major role in helping undergraduates and researchers access large number of materials from different parts of the World. With its advent, lecturers and students can work together without physical interaction between each other and achieve the same objective with that of the traditional way of studying in the higher institutions. Lecturers exchange ideas and communicate effectively since teaching, learning and research is now made easy through ICT facilities like the computer and internet.

The effective use of internet among young school leavers could be seen as a complex multifaceted process that involves not just technology, competence, adequate funding, provision of infrastructural facilities, institutional factors, environmental factors, demographic factors, student's attitude, skills, student self-efficacy and intention to use are the key factors that determine the successful use of internet for information retrieval and sharing in education.

Brändström (2011) conducted a study to investigate the influence of the use of the Internet on planning and instruction. Five upper secondary school teachers were interviewed face-to-face. Five recurrent themes were identified in the interview data: general opinions on and experience of the Internet, attitudes to teaching and learning, opinions on the use of the Internet as a planning and teaching resource, effects of the use of the Internet on students and teachers, and drawbacks of the use of the Internet in the school. It was found that the teachers think that the Internet is a valuable source of information and an important additional teaching tool. The Internet can for example, motivate the students, make teaching more fun, and allows variation in teaching. Four major drawbacks of the use of the Internet were reported by the teachers, viz. students' cheating, unreliable information, technical problems, and students' extracurricular activities during lessons.

In another related study based on elementary and secondary school teachers' email reports, lesson plans and reflective journals, Karchmer (2001) investigated the influence of the Internet on literacy instruction. The teachers in the study were regarded as "exemplary at using technology" by colleagues (Karchmer 2001). All the teachers in the study report that regularly use the Internet in teaching increase their work load. It takes a great deal of time to learn how to use the technology and to implement it in teaching, thus more time has to be devoted to planning. Compared to when they were using textbooks, the elementary teachers have to devote more time to finding appropriate online material which is neither too easy nor too difficult for the students. Therefore they preview the information they plan to use in class beforehand. However, at times the teachers are unable to find suitable web sites to use.

The internet is acknowledged globally as a technology dominated by young people, particularly young school leavers or students who are more inclined to exploit internet resources for education, social interaction and entertainment. Ani (2005), noted that the internet is a network that link computers which are located at different points all over the world that provides easy communication between persons and organization no matter where they are located.

The utilization of internet facilities plays a major role in helping undergraduates and researchers access large number of materials from different parts of the World. With its advent, lecturers and students can work together without physical interaction between each other and achieve the same objective with that of the traditional way of studying in the higher institutions. Lecturers exchange ideas and communicate effectively since teaching, learning and research is now made easy through ICT facilities like the computer and internet. The effective use of internet among students could be seen as a complex multifaceted process that involves technology, competence, adequate funding, provision of infrastructural facilities, institutional factors, environmental factors, demographic factors, student's attitude, skills, student self-efficacy and intention to use are the key factors that determine the successful use of internet for

information retrieval and sharing in education. ICT utilization and satisfaction levels of students vary from a number of transactions or encounters that an individual experiences with a library fuse to form an impression of service quality for that person. The collective experience of many library users creates a library's reputation for service quality (Altman, 1998).

The questions then are : How can computer training schools or internet service business centres know whether students are satisfied with their service delivery or not? How would student's expectation change with the advent of modern information technology and the Computer Based Test (CBT) being introduced by the Joint Admission and Matriculation Board (JAMB)? This research seeks to survey the relationship between the use of ICT facilities and students satisfaction in research in Abak Local Government Area of Akwa Ibom State.

Statement of the Problem

The interest and the use of internet resources and services to a great extent depends on the satisfaction users derive from it in meeting their educational and research needs. The researchers' observations over the years as ICT providers, reveals that students in Abak Local Government are not satisfied with the internet services due to ill equipped few internet service centres and coupled with the fact that most of these centres do not allow these students to use the facilities by themselves instead would want to access the internet for them by proxy. This ugly trend has resulted in mass failures of the students in examinations due to demographic errors and other avoidable mistakes. The present study therefore sought to determine the availability and utilisation of ICT facilities and users' satisfaction among students in Abak Local Government Area of Akwa Ibom State , Nigeria.

Specific Objectives

The purpose of the study was to examine the availability and utilisation of ICT facilities and users' satisfaction among students in Abak Local Government Area of Akwa Ibom State , Nigeria. Specifically, the study aimed at the following objectives. These to:

1. Determine the relationship between email services and students satisfaction in research in Abak LGA?
2. Determine the relationship between internet services and students satisfaction in research in Abak LGA?

Research Questions

The following research questions were raised to guide the study,

3. What is the relationship between email services and students satisfaction in research in Abak LGA?
4. What is the relationship between internet services and students satisfaction in research in Abak L.G.A

Null Hypotheses

1 There is no significant relationship between email services and students satisfaction in research in Abak L.G.A at 0.05 level of significance.
2 There is no significant relationship between internet services and students satisfaction in research in Abak L.G.A at 0.05 level of significance.

Methodology and Ethical Issues

The survey research design was adopted for this study. The Area of Study is Abak. Abak is a town and Local Government Area in Akwa Ibom State, Nigeria. The Local Government

Area was previously part of Cross River State. It was later sub-divided into other Local Government Areas namely; OrukAnam, Etim Ekpo, Ukanafun and Ika. The indigenes of Abak are mainly the Annangs. The major economic activities of this people before and after the Nigeria civil war was palm produce exported through river port at Ekpene Okpo, Ntak Ibesit, a distance of about 8km from Abak town. Other businesses has also sprung up especially Schools, Banks, Supermarkets, Computer Training/Business centers, Auto mobile workshop, Gasoline refilling stations etc. The religion practiced here is Christianity and has given rise to the present of different churches and religious Organizations. The population of the people in Abak according to the results of the year 2006 National census is One hundred and thirty nine thousand and ninety, (139,090). 75,578 are believed to be males and 65,512 are females (Wikipedia, 2017).

The population of this study consisted of all the number of students that used computer business centers in Abak for the utilization of internet facilities like e-mailing, gamming, computer based test practice and the four major computer centers are noticeably located in Abak namely;

1. Lean On Me Computer College Abak, No. 50 Ikot Ekpene Road Abak, Akwa Ibom State.
2. Global Computer Institute, No. 3 Hospital road Abak, Akwa Ibom State.
3. Favour Computers, No. 122 Hospital road Abak, Akwa Ibom State.
4. Gafa Cyber Cafe' and Printers, No. 49 Ikot Ekpene Road Abak, Akwa Ibom State.

The four computer business centers in Abak were purposively used. While, four hundred (400) students who use the centre were randomly selected from each of the centres for the study. Questionnaires were administered on the managers of the different business centers and the students that patronize them. The distribution showing the names of the business centres and the number of students' users is presented below.

S/N	Name of Computer Center	Location of Computer Center	Number of Users Used
1	Lean On Me Computer College	No. 50 Ikot Ekpene Rd. Abak	100
2	Global Computer Institute	No.3,Hospital Rd. Manta, Abak.	100
3	Favour Computers	No. 122, Hospital Rd. Abak.	100
4	Gafa Cyber Cafe' and printers	49 Ikot Ekpene Road, Abak.	100

Names of computer centres in Abak and the number students users.

The instrument for this study was a researchers' made questionnaire known as availability and utilization of ICT facilities and users satisfaction in Abak L.G.A. The questionnaire was made up of two sections. Section A and B. Section A was made up of six units which described the company or business centers defaults. It also included the details of the contact person/focal point (for operating statistics), Date of commencement of service, operational status, network details and the details of the major internet subscribers in Abak Local Government Area. Section B was made up of three units. Unit 1 sought to explain the facilities used by young Users visiting computer centers. Unit 2 is to show the frequency of use of ICT facilities in Abak Local Government Area. Unit 3 looked at the main benefits of internet facilities to young school leavers in Abak Local Government Area.

The instrument was content validated by two validates from the University of Uyo and National Open University of Nigeria, Uyo Study Centre. These experts were contacted to ensure the instrument measured what it intended to measure. The valuators were required to access the validity of the item measuring the variables in the research. All corrections and comment were in-corporated into the final form of the instrument. The researchers carried out the test retest reliability by administering the questionnaire to ten different respondents at the four business centers in Abak L.G.A. These people were not part of the original respondents. This was to ensure the reliability of the instrument. The Cronbach Alpha tool was used to test the index of the instrument. In the end the instrument reliability index stood at 0.56, 0.68 and 0.75 respectively .The researchers administered the questionnaire to all the respondents in the different business centers and ensured their cooperation. Therefore a 100% return rate was achieved. The data obtained were analyzed using descriptive statistics to answer the research questions. The test of hypothesis was done using linear regression.

Result Presentation

This Study examined availability and utilisation of information and communication technology facilities and users' satisfaction among students in Abak Local Government area Akwa Ibom State

Research Questions

Research Questions 1: What is the relationship between email services and students satisfaction in research in Abak LGA?

Table 1: Coefficient of email services and students satisfaction in research

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	**(Constant)**	25.571	3.031		8.435	.000
	Email Services	-.095	.366	-.047	-.260	.796

a. Dependent Variable: school leavers' satisfaction

The Table 1 above shows the beta coefficient of -0.047 is less than the critical r value of 0.796. This means that there is no significant relationship between email services and students' satisfaction in research in Abak L.G.A is accepted.

Research Questions 2: What is the relationship between ICT facilities and students satisfaction in research in Abak L.G.A

Table 2 Answer to research question 2: Coefficient of ICT facilities and students satisfaction in research

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	**(Constant)**	25.571	3.031		8.435	.000
	ICT Facilities	-.217	.256	-.158	-.847	.403

a. Dependent Variable: school leavers' satisfaction

The Table 2 above shows the beta coefficient of 0.158 is less than the critical r value of 0.403. This means that there is no significant relationship between ICT facilities and students' satisfaction in research in Abak L.G.A is accepted

Test of Hypotheses
Null Hypothesis 1: There is no significant relationship between email services and students' satisfaction in research in Abak L.G.A

Table 3. Coefficient of email services and students satisfaction in research

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(**Constant**)	25.571	3.031		8.435	.000
	email services	-.095	.366	-.047	-.260	.796

a. Dependent Variable: school leavers' satisfaction

Source: Researchers' Computation using SPSS 20

According to Table 3, the Beta Coefficient was used for the test of hypothesis. The result showed a beta coefficient of -0.047 is less than the critical value of r of 0.796 . This means that the null hypothesis which states that there is no significant relationship between email services and students' satisfaction in research in Abak L.G.A is accepted. This decision is based on the fact that the significance level is greater than the confidence interval of 0.05.

Null Hypothesis 2: There is no significant relationship between ICT facilities and students' satisfaction in research in Abak L.G.A.

Table 4. Coefficient of ICT facilities and students satisfaction in research

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(**Constant**)	25.571	3.031		8.435	.000
	ICT Facilities	-.217	.256	-.158	-.847	.403

a. Dependent Variable: school leavers' satisfaction

Source: Researchers' Computation using SPSS 20

According to Table 4 the Beta Coefficient was used for the test of hypothesis. The result showed a beta coefficient of -0.158 is less than the critical value of r which stood at 0.403. This means that the null hypothesis which states that there is no significant relationship between ICT facilities and students' satisfaction in research in Abak L.G.A.is accepted. This decision is based on the fact that the significance level is greater than the confidence interval of 0.05.

Discussion of Findings
Based on the findings it is evidence that there are negative relationships between the independent variables and the dependent variable. The email services showed a negative and insignificant relationship with students' satisfaction research. This could be due to the insignificant presence of internet services and the limited ICT training centres in Abak Local Government Area. This result is in total disagreement with the assertion of Quitana (2018) who concluded that the use of Email services is of great advantage in achieving successes in education.

The result as shown in Table 4 also showed a negative relationship in that the null hypothesis was accepted. This probably due to the fact that the students in Abak Local Government Area did not consider the use of the internet facilities as an additional tool that can add to their successes in research and in turn lead to users satisfaction. This result is in total disagreement with the study of Brandstrom (2011), which found out that the use of the internet was a valuable source of information and important additional tool in planning and instruction.

Conclusion

There are now numerous information and communication technology facilities available for everyone whether in the public institutions or private organizations. These services are assessable through various ICT facilities that are available for utilization. The revolution in Information and Communication Technology (ICT) and particularly the internet is supposed to have effect on students most especially in the conduct of Computer Based Test (CBT), by the Joint Admission and Matriculation Board (JAMB) which is the body that examines and admits secondary school leavers into tertiary institutions of their choices upon passing their examinations. But based on the findings of the study; it can be concluded that the satisfaction of the school leavers does not relate with the availability of ICT services this is due to the poor availability of these services in Abak Local Government Area.

Recommendations

The researcher therefore recommends that;

1 Investors should open new ICT training centres in Abak Local Government
2 The Internet service providers should improve their coverage in Abak Local government Area.
3 The government through the ministry of education should build ICT training facilities in all secondary schools in the state, especially in Abak

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