Electronic Banking System and the Nigerian Banking Environment: An Empirical Review

Isibor Areghan (PhD)
Dept. of Accounting, Finance,
and Taxation, Caleb University, Nigeria
isiborareghan@gmail.com;
Areghan.isibor@calebuniversity.edu.ng

Jude Idemudia Okoh PhD
Dept. of Business Administration,
University of Fairfax, Virginia, USA

Adedoyin Ibosiola (PhD)
School of Energy, Geoscience,
Infrastructure, and Society, Heriot Watt University
ai2036@hw.ac.uk; knoxyblack@yahoo.com

Kafidiya Olabisi
Covenant University, Nigeria
olabisikafidiya@gmail.com

Ogunfeyimi Ruth Inumidun
Dept. of Accounting, Finance, and Taxation,
Caleb University, Nigeria
ogunfeyimiruth@gmail.com

https://doi.org/10.56201/ijssmr.vol.12no10.2026.pg615.631

Abstract
This research investigated the impact of electronic banking on Nigerian banking environment. The introduction and increased usage of electronic banking has increased banks profitability, created new frontiers, horizons and opportunities for the banking industry in Nigeria. The study population consist of three (3)deposit money banks (DMBs) which includes;First bank of Nigeria, Guarantee trust bank(GTB) and United bank for Africa (UBA), through the judgement sampling technique, data was collected by means of questionnaire in which a total number of a hundred and twenty (120) questionnaires were administered to different bank customers and staff of the 3 selected deposit money bank and a hundred and five (105) were returned for valid analysis. The statistical package for social science (SPSS) using correlation and regression technique was used as an analytical tool for running the primary data. The result of the analysis showed that the deposit money banks are now able to give better services to their customers' which has improved the efficiency and effectiveness of their operations.In general, electronic banking has made banking

transactions easier and faster by bringing services close to their customers. The study further recommended that the Central bank of Nigeria (CBN) should adopt a policy that would require all DMBs to charge two or more digits on every over the counter transactions especially withdrawals and a single or no-digit charges on any electronic platform of withdrawals and payments.

Keywords**:** *Electronic Banking, Nigerian Banking Environment, SPSS, ANOVA, Regression*

1.0 Introduction

Over the past few decades, unprecedented evolution of information technology has affected the banking industry and has provided away for the bank to differentiate their products and services. Many years ago, banks were using branch-based operations but the advent of multiple technologies and applications changed the nature of financial services delivered to customers. As a result of the new technological improvement, automated teller machines (ATM) displaced cashier teller, telephone represented by call centers replaced the bank branch, the internet replaced mail, credits cards and electronic case replaced bank transactions. The reason was the numerous key advantages that banks could gain by providing electronic banking services.

According to Richard &Arora (2009), banking through electronic channels has gained much popularity in recent years. This system, popularly known as 'e-banking', provides faster delivery of banking services to a wide range of customers. Electronic banking is the term used for new age banking system. E-banking is also called online banking and it is an outgrowth of PC banking. E-banking uses the internet as the delivery channel by which to conduct banking activity, for example, transferring funds, paying bills, viewing checking and savings account balances, paying mortgages and purchasing financial instruments and certificates of deposits (Mohammed, et al, 2009). Prakash and Malik, (2008) defined electronic banking as the use of technology to communicate instructions and receive information from a financial institution where an account is held. This service includes the system that enables financial institution customers, individuals or business to access accounts transact business, or obtain information on financial products and services through a public or private network. Ovia (2002) stated that e-banking is the delivery of banking services and products through the use of electronic devices to customers irrespective of place, time and distance. He went further to state that this form of transaction process has transformed the cash-based economy to an electronic based. E-banking includes the systems that enable financial institution, customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet or mobile phone (Gio, 2005). Customers access e-banking services using an intelligent electronic device, such as a personal computer (PC), personal digital assistant (PDA), automated teller machine (ATM), kiosk, or Touch Tone telephone.

Ojokuku and Sajuyigbe (2012) state that electronic banking facilitates the customers' access to their accounts and executing transactions electronically in an easier way through visiting the bank websites at any given time. In utilizing this facility, individuals and companies are saving a lot of their time and money. Siam (2006) also agrees that electronic services contribute in reducing costs, increasing profits, activating bank's management, increasing bank's effectiveness and its competitive degree. This reflects the direct relation between increasing client's needs to reduce time, costs and between electronic banking services.

Gbadeyan and Akinyosoye, (2011) believe that the use of e–banking has brought many benefits amongst which include: there are no barrier limitations; it is convenient; services are offered at

minimal cost; it has transformed traditional practices in banking; the only way to stay connected to the customers at any place and any time is through internet applications; it results in high performance in the banking industry through faster delivery of information from the customer and service provider; customers prefer the use of e–banking because it saves time; it makes possible the use of innovative product or service at a low transaction fees and it encourages queue management which is one of the important dimensions of e–banking service quality. However, electronic banking in Nigeria is at the infancy stage as many transactions are still being carried out manually. A great deal of efforts and investments are required to make the country relevant to the present dispensation in the industry. The awaiting time for customers is relatively long and the quality of service is not satisfactory to most customers. A lot of problems still exist in fund transfer, tracing of accounts transaction history, ordering of bank statement retrieval of account balances and many more. In view of the above, the study intends to investigate the impact of electronics banking on the Nigerian banking environment, with interests in GT Bank Plc, UBA Bank Plc, and First Bank Nigeria Plc.

In recent years in Nigeria, transactions of the money from one manual bank to the other can take more than one day. Sometimes businessmen have to cancel their business deals due to the unavailability of the cash transferring facility in time in traditional banking system where services are as slow as non-secure, non-satisfactory. In order to satisfy customer's needs, e-banking was introduced by banks so as to improve their service delivery, decongest queues in the banking hall, enable customers withdraw cash 24/7, aid international payment and remittance, track personal banking transaction, request for online statement, or even transfer deposit to a third party account. Despite the effort of banks to ensure that customers reap the benefits of e-banking, the bank is met with persistent public outcry as regards the new challenges, the electronic banking since its inception in 1996 has brought to financial institutions (banks) and general public. To many people, banking transactions via the internet are insecure and often congested. Hence, interruption is usually experienced in banking operations due to network failures. This hindered customers from carrying out transactions at that point in time. Besides, in many parts of the country, many people do not know what e-banking entails, or how to use its products. This aids in revealing the secrete PIN number (in the case of ATM card and other cards transaction) to the third party by the illiterate cardholders (customers) at any time they want to make withdrawals as they always request for assistance. Consequently, there are increases in fraudulent activities in the banking industry. The CBN Annual Report and Statement of Accounts, (2009) have it that, the number of reported cases of attempted or successful fraud and/or forgery in the banking industry rose in 2009. According to the report, 70% of the fraud cases were perpetrated via the electronic system. In addition, the bank is met with complaints from customers as regards, malfunctioning Automated Teller Machines (ATMs), network downtime, non-availability of financial service, payment of hidden cost of electronic banking like Short Message Services (SMS), for sending alert, mandatory acquisition of ATM cards, non-acceptability of Nigerian cards for international transaction amongst others. These issues to this group of people have posed problems to the smooth operations of electronic banking in Nigeria. As a result of this, it is imperative to seek answers to the research questions that have would be stated in this research.

1.1 Research Hypotheses

H_0: There is a positive effect of e-banking service on customer value.

2.1 Theoretical Studies on E-Banking

The technology diffusion theory examined Electronic banking from the following platforms: (i) Internet banking (or online banking), (ii) telephone banking, (iii) TV-based banking, (iv) mobile phone banking, and e-banking (or offline banking). E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet or mobile phone. The theory explained that all the platforms listed above makes e-banking function effectively in any environment. Customers access e-banking services using an intelligent electronic device, such as a personal computer (PC), personal digital assistant (PDA), automated teller machine (ATM), kiosk, or Touch Tone telephone. While some literature restricts the use of the term to internet banking (Daniel 1999), elsewhere the term is limited to retail banking (Aladwani 2001) or both retail and corporate banking (Simpson 2002).

2.2 Empirical Studies on E-banking

Chiemeke et al. (2006) conducted an empirical investigation on adoption of e-banking in Nigeria. The study identified the major inhibiting factors to Internet banking adoption in Nigeria such as, insecurity, inadequate operational facilities including telecommunications facilities and electricity supply, and made recommendations on how Nigeria banks can narrow the digital divide. Also, the report revealed that Internet banking is being offered at the basic level of interactivity with most of the banks having mainly information sites and providing little Internet transactional services. Similarly, Agboola (2006) investigated electronic payment systems and tele-banking services in Nigeria. The findings revealed that there has been a very modest move away from cash.

Esman, Embi and Jusoh (2010) conducted a study on the usage of self-service technologies. This study examined the levels of intention to use the self-service technologies (SSTs), in particularly the ATMs and internet banking among the postgraduate students in the University, The Bursary of the institution had introduced the e-debit system to the students as a new way to settle the tuition fees. The objectives of the e-debit system were to reduce the human interaction between the bursary ‘s staffs and students. In essence, the e-debit system consists of automated teller machines (ATMs), internet banking and cash transaction, but this study focuses on the usage of ATMs and online banking other than the cash transaction. Therefore, the research model proposed six variables, which are (a) perceived usefulness, (b) perceived ease of use, (c) perceived enjoyment (d) need for interaction, (e) security and privacy, and (f) demographic characteristics (such as gender, age, level of education, mode of study and faculty enrollment) for measuring the behavioral and intention to use the SSTs.

This study showed that the majority of the postgraduate students ‘intention to use SSTs is at a moderate level. Statistical analysis revealed that perceived usefulness, perceived ease of use, perceived enjoyment, and security and privacy are the factors that affect students ‘intention to use the SSTs. Furthermore, the results from stepwise multiple regressions demonstrate that perceived enjoyment is the best variable to predict students ‘intention toward the usage of the SSTs.

Khan, Kadir, and Wahab (2010), investigated the Role of Satisfaction and Relationship Commitment. This study was the first to consider customer value in terms of both functional and relational aspect. The main objective of the study is to investigate the most prominent predictor of customer behavior intention and also to examine the indirect factors (functional value and relational value) related to the respective direct factors (satisfaction and relationship commitment) and their ability to explain customer behavior intention. The results revealed that relationship commitment followed by satisfaction has a significant direct effect on behavior intention.

Ho and Ko (2008) explored the effects of self-service technology on customer value and customer readiness. In addition, it is proposed to inspect the effects of customer value and Customer readiness in customers continued use of Internet banking. The findings of this study showed that self-service technology characteristics such as ease of use, usefulness, costs saved, and self-control demonstrated positive effects on Customer value and Customer Readiness. Almazari and Siam (2008) carried out a study on Jordanian Commercial Banks. One of the objectives of this study was to determine the relation between the use of electronic services by the Jordanian commercial banks and the customers. This study proved that customers do not look for an emotional relationship with the banks but see the price, quality and performance as important factors when choosing banks.

Roig, Garcia, Tena, and Monzonis (2005) in their study assessed Customer perceived value in banking services. The purpose of this study was to analyze the dimensionality of the concept of Customer perceived value in the banking sector; this study proposed a scale of measurement of the value perceived by consumers in the banking sector which incorporates valuations of functional aspects and of affective aspects, thus obtaining an overall quantification of the value perceived by the customer of the purchase made. The results of this study showed that Customer perceived value is found to be a multidimensional construct composed of six dimensions (functional value of the establishment, functional value of the personnel, functional value of the service, functional value price, emotional value, and social value.

Hernando and Nieto (2005) examined the performance of multichannel banks in Spain between 1994 and 2002. The study found higher profitability for multichannel banks through increased commission income, increased brokerage fees and (eventual) reductions in staffing levels and concluded that the Internet channel was a complement to physical banking channels. In contrast to earlier studies, the multichannel banks in Spain relied more on typical banking business (lending, deposit taking and securities trading). The adoption of the Internet as a delivery channel had a positive impact on banks' profitability after one and a half years of adoption. It was explained by the lower overhead expenses and in particular, staff and IT costs after the same period.

Gupta (2008) stated that e-banking is transforming the banking and financial industry in terms of the nature of core products/services and the way these are packaged, proposed, delivered and consumed. It is an invaluable and powerful tool driving development, supporting growth, promoting innovation and enhancing competitiveness.

Thus, going by the findings of most studies, we can argue that the literature on the impact of e-banking is inconclusive especially in developing economies and serve as an open ground for more research in the area of e-banking.

3.1 Methods

The research design to be adopted will be the survey research design because the samples being studied are only observed and not manipulated or controlled which will be focusing on the population. For this study, primary data were generated by means of questionnaire administered among bankers. Secondary data consists of relevant articles, magazines, journals, newspaper, textbooks, and reports from the Central Bank of Nigeria. The research population of the study will be GT bank Nigeria Plc, UBA Bank Nigeria Plc, and First Bank Nigeria Plc all in Lagos State.

A total of 120 respondents have been selected through the simple random sampling method in order to ensure that every member of the population have an equal chance of being part of the sample. The respondents were asked to fill a questionnaire given to them as a way of getting their

responses. The sampling size will be management staff in the head office and branch office and customers of all the selected banks.

The method that was used in the presentation of data is the correlation analysis using the Statistical Package for Social Sciences (SPSS). SPSS contains all necessary and important statistical techniques for data analysis and it is a very current package. Correlation analysis measures the degree of relationship between variables will be used to analyze the result generated from the questionnaire. When comparing the correlation between two items, one item is called the 'dependent' item and the other the 'independent' item. Correlation analysis helps in determining whether or not two sets of observation co-vary and as such help to determine whether there is any correlation between good corporate governance and bank sustenance and growth.

4.1 Analysis and Interpretation

4.2 Presentation of Data

Table 4.1: Number of Respondents

Table 4.1 presents the details of the number of questionnaire returned or not returned.

Questionnaires	Number	Percentage
Administered	120	100%
Returned	105	100%
Not- returned	15	0%

Source: Field Survey, 2019

A total of 105 copies of questionnaire were administered to the customers of GTB Bank Nigeria Plc, UBA Bank Nigeria Plc, and First Bank Nigeria Plc. Out of the copies administered, the same 105 copies were filled and returned. This was considered large enough to make valid deduction and conclusions.

4.3 Data Analysis and Interpretation

4.3.1 Demographic characteristics of respondent

Table 4.2: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	57	54.3	54.3	54.3
	Female	48	45.7	45.7	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

Table 4.2 classifies gender of respondent. This table shows that out of 105 participants that took part in the study, 57 are males which represent 54.3% of the entire population. On the other hand, the female respondents are who participated in the study are 48 which represented 45.7 % of the population. The frequency table confirmed that the male's customers of the banks under study are more than their female's counterpart.

Table 4.3: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 20	17	16.2	16.2	16.2
	21-30	60	57.1	57.1	73.3
	31-40	22	21.0	21.0	94.3
	40 and above	6	5.7	5.7	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

The above frequency shows the age analysis of the bank customers. The age range confirmed that bank customers below the age of 20 years are 17 which represent 16.2% of the population, 60 bank customers fall within the age range of 21-30 years which represents57.1% of the population, those within the age range of 31-40 are 22 which represents 21.0% of the population, while customers that are 40 years old and above are 6 which represents 5.7% of the study population.

Table 4.4: Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	44	41.9	41.9	41.9
	Single	60	57.1	57.1	99.0
	Divorced	1	1.0	1.0	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

Table 4.4 confirmed the marital status of the bank customers. The result shows that 44 are married which represents 41.9% of the population; those that are single are 60 which represent 57.1% of the population, while only one customer was rated as divorced in the population of study.

Table 4.5: Educational Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pry school	30	28.6	28.6	28.6
	Sec school	25	23.8	23.8	52.4
	OND/HND	14	13.3	13.3	65.7
	Bsc	12	11.4	11.4	77.1
	MBS/Msc	24	22.9	22.9	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

Table 4.5 classifies the educational qualification of the bank customers. The table indicates that out of the whole population that participated in the study, 30 of them which represents 28.6% of the population are primary school certificate holders, 25 customers are secondary school certificate holder which represents23.8% of the sample size, those with OND/HND are 14 which represents

13.3%v of the population, B.Sc holders are 12 which represents 11.4% of the sample size, while those with M.Sc are 24 which represents 22.9% of the population.

4.6: Job Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unemployed	12	11.4	11.4	11.4
	student	34	32.4	32.4	43.8
	employed	58	55.2	55.2	99.0
	4.00	1	1.0	1.0	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

The above frequency table 4.6 confirmed the job status of the bank customers. The table indicates that 12 customers are unemployed and represents 11.4% of the population; the students are 34 which represent 32.4% of the population, while employed bank customers are 58 which represent 55.2% of the sample size.

Table 4.7 I find that e-banking service is easy to use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	12	11.4	11.4	11.4
	Disagree	29	27.6	27.6	39.0
	Undecided	23	21.9	21.9	61.0
	Agree	21	20.0	20.0	81.0
	strongly agree	20	19.0	19.0	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

On the use of e-banking services (Table 4.7), the result showed that 39% of the population supported the idea while another 39% did not support the idea. On the contrary, 21.9% were undecided in this opinion.

Table 4.8 It is easy to apply financial services on internet banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	83	79.0	79.0	79.0
	disagree	19	18.1	18.1	97.1
	Agree	3	2.9	2.9	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

The result of table 4.8 disagreed with this view as confirmed by 88.1% of the population.

Table 4.9. I have the opportunity to try various electronic banking services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	34	32.4	32.7	32.7
	Disagree	50	47.6	48.1	80.8
	Undecided	12	11.4	11.5	92.3
	Agree	7	6.7	6.7	99.0
	strongly agree	1	1.0	1.0	100.0
	Total	104	99.0	100.0	
Missing	System	1	1.0		
Total		105	100.0		

Source: Field Survey, 2019

The result (Table 4.9) indicates that there is no opportunity to try various electronic banking methods as confirmed b 79.1% of the entire population.

Table 4.10 It is difficult to use the e-banking services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	11	10.5	10.5	10.5
	Disagree	22	21.0	21.0	31.4
	undecided	20	19.0	19.0	50.5
	Agree	39	37.1	37.1	87.6
	strongly agree	13	12.4	12.4	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

The findings (Table 4.10) showed that it is not difficult to use banking service as confirmed by 49.5% of the population.

Table 4.11. I feel secured using electronic banking than with regular banking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	25	23.8	25.0	25.0
	Disagree	59	56.2	59.0	84.0
	Undecided	8	7.6	8.0	92.0
	Agree	8	7.6	8.0	100.0
	Total	100	95.2	100.0	
Missing	strongly agree	5	4.8		
Total		105	100.0		

Source: Field Survey, 2019

The frequency distribution (Table 4.11) rejected the statement as confirmed by 80.1% of the sample size used in the study.

Table: 4.12: Electronic banking has more security than the regular banking system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	21	20.0	20.0	20.0
	Disagree	52	49.5	49.5	69.5
	Undecided	19	18.1	18.1	87.6
	Agree	12	11.4	11.4	99.0
	strongly agree	1	1.0	1.0	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

The result (Table 4.12) indicates that e-banking doesn't have more security than the regular banking service as confirmed by 69.5% of the population.

Table 4.13: Fraud is common in the electronic banking than the regular banking services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	27	25.7	26.2	26.2
	Disagree	48	45.7	46.6	72.8
	undecided	21	20.0	20.4	93.2
	agree	5	4.8	4.9	98.1
	strongly agree	2	1.9	1.9	100.0
	Total	103	98.1	100.0	
Missing	System	2	1.9		
Total		105	100.0		

Source: Field Survey, 2019

On Table, 4.13. The result showed that fraud is not common in e-banking as confirmed by 70.4% of the population.

Table 4.14: When I use electronic banking, my money is as safe as when i use other banking services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	21	20.0	20.0	20.0
	Disagree	56	53.3	53.3	73.3
	undecided	19	18.1	18.1	91.4
	Agree	7	6.7	6.7	98.1
	strongly agree	2	1.9	1.9	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

The findings (Table 4.14) indicates that using e-banking is not safe as when compared using other e-banking services as confirmed by 70.4% of the population.

Table 4.15: E-bank services increase bank profit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	23	21.9	22.1	22.1
	disagree	54	51.4	51.9	74.0
	undecided	23	21.9	22.1	96.2
	agree	4	3.8	3.8	100.0
	Total	104	99.0	100.0	
Missing	System	1	1.0		
Total		105	100.0		

Source: Field Survey, 2019

The result (Table 4.15) showed that e-banking doesn't increase banking services when compared to the regular services as confirmed 72.1% of the sample size.

Table 4.16: Using internet banking offers effective banking transaction than the regular banking services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	31	29.5	29.8	29.8
	disagree	44	41.9	42.3	72.1
	undecided	21	20.0	20.2	92.3
	agree	6	5.7	5.8	98.1
	strongly agree	3	2.9	1.9	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

The frequency distribution table shows that using internet banking doesn't offer effective banking transaction than the regular banking services. This result was confirmed by 70.4% of the population.

Table 4.17: Using internet banking reduces banks profitability

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	49	46.7	46.7	46.7
	Disagree	48	45.7	45.7	92.4
	Undecided	7	6.7	6.7	99.0
	Agree	1	1.0	1.0	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

The analysis (Table 4.17) indicates that using internet service doesn't reduce bank profitability as confirmed 92.4% of the sample group.

Table 4.18 E-banking services affect the rapid growth of banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	22	21.0	21.0	21.0
	Disagree	42	40.0	40.0	61.0
	Undecided	19	18.1	18.1	79.0
	Agree	17	16.2	16.2	95.2
	strongly agree	5	4.8	4.8	100.0
	Total	105	100.0	100.0	

Source: Field Survey, 2019

The result (Table 4.18) shows that e-banking service doesn't affect the rapid growth of banks as confirmed by 61.0% of the population.

Rules for accepting hypothesis

In order to undertake hypothesis testing you actually need to express your research hypothesis as a null and alternative hypothesis. The null hypothesis and the alternative hypothesis are statement regarding the differences or effect that occur in the population. This will show which statement is most likely. We either reject or accept the null hypothesis.

4.3 Hypothesis Testing

H_0: there is a negative effect of e-banking service on customer value

Table 4.19 Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.819[a]	.671	.665	1.21035
a. Predictors: (Constant), E BANKING				

Source: SPSS OUTPUT (2019)

The model summary table shows how much of the variance in the dependent variable (customer value) is explained by the model. In this case the R square is .671 if expressed by a percentage will be 67.1%. This means that our model explains 67.1% of the variance in customer value.

Table 4.20

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	26.501	1	26.501	18.090	.000[b]
	Residual	150.890	103	1.465		
	Total	177.390	104			
a. Dependent Variable: i find that e-banking service is easy to use						
b. Predictors: (Constant), E BANKING						

Source: SPSS OUTPUT (2019)

Interpretation of Result: The ANOVA table shows the assessment of the statistical significance (sig=0.0001), in which the F-value is equal to 18.090, and less than or equal to 0.0001, therefore we reject the null hypothesis. So, we can conclude that there is positive effect of e-banking service on customer value.

Table 4.21

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.119	.254		8.342	.000
	E BANKING	.502	.118	.387	4.253	.000
a. Dependent Variable: i find that e-banking service is easy to use						

Source: SPSS OUTPUT (2019)

The table seeks to explain which of the variables is making a statistically significant unique contribution to the model looking at the sig column in the table; it reveals that there is positive effect of e-banking service on customer value. This is because it made significant contributions to the model. (B= .502, t= 4.253, p value= .000)

Decision; Hence, we reject the null hypothesis. The implication of this result is that there is positive effect of e-banking service on customer value.

5.1 Recommendations

1. Central Bank of Nigeria should evolve a plan or policy that makes it mandatory for all banks to set aside certain percentages of their profit on yearly basis as budget for information technology so as to abreast of technological development in the area of e-banking;
2. The central bank should put in place information technology policy and regulatory activities that will stimulate standards to adhere strictly to implementation of information policies;
3. The banks should keep on side by side innovative technological advancement particularly in the area of application, so as to reliably create e-product that will address the issues of the customer;
4. For a better and secured electronic banking environment, a three-component confirmation ought should be practiced. For example, use of password, a smartcard to ascertain what one has, and biometric recognition (for example fingerprint or retina scanning) to ascertain who one biologically is.

5.2 Conclusion

The following conclusions are reached based on the result of findings from the study: Electronic banking has a significant effect on the Nigerian baking environment. This means that the banks are now able to give better services to their customers and timely response. This has reduced to some extent complaints of customers. Before the introduction of E-banking, customers experience has being poor in terms of time to service customer and operational service (e.g., draft, bank transfer etc.). Electronic banking has brought a lot of impact. However, electronic banking has not helped the curtailment of fraud in banks. People now find various means of getting pin numbers to smart cards and how to access people bank details online. Also, electronic banking has not increase bank profitability. The Banks are not making more profit due to the advent of Electronic Banking for now, rather have spent more money to put everything place.

References

Agboola, A. A. (2006). "Electronic Payment Systems and Tele-banking Services in Nigeria", *Journal of Internet Banking and Commerce,* Vol. 11, No. 3, December 2006, online source: http://www.arraydev.com/commerce/jibc/

Aladwani, A. (2001). "Online Banking: A Field Study of Drivers, Development Challenges, and Expectations" ,*International Journal of Information Management*, 21, 2001, pp. 213–225.

Ayo, C. K. (2006): "The Prospects of E-Commerce implementation in Nigeria" *Journal of Internet Banking and Commerce*, December 2006, 11 (3) http://www.aravdev.com.commerce/isbc

Byers, R., Lederer, P.J. (2001), "Retail bank services strategy: a model of traditional, electronic, and mixed distribution choices", *Journal of Management Information Systems*, 18 (2) ,pp.133-56.

CBN (2009):" Guidelines On Electronic-Banking In Nigeria", available at *http/www.cenbank.org*

Chiemeke, S. C., Evwiekpaefe, A. and Chete, F. (2006). "The Adoption of Internet Banking in Nigeria: An Empirical Investigation" ,*Journal of Internet Banking and Commerce*, vol. 11, No.3, December 2006.

Daniel, E. (1999). "Provision of Electronic Banking in the UK and the Republic of Ireland", *International Journal of Bank Marketing*, Vol. 17, No. 2, 1999, pp. 72–82

Davis, F.D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology*", MIS Quarterly*, Vol. 13, No. 3, page (319-39).

Dube, T., Chitura, T., Chitura, T. and Langton, R. (2009). Adoption and Use of Internet Banking in Zimbabwe: An Exploratory Study, *Journal of Internet Banking and Commerce*, April 2009, Vol. 14, 2009, No.1.

Durkin, M. (2004) "In search of the Internet-banking customer Exploring the use of decision styles", *The International Journal of Bank Marketing* Vol. 22, No. 7, page (484 – 503).

Esman, F., Embi, R., and Jusoh,R., (2010) " Usage of Self-Service Technologies (SSTs): A Case Study of e-Debit System at Bursary UiTM Shah Alam", *International Journal of Instructional Technology and Distance Learning*, Vol. 7, No. 9, page (23-33).

Gbadeyan R.A and Akinyosoye,O.O (2011). "Customers' preference for e-banking services: A case study of selected banks in Sierra Leone". *Australian journal of business and management research*. 1(4), 108-116.

Gefen, D. and Straub, D. W. (2005). "A practical guide to factorial validity using PLS- graph: tutorial and annotated example" *communication of the association for information system,* pp 91- 109

Goi.C.L. (2005), "E-Banking in Malaysia: Opportunity and Challenges", *Journal of Internet Banking and Commerce*, Vol. 10, No.3.

Gupta, P.K (2008). "Internet banking in India: consumer concern and bank strategies" *global journal of business research, vol. 2, No.1, 2008,* pp. 43-51

Gurau, C. (2002) "E-banking in transition economies: The case of Romania", Journal of Financial Services Marketing Vol. 6, No.4, page (362–378).

Hasan, I., Maccario, A. and Zazzara, C. (2002), "Do Internet Activities Add Value? The Italian Bank Experience", Working Paper, Berkley Research Center, New York University.

Hawkins, J. (2001) "The Banking Industry in the Emerging Market Economies: Competition, Consolidation and Systemic Stability: An Overview*", Bank for International Settlements*, No. 4, page (1-158).

Hernando, I.and Nieto, M. J. (2005), "Is the Internet Delivery Channel Changing Banks' Performance? The Case of Spanish Banks", Banco de Espana, Unpublished Manuscript.

Hertzum, M. Jørgensen, N. &Nørgaard, M. (2004) "Usable Security and E-Banking: Ease of Use Vis -À-Vis Security", *Australasian Journal of Information Systems*, Vol. 11, No. 2, page (52 -65).

Hewer, P., Howcroft, B. (2002), "Consumers distribution channel adoption and usage in the financial services industry: a review of existing approaches", *Journal of Financial Services Marketing*, 3 (4), pp.344-58.

Ho, SH. &Ko,YY. (2008) "Effects of self-service technology on customer value and customer readiness", *The case of Internet banking, Internet Research*, Vol. 18 No. 4, page (427-446).

Howcroft, B., Hamilton, R., Hewer, P. (2002), "Consumer attitude and the usage and adoption of home-based banking in the United Kingdom", *The International Journal of Bank Marketing*, 20 (3), pp.111-21.

Irechukwu, G. (2000) *'Enhancing the Performance of Banking Operations Through Appropriate Information Technology' In Information Technology in Nigeria Banking Industry*, Ibadan, Spectrum Books.

Jasimuddin, S. (2004).Saudi Arabia Banks. Retrieved 25 April, 2010, online source: www.arraydev.com/commerce/jibc/0103-02.htm

Jayawardhena, C. and Foley, P. (2000). Changes in the Banking Sector: The Case of Internet Banking in the UK, Internet Research: Electronic Networking Applications and Policy, Nol.10, No.1, 2000, pp. 19-30.

Joseph, M., & McClure, C. (1999) "Service quality in the banking sector: the impact of technology on service delivery", *International Journal of Bank Marketing*, Vol. 17, No.4, page (182-191).

Kaleem, A, Ahmad, S (2008), "Bankers perceptions of electronic banking in Pakistan"; *Journal of Internet Banking and Commerce*, http://www.arraydev.com/commerce/jibc.

Kamel, S. (2005). "The Use of Information Technology to Transform the Banking Sector in Developing Nations", *Information Technology for Development*, Vol.11, No. 4, 2005, pp. 305-312

Kannabira G. and Narayan, H. (2005)."Deploying internet Banking and e-Commerce: Case Study of a Private Sector Bank in India" , *Information Technology for Development*, Vol. 11, No. 4, 2005, pp. 363-379

Kannan, R., (2004) "Project on Internet Banking - Report of RBI (Reserve Bank of India) Working Group" http://www.geocities.com/kstability/student/ internet-banking/index.html.

Karjaluoto, Heikki; Mattila, Minna; Pento, Tapio. (2002). "Electronic Banking in Finland: Consumer Beliefs and Reactions to a New Delivery Channel", *Journal of Financial Services Marketing*, Vol. 6, No. 4, 2002, pp. 346–361

Khan, N., Kadir, S.L., &Wahab, S.A., (2010) "Investigating Structure Relationship from Functional and Relational Value to Behavior Intention: The Role of Satisfaction and Relationship Commitment", *International Journal of Business and Management*, Vol. 5, No. 10, page (20 -38).

Kiang, M.Y., Raghu, T.S., Hueu-Min Shang, K. (2000), "Marketing on the Internet – who can benefit from an online marketing approach?" Decision Support Systems, 27 (4,) pp.383-93.

Larpsiri, R., Rotchanakitumnuai, S., Chaisrakeo, S., Speece, M. (2002), "The impact of Internet banking on Thai consumer perception", paper presented at the Conference

on Marketing Communication Strategies in a Changing Global Environment, Hong Kong, May,

Liao, Z., Cheung, M.T. (2002), "Internet-based e-banking and consumer attitudes: an empirical study*", Information & Management*, 39 (4), pp.283-95.

Luštšik, O. (2004) "Can E-Banking Services Be Profitable?" University of Tartu, page (1-40).

Mahdi, S. and Mehrdad, A.(2001)"E-Banking in Emerging Economy: Empirical Evidence of Iran", *International Journal of Economics and Finance*, Vol. 2, No. 1, pp. 201-209

Maholtra, P. and Singh, B. (2007)."Determinants of Internet Banking Adoption by Banks in India", *Emerald Internet Research* Vol. 17, No. 3, 2007, pp. 323-339

Meuter, M. L., Ostrom, A. L., Roundtree, R. I. and Bitner, M. J. (2000) "Selfservice technologies: understanding customer satisfaction with technology-basedservice encounters", *Journal of Marketing*,, Vol. 69, pp. 61-83.

Mohammed, S. K.; SibaSankarMahapatra and Sreekumar (2009)."Service Quality Evaluation in Internet Banking": An Empirical Study in India ,*International Journal of Indian Culture and Business Management*, Vol. 2, No. 1, 2009.

Mols, N.P. (1999), "The Internet and the banks' strategic distribution channel decisions", *International Journal of Bank Marketing*, 17 (6), pp.245-300.

Moutinho, L., Davies, F., Deng, S., Miguel P. S. andAlcaniz J. E. (1997), "The future role of bank branches and their managers: comparing managerial perceptions in Canada and Spain", *International Journal of Bank Marketing*, 15 (3), pp. 99-105.

Nancy B., Lockett, A., Winklhofer, H & Christine, E., (2001), "The adoption of Internet financial services: a qualitative study", *International Journal of Retail & Distribution Management*, 29 (8), pp. 390-398.

Ojokuku R.M and Sajuyigbe A.S (2012)."The Impact of Electronic Banking on Human Resources Performance in the Nigerian Banking Industry", *International Journal of Economic Development Research and Investment* Vol. 3, No 2.Pp 61-69.

. Oladejo, M.O & Dada, A (2008): Information Technology on Service Delivery: An Investigation into some selected Nigerian Insurance Companies, in Proceedings of International Conference on Research and Development, Vol.1, No.13 held on 25-28 November2008 at the Institute Of African Studies, University of Ghana, Accra Ghana.

Olayinka, A.I et al., (2006).*Methodology of Basic and Applied Research*.Ibadan, Postgraduate School, University of Ibadan.

Olayinka, A.I. et al. (2004). *Methodology of Basic and Applied Research*. Ibadan, Postgraduate School, University of Ibadan

Olayinka, A.I. et al. (2004). *Methodology of Basic and Applied Research*.Ibadan, Postgraduate School, University of Ibadan.

Ovia, Jim (2002; "Payment System and Financial Innovations". A paper presented at the Annual Policy Conference, Nov. 2002.

Prakash, A., Malik, G. (2008). "Emperical Study of Internet Banking in India".*Internet research*, 12(5), 83-92.

Rafiu, OyesolaSalawu (2007). "The Emergence of Internet Banking in Nigeria: An Appraisal" ,*Information Technology Journal*, Vol. 6, No. 4, 2007, pp. 490-496.

Rao, SS, Metts, G. and Mong C.A (2003): "Electronic Commerce Development in Small and Medium sized enterprises". *Business Project Management Journal*, 9 (1) pp.11-32.

Richardo T &Arora, O (2009).“Electronic banking services and customer satisfactionin Nigerian banking industry”. *International journal of business and management tomorrow.* 2(3), 1-8.

Roig, J.F., Garcia, J.S., Tena, M.A., &Monzonis, J.L.(2006) “ Customer perceived value in banking services”, International Journal of Bank Marketing Vol. 24, No. 5, page (266-283).

Rotchanakitumnuai, S. and Speece, M.,(2003), “Barriers to Internet banking adoption: a qualitative study among corporate customers in Thailand”, *International Journal of Bank Marketing*, 21 (6/7), pp. 312-323.

Salawu, R. O. and Salawu, M. K. (2007) “The emergency of internet banking in Nigeria: An appraisal”, Available from http://scialet.net/fulltext/?doi=itj.2007.490.496 (Accessed 11 August 2010).

Salehi, Mahdi; Ali, Mansouri and ZhilaAzary. (2008). “Islamic Banking Practice and Satisfaction: Empirical Evidence from Iran”, *ACRM Journal of Business and Management Research*, Vol. 3, No.2, 2008, pp. 35-41.

Sathye, Milind. (1999). “Adoption of Internet Banking by Australian Consumers: An Empirical Investigation” ,*International Journal of Bank Marketing*, Vol. 17, No. 7, 1999, pp. 324–334.

Siam, A.Z. (2006) “Role of the Electronic Banking Services on the Profits of Jordanian Banks”, *American Journal of Applied Sciences*, Vol. 3, No. 9, page (1999-2004).

Siam, A.Z. (2006) “Role of the Electronic Banking Services on the Profits of Jordanian Banks”, *American Journal of Applied Sciences*, Vol. 3, No. 9, page (1999-2004).

Sinkey J. F. (1990) *Commercial Bank Financial Management in the Financial Services Industry*. 4th Ed, Colin publishing.

Sulaiman. A., Lim, C.H, & Wee, A. (2005) “ Prospects and Challenges of E-Banking in Malaysia”, *The Electronic Journal on Information Systems in Development Countries*, Vol. 22, No. 1, page (1-11).

Sullivan, R. J. (2000), “How Has the Adoption of Internet Banking Affected Performance and Risk at Banks? A Look at Internet Banking in the Tenth Federal Reserve District”, Financial Industry Perspectives, Federal Reserve Bank of Kansas City, December, pp.1-16.

Thanton, J. and White, L. (2001), “customer orientations and usage of financial distribution channels”. *Journal of services marketing:* vol. 15 No. 3,pp.168-185

Wang, Y. S., Y. M. Wang, H. H. Lin, and T. I. Tang (2003).“Determinants of User Acceptance of Internet Banking: an Empirical Study”, *International Journal of Service Industry Management*, Vol. 14 No. 5, 2003, pp. 501-19.

White, H., Nteli, F. (2004), "Internet banking in the UK: why are there not more customers?",*Journal of Financial Services Marketing*, 9 (1) pp.49-57.