AN ANALYSIS OF JOB LOSS AND INFORMATION AND COMMUNICATION TECHNOLOGY ADOPTION IN THE NIGERIAN BANKING SECTOR

BAKARE-AREMU, TUNDEABUBAKAR[1], AFOLORUNSO ADENRELE ABOLANLE & MAMMAN, RAKIYA
[1]Department of Economics, National Open University of Nigeria
[2]Department of Computer Science, National Open University of Nigeria
[3]Department of Development Studies, National Open University of Nigeria

Abstract

This study empirically examines the relationship between information and communication technology (ICT) adoption in the Nigerian Banking industry and the number of job losses in the sector, using Zenith Bank Plc as a case study. The research design adopted for the study is a survey research design. The main instrument used was questionnaire. The questionnaire was used to elicit information (dataset), which was analyzed using both descriptive and analytical techniques. Analytically, the Chi-square method was used in testing the single null hypothesis of no correlation between ICT adoption and job losses in the banking industry in Nigeria. The finding reveals that the majority of the respondents strongly agreed that ICT adoption has a significant effect on job losses in the Nigerian banking system, which culminate with the Chi-Square results, which indicates rejection of the null hypothesis because the probability value was greater than 5% level of significance, equally, the calculated Chi-Square was greater than the critical value at 5% level of significance. Therefore, the study recommends among others, that the banks should see staffers as being complementary to the ICT innovation, and not substitute. Also, Government should increase and improve on the dilapidated infrastructures to reduce overhead costs and enable the banks to operate efficiently without an undue cost-cut strategy that could attract downsizing in the industry.

Keywords: ICT Adoption, Nigerian Banking Industry, Job Losses, Analytical Techniques

Introduction

The global economy interaction had necessitated the advancement in Information and Communication Technology (ICT) which culminates

tremendous changes in the ways of doing things (i.e. production, distribution, and consumption of goods and services) in all sectors of every economy. This to a large extent, in recent times, has led to tremendous usage of electronic banking (a subset of information and communication technology) in the various economies of the World, which can never be overemphasized due to improved and innovative technology that inform increase in technology usage in the banking industry.

Therefore, it is not a gainsaying that, Information and Communication Technology (ICT) had transformed the hitherto analogue Nigerian banking sector into a digitalized system of banking, which had resulted in a more conducive banking operation and experience, through the elimination of long queues in the banking halls, customer attachment to a branch of operation, analogue book-keeping, strict adherence to the use of vouchers, and checkbooks for cash transactions, and so forth.

The digitalization of the Nigerian banking sector through the adoption of ICT had rewritten the history of banking operations in Nigeria and had changed the narratives, this is because all the hitherto features of the analogue style, had long disappeared with the invention and adoption of ICT. The importance of digitalization of the banking sector cannot be overemphasized because it created both time and place utility to customers, as customers can now transact business with ease and without visiting banks or speaking to bank employees or agents. The smooth operation of digital banking is a hub on different tools of electronic banking transactions such as Point of Sales (POS), Automated Teller Machine (ATM), Mobile-Banking, and On-Line Banking or Internet Banking System, etc.

Accordingly, Quresh, Zafar, and Khan, (2008) argued that e-banking is becoming an indispensable part of modern-day banking transactions; because the banking industry is one of the fast industries that adopt information and communication technology, which had helped in providing better services to customers. The quality of the banking services is improved by the day as more and improved technological innovations are adopted for the betterment of individual banking firms, the customers, and the industry at large. Despite this overwhelming innovative banking experience, occasioned by ICT, could it be

right to assume or conclude that ICT adoption in the Banking system has no pitfalls**?** The answer to this question is part of this research focus

It is also important to note that modern-day banking services paid more emphasis on the usage of technological innovations to improve service delivery and high level of customer satisfaction, cum global competitiveness. However, this overwhelming usage of technology partly explains why we experienced a high level of job losses among employees in the modern-day industry because the machine now takes up man's job. In addition, the evolution of e-banking started from the use of Automated Teller Machines (ATMs) and telephone banking (tele-banking), direct billing payment, electronic fund transfer, and the groundbreaking internet banking system (Safeena, Abdullah and Date 2010).

Globally, the internet is the cheapest delivery channel for banking products as it allows the entity to reduce their branch networks and downsize the number of service staff (decreasing the level of manpower usage in the banking sector). This dehumanizes the work organization which is one of the shortcomings of Business Process Improvement (BPI). The focus of the present study is more on the effect of e-banking on employees' job security in the Nigerian banking sector, the transformation from traditional banking to e-banking has been a 'leap' change. To this end, this study is poised to empirically evaluate the relationship between ICT adoption in the Nigerian Banking industry and job losses or job security, using the data set from structured questionnaires administered to one of the foremost banks (Zenith Bank) in Nigeria. The rest of the study is organized into five (5) sections. Following the background to the study is the literature review, section three is data analysis, and results and discussion is discussed in section four. The conclusion and policy recommendations are contained in section five.

Literature Review

Conceptual Clarification

Concept of Electronic Banking

Electronic banking could mean 24-hour access to cash through an automated teller machine (ATM) or Direct Deposit of paychecks into checking or savings

accounts. Also, electronic banking involves many different types of transactions for instance, electronic fund transfer (EFT) is a component of electronic banking that uses computer and electronic technology as a substitute for cheques and other paper transactions. EFT is initiated through devices like cards or codes that allow an account holder or the bearer to access the account. Many financial institutions use ATM or debit cards and Personal Identification Numbers (PINs) for this purpose. Some use other types of debit cards such as those that require, at the most, account holder signature or scanned information. For example, some use radio frequency identification (RFID) or other forms of "contactless" technology that scan your information without direct contact. The federal Electronic Fund Transfer Act (EFT Act) covers some electronic consumer transactions (Simpson2002, Fox and Beier, 2006).ATMs are electronic terminals that let an account holder to bank almost any time, therefore, to withdraw cash, make deposits, or transfer funds between accounts, an account holder generally inserts an ATM card and enters his PIN. Other forms of electronic banking include, mobile banking, internet banking, and so on.

The Concept of Layoff /Job Losses

"Job losses as a result of Layoff through downsizing is becoming one of the most popular strategies being used by organizations to survive and compete in the current business scenario (Bhattacharyya & Chatterjee,2005)". "Other terms commonly used interchangeably for layoff include downsizing, building down, retrenching, streamlining, rationalizing, de-hiring, compressing, de-massing, resizing, rightsizing, de-recruiting, leaning-up, reassigning and slimming, it should be noted that each of these terms shares some common meaning, yet with a unique connotation". A Layoff is defined as the systematic reduction of the workforce through an instituted set of activities to improve efficiency and performance (Teryima, Agburu & Alabar 2012). A Layoff is a term within the general concept of right sizing for restructuring purposes, which is seen as the effective management of the organization's workforce size.

Theoretical Background

A closely related theory to this study is the Technology Acceptance Model (TAM) developed by Davis (1989) on which this study is to be anchored. Other related theories include. The theory of planned behaviour developed by Ajzen (1985), and the innovative diffusion theory, developed by Rogers (1983), which aimed to understand the social, perceived, and attitudinal and behavioural factors that influence the adoption of e-banking. According to Spreading Science (2009), there are stages through which acceptance of innovation ensue, therefore individual firms; or group of firms undergo these stages which are enumerated in no specific order;

"Information awareness, where the individual is simply aware that the innovation exists; Interest, where the individual wants more information and begins to wonder whether or not the innovation will be to his/her advantage; Evaluation, where the individual mentally examines the innovation using the information gathered; Testing, where the individual actually tests the innovation to see if reality matches expectations; and Adoption, where the individual likes the innovation and adopts it wholeheartedly".

These processes are likely considered before the adoption of any new technological innovation, which this study presumably believed are taken into consideration before the adoption of ICT in the Nigerian Banking system and thus stand as the premise upon which the study is been built.

Empirical Review

A study by Kessington, Susan, and Dwyer (2021) Investigated the impacts of ICT on small and medium scale enterprises operation in Nigeria, they wish to uncover whether or not the ICT adoption by businesses spur the profitability level and perhaps increase the level of global competitiveness using both quantitative and qualitative methods of analyses. They however found that ICT adoption had great influences on the profitability and global competitiveness of the SME in Nigeria. A seemingly related study by Adelani (2019) examined the adoption of electronics banking on job security in Lafia (capital of Nasarawa state in Nigeria), using a structured questionnaire analyzed descriptively. The result indicates that loss of a job is possible in the

foreseeable future because of the increase in the adoption of machines replacing man's job.

Also, Balogun (2016) examined the impact of information technology on banks' service delivery and customer satisfaction. This was achieved through a structured questionnaire to the two (2) target audiences; the bank's employees and the customers. The study reveals that information technology-induced both customer satisfaction and workers' performance. A related study by Saeed and Bampton (2013) examined the imperative of information and communication technology on the performance of the Libyan banking sector. It was gathered that ICT was very germane to the effective delivery of service in the Libyan banking sector but poor communication infrastructure and incessant power outage, Government intervention in the banking sector were the banes of its poor performance.

The study by the trio, Atiku, Genty, and Akinlabi (2011) examined the adoption of electronics banking on banks employees' job security in Nigerian. The study analyzed data set for structured questionnaire distributed among four banks of which the analytic outcome indicates a robust finding-that electronics banking is a threat to job security in the banking sector. Though, it provides customers satisfaction and global competitiveness of banks. Similarly, Onwuka, Uzor, and Onwuzuligbo (2021) examined the effect of information and communication technology on the performance of small and medium enterprises in the Onitsha metropolis of Eastern Nigerian, the study reveals that there is the existence of a significant relationship between ICT adoption and knowledge base of the SME employees and thus encourage the use of ICT in businesses for effective and efficient service delivery.

A study by Nwakobi, Sidi, and Abomech (2018) examined the impact of information and communication technology on the performance of deposit money banks in Nigeria, using an econometrics model on a dataset that spanned 2005-2015. The result revealed that ICT has greatly influenced the banking operations in Nigeria and has specifically increased the bank's return on equity. The study further suggested that improvement in ICT usage should be encouraged to increase the effectiveness and efficient service delivery in the banking sector and thus enhance global competitiveness.

The trio, Teryima, Agburu, and Alabar (2012) carried out a study on job losses resulting from ICT adoption, the study found that downsizing was seen as instrumental as both defensive and offensive strategies of organizations. They also asserted that corporate competitiveness was liable, largely on downsizing; and that, for their studied organization to remain competitive, staff layoff, as a strategy, must be utilized regularly. In the same vein, Fapohunda (2012) found that business restructuring involved a reasonable reduction in the size of activities engaged in by the studied organizations and consequently resulted in cuts in the size of their employees. Cameron (1994) found that downsizing business activities helped organizations in cost savings but was compared to throwing a grenade into a crowded room, closing the door, and expecting the explosion to eliminate a certain percentage of the workforce". While, Williams, Etuk, and Inyang (2014) identified diverse surviving employee perceptions of the retrenchment cases in the banking sector. The study revealed that the majority of the respondents in the study in both new and old generation banks perceived the retrenchment and crises as being triggered by poor corporate governance, and fraudulent practices by some of the executive management. Persistent pathological corruption and mismanagement in the Nigerian economy perpetuated by the leaders have also permeated the banking sector. The implication is that banks are no longer declaring huge profits as was the case in the past. The authors argued that to still maximize profit the cost has to be reduced through retrenchment/layoff.

In conclusion, there is an unending interest among scholars in the relationship between ICT adoption in various industries and the number of job losses. But in Nigeria, to the best of our knowledge, there is scanty literature on the relationship between ICT adoption in various industries and the number of job losses, hence, this study contributes to the existing literature.

Methodology

Research Design

This study adopted an ex-post research design which consists of both qualitative and quantitative analytical methods. This method includes descriptive analyses and the aspect of the analytical method in this study is the

Chi-square which was used to test the hypothesis that ICT adoption does not correlate with job loss in the Nigerian Banking industry.

Study Area

The research area of the study is the Lagos State of Nigeria. Lagos State is one of the 36 federating units in Nigeria and it consists of 37 local government areas. The state is the financial hub of Nigeria. Consequently, the choice of the study area was informed by the need to examine the correlation between ICT adoption in the Nigerian Banking industry and the number of job losses in the sector, using Zenith Bank Plc as a case study. *Zenith Bank Plc* is a large financial service provider in *Nigeria* and Anglophone West Africa. It is licensed as a commercial bank by the Central Bank of Nigeria. As of 31 December 2019, it holds $16.1bn in total assets, with shareholders' equity of $854 million. The company is listed on the Nigerian stock market and the London stock market. Zenith Bank has more than 500 branches and business offices in all states and the Federal Capital Territory while it has about 144 branches in Lagos State. Unlike many of its peers, Zenith Bank increased its staff strength from 7,405 in 2019 to 7,544 at the end of 2020. This represents an increase of 139 staff in the review year (Wikipedia).

Population of the Study

The population of this study comprises the staff of Zenith Bank Nigeria Plc. in different branches and Local Government Areas (LGAs) of Lagos State. A population of 350 staff was selected from different Zenith Bank branches within the 20 selected Local Governments Areas of Lagos State. Emphasis was placed on the respondent's knowledge regarding the subject matter of the study.

Sampling and Sample Techniques

The probability or representative sampling is the one where the chance of each case being selected from the population is known and is usually equal for all cases. During the study, a probability sampling procedure was used. In particular, the study used purposive sampling to obtain a sample that was a true representative of the population and usually tried to ensure that a range from one extreme to the other was included. This method was chosen because

it gives the subjects in the population an equal chance of being selected. A sample size of three hundred (350) respondents was used from randomly selected seven LGAs.

The source and method of data collection were purely primary and the method of collection was a structured questionnaire, administered by the researcher. The content of the validity of the instrument (questionnaire) was assessed by colleagues in the Department. The response of the respondents to the research instrument was measured on a 5 point rating Likert scale anchored as strongly disagree (1) to strongly agree (5).

Method of Data Analysis

The study employed descriptive statistics in the analysis of the findings of the research. The objective is to draw inferences from the respondents' reactions. Moreover, the Chi-square is used for the analysis of the data. The purpose of the Chi-square technique is to validate or invalidate the hypothesis stated earlier.

Results and Discussion

The questionnaire was collated and checked for completeness of response. The data are analyzed in frequencies and percentages as well as chi-square.

Table 1: Gender of Respondents

Variables	**Characteristics**	**Frequency**	**Percentage**
Gender	Male	135	45%
	Female	165	55%

Source: Author's Computation (2021).

Table 1 presents gender statistics of respondents which revealed that 135 respondents representing 45% are male, while 165 respondents representing 55% are female, this indicates that more females responded and returned their questionnaire.

Table 2: Age of Respondents

Respondents' Age	26-30	96	32%
	31-35	126	42%
	36 and above	78	26%
	Total	300	100%

Source: Author's Computation (2021).

Table 2 shows that 96(32%) of the respondents are within the ages of 26-30years, 126(42%) are within the ages of 31-35years, and 78(26%) are within the ages of 36years and above. Hence, the categories of people that majorly responded fall within the age bracket of 31 and 35 years. Meaning that youth that are ICT compliance within the banking system responded to the questionnaires, responses are therefore regarded as being worthy

Table 3: Qualifications of Respondents

Highest Educational Qualification	SSSCE/WASCE	18	6%
	NCE/OND	75	25%
	B.Sc./ HND	165	55%
	Masters and above	42	14%
	Total	**300**	**100%**

Source: Author's Computation (2021).

Table 3 reveals that 18(6%) of the respondents have senior secondary school certificate examination or its equivalent, while 75(25%) hold either NCE or OND certificates, also, 165(55%) are B.Sc. degree or HND holders, while 42(14%) hold Master degree and above. Hence, the majority of the selected bank staff have the basic knowledge of how to read and write and are ICT literates.

Table 4: Respondents' Years of Experience

Options	**Frequency**	**Percentage**
Less than 3 years	21	7%
Less than 5 years	96	32%
Less than 9 years	108	36%
9 years and above	75	25%
Total	**300**	**100%**

Source: Author's Computation (2021)

The analysis of data in Table 4 indicates that 7% of the respondents have spent between 1 to 3 years in the banking system, while 32% of the respondents have worked for 4-6 years in the banking sector. Also, 36% of the total respondents have spent between 7 to 9 years while a quarter has had over 9 years experience in the banking service. This is not surprising because more experienced staff are found in the head and regional offices of the banks in major cities.

Intent Responses and Analytical Tools

The data collected based on the subject from the respondents are presented and analyzed in this section using 5 point rating Likert scale and working out the mean and standard deviation from the responses to each research question. The summary of the results in respect of the only hypothesis tested using chi-square analysis is also presented in this section.

Table 5: Summary of the Likert Scale Results of the Impact of ICT on Job Losses in the Banking Sector in Nigeria.

S/N	Variables	Mean (%)	Standard Deviation
1	The use of internet banking reduces the number of manpower needed	3.9(58.3)	1.1
2	The emergence of internet banking led to the early retirement of staff in the Nigerian banking sector	3.1(51.6)	1.1
3	Adoption of ATM led to laying-off of teller officers	3.8(63.3)	1.2
4	High level of staff redundancy is as a result of electronic fund transfer in the banking industry	2.9(48.3)	1.2
5	The usage of automation machines as a result of technological innovations had led to the displacement of staffers in your bank.	4.1(68.3)	1.3
6	The adoption of telephone banking led to the downsizing of customer relations officers	4.0(66.7)	1.1
7	My bank reduces the number of employees as a result of telephone banking	3.3(55.0)	1.2
8	Electronic fund transfers led to the redundancy of service staffers in the Nigerian banking industry	2.6(43.3)	1.1
9	There is forceful ejection of teller officers as a result of automation paying machine	2.2(36.7)	1.1
10	The emergence of telephone banking contributed to downsizing the number of service staffers	3.2(53.3)	1.1

11	The adoption of internet banking increases the level of employee's job insecurity in your bank	3.5(58.3)	1.3
12	Electronic fund transfer promotes de-skilling of staffers in the Nigerian banking industry	2.7(4.5)	1.1
13	The adoption of automation process reduces the level of manual procedures	4.1(68.3)	1.3
14	Telephone banking service increases the level of employee's job insecurity in Nigerian banks.	3.1(51.6)	1.2
15	Early retirement in the banking industry is as a result of internet banking innovation	3.2(53.3)	1.2
16	Electronic fund transfer increases the level of employee's job insecurity	3.1(51.6)	1.1
17	ATM enhances the de-skill of workers in the industry	2.9(48.3)	1.1
18	Telephone banking is one of the technological innovations that dehumanize the work	2.3(38.3)	1.2
19	Forceful retirement is a consequence of electronic banking in Nigeria	3.7(61.7)	1.1
20	Displacement of workers is a resultant effect of electronic fund transfer	3.5(58.3)	1.1

Source: Author's Computation (2021).

The mean score of the five rating 20 questions in which responses were analyzed in Table 5 is 3. This implies that the mean scores above 3 suggest that the responses to the questions are in affirmative as constructed since the scores are coded in descending order of which 5 for strongly agree and 1 for strongly disagree. To this end, Table 5 reveals that only three out of the twenty items met the above 3 acceptance mean of the impact of ICT on job losses in the banking sector in Nigeria and they all have over 50 percent of the respondents agreeing to the assertion. These items are 4, 8, 9, 12, 17, and 18. They are considered to suggest that the impact of ICT on job losses in the banking sector in Nigeria is negative, suggesting there is no relationship between the ICT adoption and job losses in the banking sector in Nigeria; this is in line with the hypothesis tested by Lucas (1988). It is also informative to note that almost all the respondents agree strongly that the adoption of automation processes reduces the level of manual procedures, which could lead to a reduction of manpower.

Item (13) shows a mean score of 4.1, and a whopping 68.3 percent of respondents agreeing with this assertion. All other items have mean scores of above 3, with more than 50 percent of the respondents agreeing with these

opinions, implying that there is a significant impact of ICT adoption on job losses in the banking sector in Nigeria. They are, therefore, considered to suggest that ICT or e-banking leads to the loss of jobs in the banking sector in Nigeria.

Table 6: Summary of Chi-square Test Analysis of the Impact of ICT Adoption on Job Losses in the Banking System in Nigeria.

Items	X^2 Calculated	X^2 Tabulated	Decision
E-banking	*6.24*	5.49	H_0 rejected

DF = 4 **α**= 0.05 **N**=156 **Probability**= 0.19
Source: Authors' computation (**2021**)

To empirically determine the correlation between e-banking or ICT and job losses in the Nigerian Banking industry, this study in addition to descriptive analysis takes a further step to adopt a non-parametric approach to analyze the subject matter using Chi-square to test the formulated hypothesis for the study. The Chi-square results in Table 6 where the probability (p) value (0.19) is greater than the significant value of 0.05 (5%) aligns with the previous outcome and decision in Table 5. Furthermore, since the calculated chi-square value (6.24) is greater than the critical value (5.49) at the 5% level of significance as depicted in Table 6, it implies that there is a significant correlation between ICT adoption in the Nigerian banking industry and job losses. That is, the null hypothesis is rejected while the alternative hypothesis is accepted.

Conclusion and Recommendations

The study was carried out to examine the relationship between ICT adoption in the Nigerian Banking industry and the number of job losses in the sector, using Zenith Bank Plc as a case study. Based on the findings, the study concludes that the adoption of ICT has reduced the level of labour-intensive procedures in banking operations and has led to the loss of jobs in the sector because less manpower is now required to effectively and efficiently deliver and remain highly competitive both locally and globally. In addition, the study concludes that globally artificial intelligence (AI) usage is increasing on daily basis, and robotic machine design for specific workforce is now taking over jobs that are hitherto being done by man.

Nevertheless, in line with the findings of this study, the following recommendations are made;

i. Though, the increasing adoption of ICT in the banking system is a welcome innovation that cannot be halted as we are in the global village and global age of ICT, therefore banks should rather consider it as a compliment and not a substitute.
ii. Our educational system should be made more functional by aligning its curriculum to the current needs of society. In this way, the products will be readily employable in the ICT-compliant banking system.
iii. The Nigerian banking industry should take advantage of labour abundant situation to spread the banking operations to nook and crannies by establishing more branches and creating an inclusive banking system.
iv. Government should increase and improve the decaying infrastructures in order to reduce overhead costs and enable the banks to operate efficiently without an undue cost-cut strategy that could attract downsizing in the industry.

References

Adelani, T.O. (2019). Electronic Banking and Employees Job Security in Lafia, Nassarawa State, Nigeria. *Lafia Journal of Economics and Management Sciences 4(2),89-107.*

Atiku S.O, Genty K.I, & Akinlabi, B.H. (2011). Effect of Electronics Banking on Employees, Job Security in Nigeria. *European Journal of Humanities and Social sciences 4(2), 69-84.*

Balogun E.O. (2016). Effect of Information Technology on Organizational Performances in Nigerian Banking Industry. *Research Journal of Finance and Accounting 7(3), 52-64.*

Chan, S.C., & Lu, M.T. (2004). Understanding Internet Banking Adoption and Use Behavior: A Hong Kong Perspective, *Journal of Global Information Management*, 12, 3, 21-43.

Chinzer, N., Currie, E. (2014). Assessing the Longitudinal Relationship between Financial Performance and Downsizing. *Management Decisions* 5(8): 1474-1490.

Constantine, L., & Chaniotakis, L., (2005). Factors Affecting Acceptance of the Interest as a Marketing-Intelligent Tool among Employees of Greek Bank Branches, *International Journal of Bank Marketing*, 23, 6,484-505.

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly 13*(3): 319–340

Economic Commission for Africa (2007). *Adoption of E-banking in Developing Countries*. Retrieved from www.uneca.org on 14 May 2011.

Ekott, E. Nseyen 1: (2006). Fundamental of Research Methodology. IkotEkpene: Development Universal Consortia.

Frey, L.R., Botan, C.H., & Kreps, G.L. (2000). Investigating Communication: An Introduction to Research Methods. 2nd Edition, Allyn and Bacon, Boston.

Gandoh, F., and Hansson, M. (2011). Causes and Consequences of Downsizing: Towards an Integrative Framework. *Journal of Management and Organization* 17(4): 498-521.

Jeffrey, K. (2011). Organizational Downsizing and its Impact on Leavers and Survivors: The case of the Reserve Bank of Zimbabwe. *Journal of Emerging Trends in Economics and Management Sciences* 2(4): 264-269.

Kensington O, Susan, K.F & Dwyer R..J. (2018). Impact of Information and Communication Technology in Nigerian Small to Medium-Sized Enterprises. *Journal of Economics, Finance and Administration Sciences 10(1), 29-46.*

Nwakobi, N.P, Sidi, C.P. & Abomeh, O.S. (2018). Impact of Information and Communication Technology on the performance of Deposit Banks in Nigeria. *International Journal of Management and Sustainability 7(4)215-230.*

Onwuka,E.M, Uzor, & Onwuzuligbo, L (2014). Information and Communication Technology and the Performance of selected Small And Medium Scale Enterprises in Onitsha Metropolis; International Journal of Development Research,5(2), 6057-6061.

Saeed, KA, and Bampton R. (2013). The Impact of Information and Communication Technology on the Performances of Libyan Banks. *Journal of west East Institute, Business and Economics 2(3)21-26.*

https://en.wikipedia.org/wiki/Zenith_Bank