

ELECTRONIC BANKING AND EMPLOYEES' JOB SECURITY IN LAFIA NASARAWA STATE, NIGERIA

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Abstract

This study examined the relationship between electronic banking and the job security of the employees in Lafia Nasarawa state. Primary data were collected through a structured questionnaire and analysed by means of descriptive statistics such as frequencies, means and standard deviation. Chi squares was also used to analyse the hypothesis for the study. The results show that adoption of e-banking does not directly lead to loss of jobs in banking sector in Lafia Nasarawa state. Despite this result, most of the respondents interviewed believed that loss of jobs is possible in the foreseeable future with the increasing rate of adoption of electronic banking. It was recommended, therefore, that more conducive environment should be created for the other sectors of the economy to take full advantage of more efficient e-banking sector and that the adoption of electronic banking, though encouraged, should be done not necessarily as a substitute to labour but rather a complement.

1.0 Introduction

Electronic banking is becoming an indispensable part of modern day banking services. This is part of the globalisation phenomenon enhanced by the advancement in information and communication technology which has brought changes in the way productive and service activities are being organised. More importantly, quality of services is improved by using technological innovations besides being time saving (Quresh, Zafar & Khan, 2008). In particular, the introduction of technology based payments systems has done a lot to increase the convenience of banks' customers, staff as well as the society at large (Kelvin, 2012).

Today, paying and receiving money between buyers and sellers are not necessarily done through fiat money. Such payments can be made using e-payment products such as Automated Teller Machine (ATM), internet, Point of Sale terminals (POS), Mobile money solutions such as master pass and m-cash. These methods, according to Tijani and Ilugbemi (2015), have brought a lot of convenience to both individual and corporate customers, unlike many years ago when the economy was heavily cash driven.

However, as desirable as this trend is, there exists the fear of loss of jobs in the sector as number of labour that will be required to serve customers reduces as more automation of banking processes is adopted. More so, according to Baten and Kamil (2010), the issue of computers eliminating jobs of people is quite emotional, real and painful. Nevertheless, there are two sides to this, automation will eliminate certain types of job like record keeper and also creates jobs like system administrator and analyst, programmers, operators and other service engineers. As a result the net effect could be positive. This possibility notwithstanding, in a labour surplus economy like Nigeria, the place of banking sector as both generator and facilitator of employment cannot be ignored. As a result the perceptions of automation as a substitute to manual labour is worthy of critical examination. For instance, Corrocher (2002) found out that banks perceived internet banking as a substitute and not a complement to traditional banks and its branching structure in Italy. Similarly, Maiyaki and Moktar (2010) opined that banking is essential but banks are not. This is already becoming a reality in Nigeria where banks close their branches in more remote areas of the states and concentrate in capital cities leaving Automated Teller Machine (ATM) christened offsite ATM operation to cater for the basic banking needs of the rural populace.

The foregoing shows that the banks' deployment of ICT has multi-dimensional effects on the economy. The gains may not be without costs. While most studies have focused on the effects of the technological innovation in the industry on service delivery and sector's financial performance, limited attention has been paid to possible unemployment implication of this advancement (Siyanbola, 2013). In Nigeria the place of service sector which is majorly driven by banking industry in employment generation cannot be over emphasised. A recent report by Price Waterhouse coopers (PwC) in 2018 corroborates this observation. It was reported that high unemployment remains a critical challenge facing the Nigerian economy despite strong economic growth which averaged 6.5% between 2000 and 2017. It was also observed that the employment elasticity is highest in the service sector at 0.5% and accounts for largest proportion of employment at 57.4% (PwC, 2018). However, employment growth in the sector has been less than proportionate to its annual GDP growth of 7.8% recorded between 2010 and 2017 (PwC, 2018). This is similar to the earlier finding by Ram (1999) that financial services is a higher productivity sub sector of the service sector, and are therefore crucial to increasing employment given the relatively higher employment elasticity.

Furthermore, findings of the few studies on employment implications of ICT dominated banking sector have also been divergent. While some studies like Atiku and Genty (2011) concluded that adoption of e-banking directly leads to loss of jobs and early retirement of employees in Nigerian banking sector, others like Alleh, Adefeso, Adebayo and Oligbi (2015) find complementary relationship. This is similar to the opinion of Schumpeter (1934) who sees innovation as creative destruction that is; more employment is created in the system than destroyed by innovative technology.

This suggests that the debate on the relationship between e-banking and job security is an on-going one and the outcomes have been divergent. This study intends to contribute to the debate by finding out the relationship in Lafia, Nasarawa state, a city that is neither a capital city nor commercial center and invariably not home to either the main headquarters or regional headquarters of most of these commercial banks. The city therefore presents different characteristics and by extension provides outcome from new perspectives.

The main objective of this study, therefore, is to find out the relationship between the adoption of electronic banking and employees' job security in Lafia Nasarawa state so as to empirically contribute to the debate of whether or not e-banking has any relationship with unemployment in the sector and the nature of the relationship. The null hypothesis that the adoption of e-banking does not directly lead to loss of jobs in the banking sector is tested. Likewise, the study intends to answer two major questions: the study will like to find out, in the first place and in the opinion of the staff, the level of adoption of e-banking in the existing banks in Lafia Nasarawa state and second, what level of effects, if any, e-banking has on employees' job security in the city.

The rest of this paper is structured as follows: In section 2 relevant literatures are reviewed from conceptual, theoretical and empirical perspectives; section 3 deals with methodology which contains discussion on research design and procedure, instrumentation and statistical methods employed for the study; results are presented and discussed in section 4 while section 5 concludes the paper with concomitant recommendations.

2.0 Literature Review

2.1 Conceptual Review

2.1.1 The concept of Electronic Banking

Electronic banking is a system of banking with an electronic communication network which permits online processing of the same day credit and debit transfers of funds between member institutions of a clearing system (Anyawaokoro, 1999). Simply put, E-banking refers to the banking operations, which is done over World Wide Web. More comprehensive and well-established definition is given by the United Nations Conference on Trade and Development (UNCTAD). This definition covers almost all area of E-Banking from internet banking angle.

“Internet banking refers to the deployment over the Internet of retail and wholesale banking services. It involves individual and corporate clients, and includes bank transfers, payments and settlements, documentary collections and credits, corporate and household lending, card business and some others” (UNCTAD, 2002: pp.134).

However, E-banking is more than just internet banking. It involves a bank creating a corporate online presence thereby developing new relationship with the customers. E-banking involves collaboration (local and international) on payment system, cashless transactions, digital cash (e.g bitcoin) and other electronic based projects.

In Nigeria in order to stimulate and encourage electronic banking, Central Bank of Nigeria (CBN) introduced cashless policy in Nigeria in 2012. Generally, cashless policy is a policy that minimizes the use of cash by providing alternative channels for executing financial transactions. Since its introduction in the country, electronic payment has increased from 610.22 million in 2010 to 1,478.5million in value, a whopping 142.29% increase within 7 years (CBN, 2010 and 2017). This growth was, however, attributed to the public confidence in card payments, following the enhanced security features in the cards and adoption of stringent measures to combat frauds and deepens the use of electronic payments and not the cashless policy partially implemented per se.

Concomitantly, cheque clearing in 2017 declined to a paltry 10.8 million in volume from a whopping 10,412.12 billion recorded in second half of 2010. The decline implies that other modes of payment, such as Real Time Gross Settlement (RTGS), NIBSS Electronic Funds Transfer (NEFT), Automated Teller Machines (ATMs), mobile banking, and Internet payments among others have become very important and increasingly being adopted.

From the available data, it was gathered that among the e-payments channels the most popular by 2012, was the ATM (98.09%) followed by web (internet) (0.72%) and mobile (0.71%). The least patronized was the Point of Sales (POS) terminal accounting for 0.48% of the total e-payment transactions (National Bureau of Statistics, 2012). However, with more awareness of other channels created, though ATM still remains highest by 2017, in terms of volume (54.15%), the percentage of its share has declined. More so in terms of value, NIBSS instant payment (NIP) has become the most patronized with 56.57% (CBN, 2017).

2.2 Theoretical Review

2.2.1 Capital –Labour Complementarity Theory

According to Milgrom and Roberts (1990), the term ‘complement’ is used not only in the traditional sense of a specific relation between pairs of inputs but also in a broader sense as a relation among group of activities. Lindbeck and Snower (2003) further elaborate on the idea of factor complementarity, which is identified as a central element in the determination of a firm’s boundaries, distinguishing among four types of complementarities: two kinds of inter-factor complementarity (technological and informational complementarity), intra-factor complementarities (leading to increasing returns to scale) and complementarities among factors in the production of additional products (leading to increase returns to scope). In this study, our theoretical analysis is restricted to inter-factor complementarities.

In economics, a set of activities related in such a way that more of any subgroup of the activities raises the marginal return to the other activities is said to be complements. In this case technology helps to do more of capital in a way that marginal physical product of labour also increases. Secondly, inputs are complements when the increase in profit from using one

is higher if more of the other has also been used. This theory argues that labor and capital are both complements: increasing input in one, while maintaining the level of the other, will increase the combined profits and benefit of the two; likewise, decreasing the input of one will decrease the total profits and benefit. For this reason, one may argue that computerisation of workplace in form of electronic banking is a phenomenon that has come to stay and can only be upgraded and not halted.

As technology advances, labour productivity increases and just like the case of an increase in capital, the economy's production possibilities expand (Mathew, Powell and Parkin, 2005). Similarly and again like the case of an increase in capital, the new technology increases the real GDP that each quantity of labour can produce by increasing the marginal product of labour and by extension the demand for labour (Mathew, Powell and Parkin, 2005). The implication of this is that new technology will lead to increase in employment as a result of increase in marginal product of labour and GDP in the short term.

However, as wages increase (labour is assumed to be paid the value of its marginal product); more labour that can be absorbed will be supplied. This pushes wages down and eventually leads to unemployment. Secondly, unemployment will result from displaced workers who lack the required skills for the new technology. This is more like other factors other than wages (in this case technology) determining demand for labour. Theoretically, this will cause a downward shift in demand curve with a new equilibrium settled eventually at a lower quantity of labour and wages.

The apriori expectation of this study is deduced from this theory that electronic banking will lead to increase in employment in the short term but eventually lead to loss of jobs in the long run. This is because as more technology is adopted in banking operations, more hands will be needed to take charge of new departments like electronic desk for instance to ensure that up to date electronic banking products are not only made available to customers but also ensure their effectiveness in meeting customers' needs. However, as more automation of the process continues, less labour can do more and for profitability and cost cutting sake, rationalisation of staff follows with its implication for employees' job security.

1.3 Empirical Review

Most studies have focused on the benefits of electronic banking and its cost implications as automation of banking process continues unabated and desirable. Few studies pay close attention to its effect on employment despite the possibility of substitution of labour intensive processes by machine processed applications. For instance Osabuohien (2008) employing primary data which was analysed using cross-tabulations and regression technique built on the framework of technical progress, concluded that ICT impacts significantly the speed of banking operations, productivity and profitability. These, he opined influence the degree of

ICT usage despite its cost implication for the banks and even recommended the training of bank workers to up the rate of ICT usage in banking operations.

Notwithstanding, the high rate of ICT adoption does not only have cost implication for the banks but also the requirement of labour to carry out hitherto manual functions. In this regard, three distinct forms of relationship can be deduced from earlier studies on relationship between electronic banking and employment, namely: positive relationship, negative impact and even no (neutral) linkage.

For instance, in terms of positive relationship, Alleh *et al* (2015) in their study analysed a neoclassical production function to estimate the effects of ICT on labour employment in the industry. General Method of Moment was employed to analyse annual data on selected banks from 2003 to 2014. Their results show that banks' production functions in Nigeria are not perfectly factor-substitutive but characterized by some elements of complementarity. The study therefore, concluded that ICT did not substitute for labour and thus not worsen unemployment but rather enhances employment generation and therefore recommended the encouragement of more adoption of ICT in their operations.

Similarly, Okoye (2018) using the aggregate data of all banks in the country from 2012 – 2016 sourced from secondary data collection and employing OLS regression method, found that cashless banking in Nigeria does not contribute to the increase in the rate of Nigeria's unemployment as perceived by many people. He further opined that, instead, more jobs are created for people with expertise in operating the machines (ATM, POS, internet mobile phone) used in the cashless banking system. Consequently recommendations were made for CBN to create awareness on the benefits derivable from shifting to cashless (cash-light) banking system in Nigeria and that machine are not used to replace the workforce contrary to the fears being expressed.

Even on the impact on the whole economy, the concession seems to be positive. For instance Ezeudu and Anyanwu (2014) examined the various aspects of electronic banking channels, the problems facing cashless banking as well as its advantages and disadvantages to Nigerians. A survey instrument was used for data collection and a non-parametric tool of chi square was employed in data analysis. The study discovered that cashless banking has a positive effect on Nigerian economy. Though, according to their discovery, the introduction of cashless banking would automatically reduce the number of personnel needed to carry out different financial transactions in the bank but on the whole employment will improve.

In the same vein, the study by Tijani and Ilugbemi (2015) also corroborates this. In the study to examine the impact of electronic payment channels on national development, using inferential statistics specifically chi square as well, to analyse processed questionnaire, it was revealed that electronic payment channels contribute positively to national development. The study even advocate, in its recommendation, for other e-payment products and intensive

campaign for complete adoption of electronic banking especially at the grassroots level. It is not surprising therefore, that banks are adopting more electronic banking through cashless policy.

Notwithstanding, the fact that adoption of electronic banking can lead to displacement of labour cannot be overemphasised. Adapting from the translog production function by Christensen et al (1970) and CES- translog production function by Pollak et al (1984), Dewan and Min (1997) estimated CES-translog production function using firm level data in United States and found that ICT is substitutive to other factors input as the marginal productivity of ICT is very high and the return to this input is highly in excess of returns to other input, especially labour.

It is not surprising therefore, that a third world country like Bangladesh has not been pushing hard for increased scope of e-banking in the country in spite of the benefits as found out by Baten and Kamil (2010). In their study aimed at determining the economic prospects of e-banking and to explain the present scenario of banking sectors in Bangladesh, adopting exploratory research method based on secondary data from NET, books and related journals, the study shows that e-banking serves several advantages to Bangladesh banking sector.

However, the study also shows that the Bangladesh customers do not have enough knowledge regarding e-banking and as a result limit its scope couple with the fact that Government is not forthcoming with policies to enhance it for fear of loss of jobs that might result. The study also recommended training, awareness creation and communication about electronic banking.

Giving effect to the fear of loss of jobs however, Siyanbola (2013), in his study of the effects of cashless banking on Nigerian economy, adopted a descriptive research design with data gathered through questionnaire administered to respondents. Using non-parametric tool of chi-square to analyse the data, it was found out, among other things, that the policy will affect employment negatively though the policy would improve Nigerian economy. The study therefore recommended increased government support, provision of uninterrupted power supply, communication link awareness, skilled manpower, collaboration among banks, adequate security and fighting corruption in addition to the policy to maximise its benefits.

The conclusion that employment will be negatively affected is in line with Atiku *et al* (2011), earlier finding. Using four selected banks in Lagos as case study with a 20 item self-report instrument analysed using mean and chi-square, their result shows that adoption of e-banking directly leads to loss of jobs and early retirement of employees in Nigerian banking sector. Also, adoption of automated teller machine and other e-payment systems also affect job stability and employment of teller officers in the Nigerian banking sector. Yet the internet electronic banking services being offered by Nigerian banks is still at basic level and at most intermediary. We are yet to adopt the advanced level which includes E-signature, video conferencing, E-cheque, robot-manned banking etc. It was therefore recommended that

efforts should be made by CBN to ensure that e-banking is seen as option to enhance the service delivery of employees not as a substitute to employees' performance.

However, there exist also studies with implied no (neutral) relationship between electronic banking and employment. An example is Aniebo, Ogunobi and Akamobi (2011) in their evaluation of post consolidation employment growth in the Nigerian banking sector using First Bank of Nigeria Plc as a case study. Employing an empirical simple correlation analysis between employment growth and earnings performance and between the ranks of employment growth and growth in gross earnings, it was found out that, contrary to a priori expectations, the correlation was very low in both cases with explanatory power of only 1.53% in the case of Pearson's simple linear correlation coefficient. By inference, if e-banking has been found out to enhance performance, then it can be concluded that it has no relationship with employment. Nonetheless, labour-intensive growth path was recommended for banking sector with focus not only on increased earning capacity that ICT will bring.

The conflicting results of the few studies, in the foregoing, on effect of electronic banking on employment in the country give credence to this study giving the facts that certain prerequisite conditions from various recommendations are necessary to maximise the benefits and ameliorate the negative effects of adoption of electronic banking. More so, the theory postulates different outcomes for different time frame (short and long runs) and since the definition of long run is not cast in stone this study remains relevant. Specifically, we are going to be using the existing commercial banks in Lafia metropolis of Nasarawa state as case study to complement the works of researchers such as Atiku *et al* (2011) who used banks in Lagos (a commercial capital of the country) to make generalisation about Nigeria. The current study also intends to analyse the outcome of responses to the designed sets of questionnaire employing both descriptive and inferential statistics.

3.0 METHODOLOGY

3.1 Study Area

This research is concentrated in Lafia which is not only the capital city of Nasarawa state but also has the single largest concentration of all the commercial banks represented in the state. Nasarawa was created on October first, 1966 by General Sani Abacha's regime. The state was bounded in the north by Kaduna state, in the west by Abuja (FCT), in the south by Kogi and Benue states while in the east by Taraba and Plateau states. The state is composed of different ethnic groups majority of who are Eggon and Migili, each with its own distinct dialect though Hausa is still common among the people. Lafia, the capital of the state is located at the south-west part of the state on latitude $8^{\circ} 30^1$ N and longitude $7^{\circ} 31^1$ E.

According to 2006 census, it has estimated population of 330,712 inhabitants and with 2.6% estimated growth rate, the projected population by year 2018 is around 450,000 people occupying 27,117km² (10,470sq m²) area. The main temperature in Lafia area ranges between

30⁰C in March and 25⁰C in December. So, traditionally asides farming, cotton weaving and dyeing are important activities of the town's indigenous inhabitants of Arago, Tiv and Kanuri peoples while Fulani herdsmen bring their cattle to graze in the vicinity during the dry season.

Modern Lafia is home to branches of fifteen out of the twenty two commercial banks in the country. These include Zenith, Eco, Skye (Polaris), Diamond, Keystone, GTB, Access, FCMB, Stanbic-IBTC, UBA, Unity, Fidelity, Heritage, Union and First banks. Other important institutions such as Nasarawa state polytechnic Lafia, College of Agriculture and Federal University of Lafia and a large number of primary and secondary schools are also situated within the metropolis. It is important to note however, that over 70% of the working population are civil servants. These characteristics of the city, suggest that banking sector is an important private employer of labour asides their traditional Agricultural activities. Therefore, job security in the sector is worth examining.

1.2 Research Design and Instrumentation

The study is a survey research because it used a questionnaire and personal interview aimed at finding the relationship between electronic banking and employees' job security in the banking sector of Lafia, Nasarawa State. A structured questionnaire adopted from the work of Atiku *et al* (2011) was used as main data gathering instrument. This was divided into two Parts. Part 1 captured basic biographic information of the respondents such as department/unit, designation and rank in the work place. Part 2A consists of 1 question where respondents' views about the level of adoption of e-banking were sought. They were to answer if the adoption is (1) often (2) occasionally (3) rarely or (4) not at all. Part 2B on the other hand, contained 20 items where respondents were asked to indicate the extent to which they agree/ disagree to various statements regarding the perceived benefits and social effects of adoption of e-banking. The questionnaires were structured on 5-point Likert scale battery of strongly agree (5), agree (4), undecided (3), disagree (2) and strongly disagree (1).

Generally, the structured questionnaire drew responses on the followings: age, sex, working experience, level of adoption of electronic banking, their type and how significant is the impact of their use on employee's job security, among others. However, due to commercial confidentiality and sensitivity of the banking information, the questionnaire was designed in a manner that did not require the respondent to reveal their names alongside their banking institutions.

1.3 Population

The target population for the study is 225 people, representing the total population of permanent and core members of staff of the fifteen commercial banks operating in Nasarawa state out of the total twenty two in the country. The population is estimated from the staff

attendance registers. From our findings while some banks have as low as 7 members of staff, some others have as high as 22 and this forms the range of numbers of staff in the banks used in this study. Two Hundred (200) respondents were selected for actual field study from all the 15 commercial banks, giving allowance for those that would be absent for one reason or the other such as annual leave. One Hundred and fifty six (156) questionnaires, representing 78%, were retrieved for processing out of this.

The questionnaires were distributed to the respondents using purposive sampling technique. This is because the author was interested in eliciting responses from individuals that have a relatively good knowledge of the concepts. The fifteen banks' branches covered in this study include Skye Bank, Diamond, Eco Bank Nigeria, Zenith, GTB, Keystone, Access, FCMB, Stanbic, UBA, Unity, Fidelity, Heritage, UBN and First bank. Though, all the commercial banks have headquarters in either Abuja (the capital city) or Lagos but it was essential to focus on these branches as they generally reflect technologies by sister branches where these technologies are deployed to serve the banks' customers.

1.4 Validity of the Instrument:

Validity of the instrument is the extent to which a measuring instrument on application performs the function for which it is designed. The entire instrument was scrutinized through construct validity (discriminant and convergent). The correlations results, with convergent at 0.81 higher than the discriminant at 0.02, confirmed the validity of the instrument. This is in addition to the fact that the questionnaire and interview guide were first vetted and then applied on a pilot basis to 30 experts that understood the concepts under investigation. Their responses, comments and preliminary analysis were used to modify the instrument.

1.5 Reliability of the Instrument

Reliability can be defined as extent to which an instrument measures consistently, whatever it was designed to measure. It has to do with the consistency method so that any other person employing the same method in collecting data in the same environment during the same period will arrive at the same result. The Cronbach Alpha Method was used to measure its consistency and a coefficient of 0.87 was obtained. The more closely a reliability coefficient is to the value of 1.00, the more the test is free of error variance. Therefore, since 0.87 is also greater than 0.7 cut off for reliability, it means that the instrument can highly be relied upon for analysis.

1.6 Method of Data Analysis

This is a descriptive research study of the responses to the questionnaire distributed to the respondents. As such the mean (\bar{X}) and standard deviation (SD) of the collated responses were calculated so as to determine the level of adoption as well as the effects of e-banking on

workers' job security in the existing banks in Nasarawa state. Non- parametric tool of Chi square was also employed to analyse the data so as to test the only hypothesis of this study.

The mean score of the five rating 20 questions contain in the part 2B of the questionnaire, is 3 implying that the mean score above 3 (3 not inclusive) will form the basis for the acceptance of the results as the scores of the responses here are coded in descending order. A mean of exact 3 implies neutrality of the population as regard the particular question as this is equivalent to undecided response in the questionnaire.

4.0 Data Analysis and Results Interpretation

A Total of 200 copies of the questionnaire were distributed to the participants in the study, while 156 copies were eventually retrieved and analysed. This means that a response rate of 78 percent was achieved. The data generated is presented using tables. The demographic variables of the respondents are presented in two scale tables of yes and no using frequency and simple percentage. The responses to the individual items in the questionnaire were scored using descriptive statistics of mean and standard deviation presented along the research questions in the study.

4.2 Analysis of Respondents' Demographic Variables

Table 1 Gender Distribution of the Respondents

Gender	Frequency	Percentage (%)	Cumulative (%)
Male	118	75.6	75.6
Female	38	24.4	100.00
Total	156	100.00	

Source: field survey, 2018

Table1 shows that we have more male respondents than female. 75.6% male respondents as against 24.4% female respondents. This suggests that adaptability rate to new technology of electronic banking will be high because loss of jobs weigh more on menfolk than womenfolk in our society. This provides motivation to prevent such by taking seriously to necessary skills update opportunities such as in-service training.

Table 2 Age Distribution of the Respondents

Age	Frequency	Percentage (%)	Cumulative (%)
Under 30 years	15	9.62	9.62
30 – 40 years	54	34.62	44.23
41 – 50 years	75	48.08	92.31
51 – 60 years	12	7.69	100.00
Total	156	100.00	

Source: field survey, 2018

Table 2 shows the age range of the respondents. The analysis shows that 9.62% falls within 30 years and below while age range of 30 – 40 years constitutes 34.62 % of the respondents. A whopping 48.08% of respondents belong to the ages ranging between 41 and 50 years as against paltry 7.69% of the age range of 51-60 years. In summary, the analysis shows that more respondents belong to age range of 41-50 (48.08) closely follow by age range 30-40 (34.62%). The implication of this is that we have more population of youths and so teachable in the employment of the banks. In this way their mobility to other new departments occasioned by electronic banking will not be a huge issue. The job loss effect, if any, of electronic bank will therefore weigh more on less than 8% of this population who are already aging and nearing their retirement.

Table 3 Respondents’ Years of Experience

Options	Frequency	Percentage %	Cumulative %
1-3 years	45	28.85	28.85
4-6 years	55	35.26	64.10
7-9 years	55	35.26	99.36
Over 9 years	1	0.64	100.00
Total	156	100.00	

Source: field survey, 2018

The analysis of data in table 3 indicates that 28.8% of the respondents have spent between 1 and 3 years in the bank. 35.26% have 4-6 years of experience, ditto for those that have spent 7-9 years while only 0.64% has over 9 years’ experience in banking. This is not surprising because more experienced staff are found in the head and regional offices of the banks in major cities. The implication of this is that most of the respondents may not be in position to compare adequately the job situation in the bank between when it was hugely manual driven and technology driven. It also shows their relative readiness for the new dispensation of electronic banking because it is expected that these younger employees will not be a total strangers to the electronic gadgets such android phones needed to drive electronic banking.

4.3. Data Presentation and Analysis

The data collected from the respondents are presented in this subsection using Likert’s 5 point rating 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 tool of analysis is also presented in this section.

Table 4 Respondents’ views on the level of adoption of e-banking in the operations of the banks

Respondents’ Banks	Often	Occasionally	Rarely	Not at all	Total
Zenith Bank	11	0	0	0	11
Skye Bank	10	2	0	0	12
Eco Bank	11	1	0	0	12
Diamond Bank	12	0	0	0	12
Keystone Bank	11	1	0	0	12
Guaranty Trust Bank	11	0	0	0	11
Access Bank	7	0	0	0	7
First City Monument Bank	8	1	0	0	9
Stanbic – IBTC Bank	9	0	0	0	9
United Bank for Africa	13	0	0	0	13
Unity Bank	7	0	1	0	8
Fidelity Bank	11	0	0	0	11
Heritage Bank	4	0	0	1	5
Union Bank	11	0	0	0	11
First Bank	13	0	0	0	13
TOTAL	149	5	1	1	156

Source: field survey, 2018

The analysis of respondents’ views on the level of adoption of e-banking by the banks in Table 4 shows a very high level of adoption of e-banking in their banks. All the respondents (The banks’ permanent and core members of staff) express their view that they often applied e-banking mechanism in their operations. This may, possibly, be as a result of rapid advances in ICT and intensive competitive banking markets. Churning out E-banking Products seems to be the trending way of gaining competitive advantage in the market. Christopher, Mike & Amy (2006) corroborates this assertion in their observation that, e-banking has become an important channel to sell the products and services and is perceived to be necessary in order to stay profitable and successful. This is also in line with the submission of Rafiu (2007) that the challenge to expand and maintain banking market share has influenced many banks to invest more in making better use of internet.

Table 5 Summary of effects e-banking has on workers job stability in the existing banks in Nasarawa State.

S/N	Variable	Mean –X- (%)	Standard Deviation
1	Adoption of ATM led to laying-off of teller officers	2.5(41.7)	1.3
2	My bank reduces the number of employees as a result of telephone banking	2.4(40.0)	1.2
3	The emergence of internet banking led to early retirement of staff	2.5(41.7)	1.1
4	High level of redundancy is as a result of electronic fund transfer in banking industry	2.6(43.3)	1.2
5	The usage of automation as a result of technological innovations led to displacement of employees	3.0 (50.0)	1.2
6	The adoption of telephone banking led to downsizing of customer's relation officers	2.6 (43.3)	1.2
7	The use of internet banking reduces the number of service staff	2.9(48.3)	1.2
8	Electronic fund transfers led to redundancy of service staff in Nigeria banks	3.0(50.0)	1.0
9	There is forceful ejection of teller officers as a result of automation	2.7(45.0)	1.0

S/N	Variable	Mean- (%)	X-	Standard Deviation
10	The emergence of telephone banking contributed to downsizing the number of service staff	2.9(48.3)		1.1
11	The adoption of internet banking increases the level of employee's job insecurity	3.3(55)		1.1
12	Electronic fund transfer promotes de-skilling of staff in my bank	2.8(46.7)		1.2
13	The adoption of automation process reduces the level of manual procedures	4.2(70.0)		1.1
14	Telephone banking service increases the level of employee's job insecurity	3.1(51.7)		1.1
15	Early retirement in banking industry is a resultant effect of internet banking innovation	2.7(45)		1.2
16	Electronic fund transfer increases the level of employee's job insecurity	3.0(50)		1.2
17	ATM enhances de-skill of workers in the industry	2.7(45)		1.1
18	Telephone banking is one of the technological innovations that dehumanize the work	2.9(48.3)		1.3
19	Forceful retirement is a consequence of electronic banking in Nigeria	2.5(41.7)		1.2
20	Displacement of workers is a resultant effect of electronic fund transfer	2.6(43.3)		1.2

Source : Researcher's Computation, 2018

The mean score of the five rating 20 questions which responses were analysed in table 5 is 3. This implies that 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 – 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 effects of e-Banking on employment in banking sector in Lafia, Nasarawa State and they all have over 50 percent of the respondents agreeing to the assertion. These items are 11, 13 and 14. They are considered to suggest that the effect e-banking has on workers' job security in Nigerian banking sector is negative. Three other items (5, 8 and 16) are neutral, with the opinion of the respondents divided in equal halves (50%), suggesting no relationship between electronic banking and job security; this is in line with the hypothesis proposed by Lucas (1988). It is also instructive to note that almost all the respondents agree strongly that the adoption of automation process reduces the level of manual procedures. The item (13), that implies this, has a mean score of 4.2 and a whopping 70 percent of respondents agreeing with this assertion.

The rest of the fourteen items: 1, 2, 3, 4, 6,7,9,10,12,15,17,18,19 and 20 have mean scores of below 3, with less than 50 percent of the respondents agreeing with these opinions, implying that e-banking and workers' job security in the existing banks in Lafia Nasarawa State have no negative relationship. They are therefore, considered to suggest that e-banking does not lead to loss of jobs in banking sector in Lafia Nasarawa State.

Table 6 Summary of Chi-square test analysis of influence of e-banking on employees' job security in banking sector

Item	X ² calculated	X ² tabulated	Decision
E-banking	6.24	9.49	H ₀ not rejected

DF = 4 α= 0.05 N=156 Probability= 0.19

Source; Researchers' computation

In order to empirically determine the relationship between e-banking and employees' job security, non-parametric tool of Chi-square was employed to analyse the data so as to test the hypothesis formulated for the study. The Chi square results in table 6 where our probability (p) value (0.19) is greater than our significant value of 0.05 (5%) confirmed our outcome in table 5. In the same vein, since the calculated chi-square value (6.24) is less than the critical value (9.49) at the 5% significance level as depicted in table 6 above, it means that there is no relationship between electronic banking and job security that is the null hypothesis is not rejected while the alternative hypothesis is rejected. As a result and by application to this study, our null hypothesis that e-banking has no significant influence on employment in banking sector is not rejected.

The outcome of this study is in contrast to the findings of Atiku *et al* (2011) who conducted similar study and used Lagos state as case study and that of Alleh *et al* (2015) that both have complementary relationship which is also in line with the postulation of Schumpeter (1934) that more employment is actually created in the system than destroyed by innovative technology. It is however similar to the finding of Aniebo *et al* (2011) which study inferred, that e-banking has no relationship with employment.

The outcome in Nasarawa state may not be surprising considering the years of experience of majority of the respondents; less than 1%, precisely 0.64% of the respondents have spent more than 9 years in banking industry (table 3). This is unlike in the major city like Lagos, for instance, where more experienced staff, that have the idea of staff strength both when banking procedures were more manually based and when highly automated, are found. However, most of the bankers interviewed in the course of this study were of the opinion that though there may not be significant relationship, presently, between e-banking and employment, there is possibility of a major negative impact in the foreseeable future with the

present rate of adoption of e-banking if the labour adoption capacity of other related sectors is not boosted.

5.0 Conclusion and Recommendations

In this study, we have analysed the opinions of banks' employees in Nasarawa state and can conclude that though the adoption of electronic banking has reduced the level of manual procedures in banking operations, it has not necessarily led to loss of jobs in the sector at least in Lafia Nasarawa state. This is however believed to be possible in the nearest future considering the rate of adoption and the agreement on the importance of e-banking not only to the banking sector in terms of possibility of larger share of the market but also the convenience it affords the banking public.

In view of the foregoing, the following recommendations are made:

1. While the increasing adoption of e-banking cannot be halted and should be encouraged as we are in the global age of ICT, banks should do it not necessarily as a substitute to labour but rather as a complement bearing in mind that Nigeria is a labour abundant economy.
2. Our educational system should be made more functional by aligning its curriculum to the current needs of the society. In this way the products will be readily employable in the ICT-compliant banking sector just as training of current employees should be made continuous to keep them abreast of new developments in the sector and by extension remain relevant.
3. Government should create more conducive environment for businesses to thrive and be in position to take full advantage of efficient e-banking sector. In this way labour absorption capacity of other financial sector dependent sectors can be enhanced and invariably lead to positive net effect of e-banking on employment in the long run.
4. Lastly, further study in this area is recommended to make generalisation possible for the whole country, possibly, from secondary data and with more robust econometric tools and analysis. This is necessary considering the contrasting results already emanating from different states of the federation.

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