# Assessment of ICT Resources Uilization for Quality in Business Education Programmes in South-west Nigeria

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## ABSTRACT

The need to ensure quality in business education towards enriching graduates' competitive ability in the global workplace of the current era necessitated this study on assessment of information and communication technologies (ICT) utilization for quality in business education programme in universities in South-West Nigeria. Two research questions guided the study and three null hypotheses were tested. Descriptive survey research design was adopted for the study. Population was 550 (52 lecturers and 498 final year students). Purposive sampling technique was used to draw a sample size of 302 (all 52 lecturers and 250 students) for the study. A five-point rating scale questionnaire containing 24 items in two clusters which was validated by three experts was used for data collection. A pilot study was conducted involving 30 (10 lecturers and 20 students) of business education from universities outside the area of the study to establish the reliability of the instrument. Data collected were analyzed using Cronbach alpha and coefficients 0.85 and 0.82 were obtained for the two clusters with an overall reliability coefficient of 0.83. Mean and standard deviation were used to answer the research questions and ascertain the closeness of the respondents' views while z-test was used to test the hypotheses at 0.05 level of significance. Findings revealed a small extent utilization of ICT resources by the subjects, status and institution ownership significantly influenced the respondents' mean ratings but gender did not. Based on the findings, it was concluded that the training of university business education students in south-west Nigeria is not adequate to give them competitive advantage in the global workplace of the current information age which is powered by ICTs. Therefore, it was recommended among others that management of the institutions should ensure adequate provision of ICT resources and sponsor their business education lecturers to retraining programmes to enhance their effective utilization in order to equip the graduates with relevant competencies for the 21st century global labour market demands.

***Keywords****:* ICT resources, Utilization, Business Education Programme

## Introduction

Education has for long been recognized as a basic instrument of economic growth, social development and technological advancement of any society or nation. It is the key to upward mobility that leads to progressive modernization of societies. Education indeed empowers any nation to rise to the challenges of social, cultural, economic and technological change (Oyebade, Oladipo & Adetoro 2008). In recognition of this fact, the government of any nation is required to commit reasonable resources to provide education for the citizens and also tailor policies towards ensuring that it is accessible to the generality of the citizenry. Consequently, virtually all countries of the world are adopting information and communication technologies in their educational programmes in order to effectively combat the challenges of modern life and Nigeria should not be an exception. Nigerian tertiary institutions should embrace the challenges in teaching and learning with technology by creating learning environments that promote active learning, critical thinking, collaborative learning and knowledge creation. This is because developing the 21st century literacy (information, digital and visual) among students requires the provision and encouragement of faculty and students to utilize ICTs in instructional delivery and learning.

Effective school system and improved student outcomes should be the key objectives of the government and private sectors in every nation because quality education is the foundation of the future of any country. The progress of a nation and the enrichment of society in general require quality education since the greatest asset of a country is its literate population. In today's world of technology and global competition, quality education is of utmost importance for societal development and the future of every nation. Quality education refers to educational programmes with adequate and up-to-date curriculum, relevant infrastructural and instructional resources, competent teachers who use suitable methods and strategies to enrich the knowledge and skills of their students. Quality business education programme will adequately equip students with knowledge, skills, and values to contribute to the development of the society as active producers and consumers of economic goods and services.

Business education is education for and about business or training in business skills (Esene, 2012). According to Okoli (2010), business education is that aspect of the total education programme that provides the knowledge, skills, understanding and attitudes needed to perform effectively in the business world as a producer and/or consumer of goods and services that business offers. It is an important part of general education which emphasizes skills acquisition for office use and entrepreneurship. Business education is a multi-disciplinary programme that encompasses accounting education, cooperative economic and management/marketing or distributive education and secretarial/office technology and management (OTM) education (Okorie, 2005). An individual who receives training in business education can easily develop potentials for entrepreneurship pursuits especially in an era of economic recession and unemployment. The programme is mainly concerned with the inculcation of relevant knowledge and development of saleable skills to equip the graduates to function effectively in the world of work.

In order to actualize the lofty objectives of business education towards national, socio-economic growth and development, educational institutions and their systems are expected to function in line with set standards. These standards include

systematic and qualitative administration, relevant infrastructural and technological resources and effective teaching, learning and evaluation strategies. Being skill and work based education, the discipline requires the use of laboratories adequately equipped with information and communication technology resources for knowledge and practical skills acquisition needed for high quality teacher preparation leading to teacher effectiveness in the labour market. Today's labour market demands a quality workforce that can use technologies such as fixed wireless and satellite broadcasting networks, telecommunications and applications like the internet, intranet, database management systems and multi-media tools as a means of increasing productivity and creativity. Skills in using these technologies include identifying reliable sources of information, effectively accessing these sources of information, synthesizing and communicating that information to colleagues and associates as well as utilizing the resources for practical activities such as running business centres to serve the needs of different individuals and increase the quality of life generally.

Information and Communication Technologies (ICTs) have become key tools with a revolutionary impact on how people see and live in the world, so important that every country, organization or institution irrespective of the size seeks to identify and embrace them to facilitate the conduct of their businesses. This phenomenon has given birth to the contemporary e-commerce, e-medicine, e-banking and e-education among others. Bandele (2006) summed up that ICT is a revolution that involves the use of computers, Internet and other telecommunication technology in every aspect of human endeavour. The author posited that ICT is simply about sharing and having access to data with ease, hence it is regarded as a super highway through which information is transmitted and shared by people all over the world.

Utilization of ICT resources in teaching and learning in Nigeria has tremendous potentials for quality educational output in business education and other fields of learning in tertiary institutions. Consequently, the government stated that, in recognition of the prominent roles of ICTs in advancing knowledge and skills for effective functioning in the modern world, there is urgent need to integrate them into the education system (FRN, 2004). Furthermore, the Federal Ministry of Education (2011a) affirmed that quality learning outcomes depends on the quality of teaching and learning inputs and the qualitative processing of the inputs with the use of ICT facilities in teaching and learning. This agrees with the assertion of Ijaduola (2010a) that the efficiency of products of educational institutions is the result of inputs (teachers, equipment, and infrastructural facilities) as well as the process (instructional delivery). This means that where the inputs and processes are faulty, the result will be faulty output).

Over the years, the challenge in business education programmes in Nigerian tertiary institutions has been the quality of the graduates relative to employment demands. Utilization of ICT resources is expected to contribute to effective teaching and learning in business education and other fields of study in Nigeria. However, despite numerous efforts of the government and other stakeholders, criticisms still abound on the extent to which the graduates satisfy the demands of employers in different organizations in the country. In other words, there is no clear evidence that the utilization of ICTs has contributed to effective teaching and learning in business education in tertiary institutions in Nigeria generally and south-west in particular. The

extent of availability and utilization of the resources by lecturers and students in different zones of the country seems not yet clear. This is very important because, as posited by Akuegwu, Nwiue and Agba (2008), lecturers can only transfer ideas and skills to their students if they are masters of their trades. Although Aginam (2006) reported generally that the level at which lecturers utilize ICTs facilities in Nigerian universities is less than five percent, there is need to empirically ascertain the situation in specific zones.

Population of this study includes male and female lecturers and students of business education in federal and state owned universities in south-west Nigeria, these variables; hence gender and status, may influence their responses. Adesope, Asiabaka and Agumagu (2009) explained that gender refers to the roles, attitudes, behaviour and values ascribed by the society to individuals as males and females. Researchers are of the view that male students perform better than their female counterparts in practical oriented courses like business education courses. For instance, Anigbogu (2002) observed that some cultures see males as superior to females and such feelings manifest in every aspect of their lives, hence, Onyemelukwe (2005) reported that men use internet and other ICT resources more than women. Also, Liverpool, Marut, and Ndam (2011) investigated the existing levels of ICT proficiency among male and female academic staff of a university of Putra, Malaysia (UPM) covering word processing, spreadsheet processing, data-base management, presentation software, e-mail, world wide web, multimedia and virtual class application and reported that gap exists as male excelled in the use of the web while female excelled in the use of e-mail.

According to Salami (2013), status is the position or rank of someone or something when compared to others in the society, organization or group. Obviously, their extent of utilization of ICT resources may be influenced by their status as lecturers or students. It is expected that lecturers will utilize ICT resources more than students because they need them to access information and have needed resources to acquire them when not available. Ownership of institution is also another factor that may determine the level utilization of ICT resources in the universities. In Nigeria, some universities are owned by the federal government, some by state governments and some by private individuals or groups which their funding, provision of resources and quality of services rendered. Bassey, Umoren, Akuegwu, Udida and Akpama (2007) noted that academic staff in federal universities fared better than their counterparts in state universities in their job performance and utilization of ICT resources. Supporting this view, Akuegwu, Ntukidem, Ntukidem and Jaja (2011) reported that federal universities have ICT facilities more than state universities due to greater funding power of the federal government. In view of the above, the influences of gender, status and institution ownership on the respondents' utilization of ICT resources were determined in the study.

**Problem of the Study**

Nigerian government and people are making significant progress towards providing education for all but appear to be losing on quality education. Quality of education is the prime factor that determines the worth and significance of the system to both the recipients and the society at large. In Nigerian education system, quality is a major concern to stakeholders including the government and employers of labour,

hence Ajayi and Adegbesan (2007) asserted that the quality of graduates of tertiary institutions in Nigeria is almost nothing to be proud of in the public. Similarly, Elele in Yusuf and Onasanya (2007) noted that the Nigerian education scene is quite impressive quantitatively but qualitatively deficient. In developed countries of the world, ICTs have been found to facilitate qualitative teaching and learning in different fields of education. Ii is expected that optimal utilization ICT resources in business education in Nigerian universities by lecturers and students will guarantee quality learning outcomes in the programme. However, Akuegwu, Nwiue and Agba (2008) reported that the resources are not adequately provided in most tertiary institutions in the country and that lecturers lack adequate pedagogical knowledge for their effective utilization in instructional delivery.

Bolaji (2007) reported that ICT resources utilization in Nigerian tertiary institutions fall below expectation. This is why it common to see Nigerian business education graduates enroll in roadside computer centers to acquire ICT skills which they ought to have acquired during their years of training. As a result of this deficiency, many graduates of the programme are unemployed while employers report that those in their employment could not effectively manipulate basic ICT resources which are fundamental tools of operations in their companies (Anoke, 2008). This ugly situation may not be unconnected with observations that ICT resources are not adequately provided and utilized for teaching and learning in business education programmes in the nations' tertiary institutions. If objective steps are not taken to reverse the trend and enhance utilization of ICT resources for teaching and learning in the field of business education especially in universities, the products will remain incapable of performing in the office and business environment of the current technological era. Therefore, this study on utilization of ICT resources for quality in business education programme in universities in South-West Nigeria is imperative as the findings will inform and direct objective remedial actions by relevant stakeholders.

**Purpose of the Study**

The purpose of this study was to determine the extent of utilization of ICT resources in business education programme in universities in South-West Nigeria. Specifically, the study determine the:

1. Extent to which university business education students in South-West Nigeria utilize ICT resources for educational purposes.
2. Extent to which lecturers utilize ICT resources in instructional delivery in business education programme in universities in South-West Nigeria;

**Research Questions**

The following research questions guided the study:

1. To what extent do university business education students in South-West Nigeria utilize ICT resources for educational purposes?
2. To what extent do lecturers utilize ICT resources for instructional delivery in business education programme in universities in South-West Nigeria?

**Hypotheses**

The following null hypotheses were tested at 0.05 level of significance:

1. Male and female respondents do not differ significantly in their mean ratings on the extent students and lecturers utilize ICT resources in business education programme in universities in South-West Nigeria.
2. Lecturers and students do not differ significantly in their mean ratings on their extent of utilization of ICT resources in business education programme in universities in South-West Nigeria.
3. Respondents do not differ significantly in their mean ratings on the extent students and lecturers utilize ICT resources in business education programme in universities in South-West Nigeria based on institution ownership (federal/state).

**Method**

Survey research design was adopted for the study. Nworgu (2015) defined survey research as one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group using questionnaire or interview. This design is suitable for the study as it used questionnaire to sample opinions of a population of university business education lecturers and students on their utilization of ICT resources for teaching and leaning. The study was conducted in South-West Nigeria covering three states, namely; Ekiti, Lagos and Ogun States. The population was all 550 (52 lecturers and 498 final year students) of business education from all universities in South-West Nigeria. The choice of final year students was based on the fact that they have been in the programme long enough and can easily form an opinion on any issue relating to the programme. Purposive and stratified random sampling techniques were used to draw a sample of 302 (52 lectures and 250 students) for the study by using all the lecturers because of the size and 50 percent of the students from each university.

Instrument used for data collection was a five-point rating scale questionnaire containing 24 items in two clusters according to the research questions. The instrument was validated by three experts, two in the field of business education and one in the field of educational measurement and evaluation. The reliability of the instrument was established through a pilot study involving 10 business education lecturers and 20 students of universities in south-south Nigeria who were not included in the population of the study. Application of Cronbach Alpha yielded reliability coefficients of 0.85 and 0.82 for the two clusters with an overall reliability coefficient of 0.83. Arithmetic mean was used to answer the research questions while standard deviation was used to ascertain the homogeneity of the respondents' ratings. Decisions on the research questions were based on the cluster means relative to the real limits of numbers. z-Test was used to test the null hypotheses at 0.05 level of significance. A null hypothesis was upheld where the calculated z-value was less than the critical z-value but rejected where the calculated z-value was equal to or greater than the critical value.

**Results**

Table 1:

Respondents' mean rating and standard deviation on extent of utilization of ICT resources by students of business education

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| S/N | Students' utilization of ICT Resources | $\bar{X}$ | SD | Remark |
|---|---|---|---|---|
| 1 | Word processor for typing assignment | 3.84 | 0.72 | Great Extent |
| 2 | Spreadsheet for accounting calculations | 1.06 | 0.63 | Very Small Extent |
| 3 | PowerPoint for presentation | 1.24 | 0.60 | Very Small Extent |
| 4 | E-mail for submitting assignment and communication with lecturers | 2.84 | 0.87 | Moderate Extent |
| 5 | Software for learning keyboarding | 3.54 | 0.71 | Great Extent |
| 6 | Overhead projector for presentation and micro teaching | 1.26 | 0.67 | Very Small Extent |
| 7 | Multimedia projector for presentation and micro teaching | 1.28 | 0.66 | Very Small Extent |
| 8 | Social media for tutorial and communication | 3.56 | 0.57 | Great Extent |
| 9 | Internet to search for course materials | 3.75 | 0.77 | Great extent |
| 10 | Interactive whiteboard for presentation | 1.04 | 0.65 | Very Small Extent |
| | **Cluster Mean** | **2.34** | **0.69** | **Small Extent** |

Table 1 shows that only four out of the ten ICT resources listed have mean ratings of 3.84, 3.54, 3.56 and 3.75 which means that the students utilize them at a great extent. The cluster mean of 2.34 shows that business education students in the universities utilize ICT resources at a small extent. Standard deviations for all the items are within the same range showing that the respondents were homogeneous in their opinions.

Table 2:
Respondents' mean rating and standard deviation on extent of utilization of ICT resources by lecturers in business education programme
**( N=52 )**

| S/N | Lecturers' tilization of ICT resources | $\bar{X}$ | SD | Remark |
|---|---|---|---|---|
| 1 | Power point to plan for teaching | 2.04 | 1.12 | Small Extent |
| 2 | Over head projector for delivering lectures | 2.00 | 0.77 | Small Extent |
| 3 | Internet to search for course materials for teaching | 3.46 | 0.96 | Moderate Extent |
| 4 | E-mail to assess students work/assignment | 2.65 | 1.10 | Moderate Extent |
| 5 | Internet for tutorials | 2.05 | 1.09 | Small Extent |

| | | | | |
|---|---|---|---|---|
| 6 | Playlist aggregated objects and collection | 2.38 | 1.01 | Small Extent |
| 7 | Annotation on audio visual with my story player, etc | 2.31 | 1.25 | Small Extent |
| 8 | Animations in flash to others listed | 2.40 | 1.24 | Small Extent |
| 9 | Facsimile for lecturer-student classroom interaction | 2.38 | 1.07 | Small Extent |
| 10 | Multimedia facilities in classroom management and control | 2.42 | 0.96 | Small Extent |
| 11 | Film strip application as business education teaching aid | 2.36 | 1.13 | Small Extent |
| 12 | Multimedia projectors | 2.32 | 1.16 | Small Extent |
| 13 | Interactive whiteboards | 3.09 | 1.07 | Moderate Extent |
| 14 | Electronic organizer for information processing | 2.48 | 0.87 | Small Extent |
| | **Cluster Mean** | **2.45** | **1.06** | **Small Extent** |

Table 2 shows that only three out of the fourteen ICT resources listed have mean ratings of 3.46, 2.65 and 3.09 which means that they are moderately utilized by the business education lecturers. The cluster mean of 2.45 shows that business education lecturers in the universities utilize ICT resources for instructional purposes at a small extent. Standard deviations for all the items range between 0.77-1.25 this implies that the respondents were far apart in their opinions.

Table 3:

Summary of z-test analysis of difference between the mean ratings of male and female respondents on the extent they utilize ICT resources in business education

| **Gender** | **N** | $\bar{X}$ | **SD** | **Df** | **z-cal.** | **z-crit.** | **alpha sig** | **Remarks** |
|---|---|---|---|---|---|---|---|---|
| **Male** | 156 | 37.24 | 10.56 | | | | | |
| **Female** | 146 | 38.38 | 11.09 | 300 | 0.91 | 1.96 | 0.05 | NS |

Table 3 shows a calculated z-value of 0.91 which is less than z-critical value of 1.96 at 300 degree of freedom and 0.05 level of significance. This means that male and female respondents did not differ significantly in their mean ratings on the extent they utilize ICT resources in business education programme in South-West Nigeria. The null hypothesis was, therefore, upheld.

Table 4:

Summary of z-test analysis for the difference between the mean ratings of lecturers and students on the extent they utilize ICT resources in business education

| Status | N | $\bar{X}$ | SD | Df | z-cal. | z-crit. | alpha sig | Remarks |
|---|---|---|---|---|---|---|---|---|
| **Lecturers** | 52 | 38.08 | 10.96 | | | | | |
| **Students** | 250 | 37.64 | 10.81 | 300 | 2.68 | 1.96 | 0.05 | S |

Table 4 shows a calculated z-value of 2.68 which is greater than the z-critical value of 1.96 at 300 degree of freedom and 0.05 level of significance. This means that the respondents differed significantly in their mean ratings on the extent they utilize ICT resources in business education programme in universities in South-West Nigeria. The null hypothesis was, therefore, not upheld.

Table 5:

Summary of z-test analysis for the difference between the mean ratings of respondents from federal and state owned institutions on the extent students and lecturers utilize ICT resources in business education

| Institutions Ownership | N | $\bar{X}$ | SD | Df | z-cal. | z-crit. | alpha sig | Remarks |
|---|---|---|---|---|---|---|---|---|
| **Federal** | 60 | 37.65 | 10.79 | | | | | |
| | | | | 300 | 2.11 | 1.96 | 0.05 | S |
| **State** | 242 | 35.82 | 10.85 | | | | | |

Table 5 shows a calculated z-value of 2.11 which is greater than the z-critical value of 1.96 at 300 degree of freedom and 0.05 level of significance. This means that the respondents differed significantly in their mean ratings on the extent they utilize ICT resources in business education programme in universities in South-west Nigeria on the basis of institution ownership. The null hypothesis was, therefore, not upheld.

**Discussion**

Findings of the study revealed that business education students and lecturers in universities in South-West Nigeria utilize ICT resources at a small extent. This finding is in consonance with that of Okeke, Ezenwafor and Umoru (2013) which stated that university lecturers' utilization of ICT facilities for quality instructional delivery is significantly low. The findings also agree with the report of Akuegwu, Ntukidem, Ntukidem and Jaja (2011) that extent of ICT utilization for students' learning in Nigerian tertiary institutions is low. This findings buttressed the assertion of Okeke (2008) that although Nigerian government has made ICT literacy compulsory for lecturers and students, many institutions appear not to reap the potentials of ICTs to enhance students' learning.

The findings also agree with the report of Okolocha and Nwadiani (2015) that ICT resources are rarely utilized for teaching business education courses in both colleges of education and universities in south-south Nigeria. Findings of this study that students and lecturers utilize ICT resources at a small extent could be as a result of the level of availability of the resources the institutions since where they are not adequately available, their utilization for teaching, learning and research will be for only those who could personally acquire them. Supporting this, Akpan (2014) reported that majority of university lecturers now have their personal laptops connected to the internet through the use of their personal modems with which they can access information, communicate quickly with both students and colleagues and also keep track of students records. The findings could also be attributed to other factors such as low level of ICT literacy among tertiary institution lecturers, poor funding by government, epileptic power supply, time constraint and management attitude.

Furthermore, findings of the study revealed that male and female respondents did not differ significantly in their mean ratings on their extent of utilization ICT resources in for quality teaching and learning in university business education programme in south-west Nigeria. This finding agrees with the reports of Okeke, Ezenwafor and Umoru (2013) and Ezeani and Ishaq (2015) that no significant difference was found between the mean ratings of male and female respondents on their extent of utilization of ICTs in tertiary institutions in Nigeria. The study further revealed that status significantly influenced the respondents' mean ratings on their extent of utilization of ICT resources. This agrees with the report of Akpan (2014) that students and lecturers differ in their opinions on the extent they utilize ICT tools on a regular basis for academic work. However, the finding is at variance with that of Bupo and Ndinechi (2015) that there is no significant difference in the mean ratings of business education students and lecturers on utilization of e-learning facilities in Nigerian tertiary institutions.

Moreover, institution ownership significantly influenced the respondents' mean ratings on their extent of ICT resources utilization. This finding agrees with that of Akuegwu, Ntukidem, Ntukidem and Jaja (2011) that university lecturers' utilization of ICT facilities for quality instructional delivery differed on the basis of institution ownership. The finding also supports the report of Okolocha and Nwadiani (2015) who found a significant difference in the opinions of business educators in colleges of education and universities regarding their extent of utilization of ICT resources in teaching. This result disclosed that lecturers in federal universities utilized ICT resources more than their counterparts in state universities. The reason could be that federal universities are better funded and catered for in terms of provision of facilities than state universities despite the low budgetary allocation to the education sector in Nigeria.

## Conclusion

Based on the findings of the study, it was concluded that training of business education students in south-west Nigeria is not adequate to give them competitive advantage in the global workplace of the current information age which is powered by ICTs.

## Recommendations

Based on the findings and conclusion of this study, the following recommendations were made:

1. Universities management should adequately provide ICT resources for business education programme to boost their utilization by students and lecturers for quality teaching and learning.
2. Universities management should sponsor their business education lecturers and laboratory technologist for re-training programmes to update their ICT knowledge, skills and competencies to effectively utilize the resources for quality instructional delivery.
3. Universities management should enter into partnership with ICT manufacturing organizations towards improving supply of the resources for quality in their academic programmes.

4. Management of universities should develop sustainable preventive and corrective maintenance culture by servicing and repairing available ICT resources for optimal utilization by lecturers and students.
5. Government should make stringent policies to enforce and strengthen utilization of ICT resources for quality teaching and learning in universities to meet global standard of the 21st century.
6. Business education lecturers in the universities should seek out opportunities to engage in advanced training to enhance their ICT competencies.

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