



# **IMPACT OF ELECTRONIC BANKING TECHNOLOGY ON CUSTOMERS' SATISFACTION AND ECONOMIC GROWTH IN NIGERIA**

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## **ABSTRACT**

*Various researchers have studied the impact of e-banking on banks' performance, banks' profit, and e-banking challenges, but this study is looking at its impact on both customers' satisfaction and economic growth. The methodology employed for testing the hypotheses is a statistical parametric test called Pair Sample t-test through the use of SPSS statistical package. The study rejects both null hypotheses which mean that e-banking has improved both customers' satisfaction and caused economic growth in Nigeria. The study recommends adequate legislation on all aspects of e-banking so that both the operators of the system and the public can be adequately protected. Also, banks should charge low or no fees for e-banking services in order to motivate their customers to take advantage of e-banking services.*

**Key words:** e-banking, Customers' Satisfaction, Economic Growth, Pair Sample t-test

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## 1. INTRODUCTION

There is nothing as constant as change in life and this is also the case with the service industry made up of both the-banking and the non-banking financial institutions. A high customers' enlightenment and their need for efficient and effective service have made the financial environment both dynamic and complex in nature. The booming commerce world has giving birth to globalization. Likewise, there is a need to manage business know-how like any other asset for efficient performance of the business in particular and for the growth of the economy in general. To manage knowledge, there is the need for banks to both share information and also to enforce schemes for creating fresh ones (Nabil Al-Fahim, 2012), hence the need for electronic banking.

According to Garuba (2010), "three or four decades ago, banking was a simple business; customers saved their money with and received their financial services from banks. When they open savings account, they received passbook from the bank with which the account would be operated; and when it is a current accounts, they received cheque books for the same purpose". In modern times, the banking sector has changed into the use of banking applications. These applications can fulfill all banking operations online while relying on information. The use of electronic banking to execute banking operations has become vital to banks operating in Nigeria and also caused local and global competitiveness (Ndubuisi, 2006; Ehigie, 2006). This is because banks as financial intermediaries connect both the surplus and the deficit investors together and as financial institutions carry out banking and financial services which are very crucial for economic growth. Also, they act as catalyst for the implementation of monetary policies by the Central Bank of Nigeria; hence one can see the importance of banks to economic growth and thus the need for e-banking to help speed up the delivery of their services to their customers. According to Daniel (1998), bank customers are satisfied when they know that there will be no queue or delay in them getting their various services from the bank and one way banks can ensure the satisfaction of their customers is through the introduction of e-banking.

E-banking is also known as online-banking that is an offshoot of Personal Computer banking using the internet as the distribution line by which banking activities like paying bills, checking of account balances, and fund transfers are executed (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". According to them, electronic banking services include the arrangement that allows bank customers access accounts, carry out business transactions, and receive information on financial products and services online.

The growth and development of the-banking sector is a sine qua non for economic growth hence every country seek the development of that sector, and just as banks depend on customers' patronization either for deposit, loan, or other services in order to make profit and grow, customers too need service satisfaction from banks in order to continue transacting

business with such bank and the successful continuation of the cycle is a major boost for economic growth, hence the need for this study.

### **1.1. Statement of the Problem**

E-banking was adopted by banks so as to improve their service delivery, decongest queues in the-banking hall, enable customers withdraw cash 24/7, aid international payment, track personal banking transaction, request for online statement, or even transfer deposit to a third party account but there are still some problems working against both banks and their customers in Nigeria from enjoying e-banking.

First is the issue of unceasing faulty system and inconsistent internet connectivity. This has negatively impacted banks' operation and affected their productivity and profitability. Similarly, banks are often faced with system redundancy due to rapid technological changes resulting to excessive costs hence, lower profitability.

Again, the issue of insecurity and lack of privacy occasioned by the activities of hackers is another problem militating against the banks from milking the full benefits offered by e-banking. These could lead to financial and capital losses due to inaccurate processing of transactions, data privacy and confidentiality, unauthorized access or intrusion to financial institutions' systems and transaction, which will in turn, take a heavy toll on their profitability and overall performance.

Also, the banks are met with complaints from customers as regards, malfunctioning Automated Teller Machines (ATMs), network downtime, online theft and fraud, 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, and non acceptability of Nigerian cards for international transaction amongst others. Hence, this research work tends to look at the problems and possible solutions of electronic banking viz-a-viz customers' satisfaction and also its impact on the Nigerian economy as these problems can hamper economic growth.

### **1.2. Research Hypothesis**

H0: E-banking has not improved customers' satisfaction in Nigeria

H0: E-banking has not improve the economy

## **2. LITERATURE REVIEW**

E-banking services are beneficial to both banks and customers. For banks, it is used as artillery to aid them in achieving competitive advantage and increase market share price. Moreover, using e-banking can saves cost compared to traditional banking style (Jayawardhena and Foley, 2000). From the customers' viewpoint, Aladwani, (2001) discovered that e-banking allow efficient and effective services to customers though some customers are still reluctant to use it due to security reasons.

According to Robinson (2000), the cost of an online transaction is less when compared to a branch. Bowen and Chen (2001) opined that electronic banking is the conduct of banking business electronically which involves the use of information communication technology to drive-banking business for immediate and future goals. E-banking is seen to be an innovative service delivery style that offers different financial services (Robinson, 2000).

Similarly, Garuba and Aigbe (2010) and Taiwo, Agwu, Isibor, and Ikpefan (2014) saw e-banking as a procedure by which a customer performs banking operations online without

visiting the bank. E-banking connotes a service that allows customers to conduct banking operations from any location like home or office, (Agwu et al 2014).

The root of e-banking in Nigeria was the downfall of the Structural Adjustment Programme (SAP) in 1986 which ended the “Arm Chair Banking” the first generation banks were using that time (Isibor, Olokoyo, Arogundade, Osuma, and Ndigwe, 2018), it changed both the structure and the content of banking business. The number of banks increased from 40 in 1985 to 125 in 1991 because the licensing of banks was made easy (Olokoyo, Isibor, Oladeji, and Edosomwan, 2016). This however threatened the existing ones; hence, aggressive marketing methods were adopted by the existing banks. The increased competition changed to the adoption of e-banking seen as a necessity to survive the business environment.

## 2.1 EMPIRICAL FRAMEWORK

In their research study, Jun and Cai (2001) investigated the impact of e-banking on the profitability of Pakistani banks. Their findings reveal that e-banking has increased the profitability of banks, hence enabling them to meet their costs and earn profits in short span of time. Also, the illiteracy of customers is not regarded as a major impediment in provision of their products. Furthermore, Agwu (2013) found that banks have an effective e-banking system which has improved its customers’ satisfaction, by critically appraising the e-banking platform of Unity Bank PLC.

Subsequently, Azeez (2011) studied the prospects of e-banking in developing economy. The study showed that e-banking serves several advantages to Nigeria banking sector; it creates reliable advantages. It also establish transaction benefits like bank transfer. Daniel (1998), investigated internet banking and performance of micro and small enterprises in Costa Rica and the result showed that internet use is limited in their daily operations because of limited access to computer and the relatively low penetration of internet services.

Daniel (1999) as cited in Isibor, Babajide, Akinjare, Oladeji, and Osuma (2018) reported that transaction with internet banking does not have a significant impact on performance and risk profile. Thus, he concluded that internet banking has not proved to be a performance enhancing tool in major credit unions in UK and Australia.

Similarly, Garuba (2010) claimed that e-banking has led to increase customer satisfaction, improved operational efficiency, reduced transaction time, better competitive edge, reduced running cost and ushered in swift response in service delivery.

Despite the fact that many research studies have been done on e-banking in Nigeria, none has taken a look at its impact on economic growth and this is a major area attention should be focused on if economic growth and vision 20:2020 are to be achieved, hence this is the gap this study wants to fill.

## 2.2 THEORETICAL FRAMEWORK

### 2.2.1 *Innovation Diffusion Theory*

This theory developed by Roger in 1983 explains individuals’ intention to adopt a technology as a modality to perform a traditional activity (Isibor, Ojo, Ikpefan, 2018). The critical factors that determine the adoption of an innovation at the general level are the following: relative advantage, compatibility, complexity, and observability. It is interested with the way a new technological thought, technique, or the use of an old technique. From this theory, technological innovation is transmitted through specific channels among the members of a social scheme. The levels of transmission are: knowledge (knowing its existence and understanding its roles); persuasion (showing favourable attitude to the technology); decision

(adopting the technology); implementation (using it); and confirmation (benefits based on positive use of it).

### 3. METHODOLOGY

The researcher went to four banks in Sango Ota in Ogun state: Zenith Bank, Guaranty Trust Bank, Access Bank plc, and UBA plc and then distributed 120 questionnaires to various customers within the-banking premises. The customers were chosen based on two things, first, the objective of the study as it involves electronic banking, and two, their use of the banks' electronic services. Out of the 120 questionnaires that were distributed, only 107 were retrieved. The reason for this is that while some customers returned their questionnaires, others left the banking premises without submitting it. Also, out of the 107 questionnaires recovered, 100 were sufficiently usable, thus giving us a response rate of 70 percent. This sampling procedure is non-probability purposive sampling technique (Asika, 1991). In non-probability sampling, elements of a population are not deliberately given equal or known chance of being included in a sample. In other words, non-probability sampling does not guarantee randomness (Nachmias and Nachmias, 1982).

For testing the hypothesis, a statistical parametric test called Pair Sample t-test was employed to test the significance through the use of SPSS statistical package. The researcher's intention is to establish the level of significance of electronic banking and customers' satisfaction on the one hand and electronic banking and economic growth on the other hand.

### 4. FINDINGS AND DISCUSSIONS

**Table 1:** Descriptive Statistics

| N   |    | Minimum | Maximum | Mean | Std. Deviation |
|---|----|---------|---------|------|----------------|
| Sex   | 66 | 1       | 2       | 1.56 | .500           |
| Age   | 65 | 1       | 2       | 1.05 | .211           |
| Educational Qualification   | 62 | 1       | 6       | 2.44 | 1.678          |
| Preferred Banking Service Type  | 66 | 1       | 2       | 1.81 | .210           |
| Frequency In Use Of Atm Monthly   | 66 | 1       | 4       | 2.00 | .744           |
| Satisfaction In The Use Of E-Banking In Nigeria   | 65 | 1       | 5       | 2.55 | .953           |
| Has e-banking lead to economic growth in Nigeria?   | 66 | 1       | 3       | 1.37 | .482           |
| Should government focus more on e-banking in pushing for economic growth in Nigeria or should they focus more on other macroeconomic factors? | 65 | 1       | 3       | 2.53 | .721           |

**Source: Compiled by the researcher from Field Survey (2015)**

The results obtained for the question four shows a mean of 1.81 which means that on the average people prefer electronic banking to manual banking. It also shows a standard deviation of 0.210 which is clustered around the mean, hence showing that there is no serious deviation.

The result obtained for question five shows a mean of 2.00, meaning that on the average, people prefer using their ATM cards twice in a month. It shows a standard deviation of 0.744.

For question six, the mean of 2.55 shows that many people agree that they are satisfied with the use of e-banking in Nigeria. They are satisfied in the sense of reduction in queue and plenty of time saved when visiting the banking halls.

For question seven, the mean result of 1.37 shows that many Nigerians are of the opinion that e-banking has led to economic growth in the Nigerian context. The standard deviation of 0.482 is clustered around the mean, hence showing that there is no serious deviation.

Finally, for question eight, the mean of 2.53 shows that people are indifferent as to which area the government should focus on while pushing for economic growth. Many do not know if the focus should be on e-banking or controlling other macroeconomic variables like inflation, interest rate, etc, but what they want is to see the economy grow.

#### 4.1. Hypothesis Testing

There are two hypotheses tested to validate this study

H<sub>0</sub>: E-banking has not improved customers' satisfaction in Nigeria

H<sub>0</sub>: E-banking has not improve the economy

##### 4.1.1 Decision Rule

Reject H<sub>0</sub> if P value is < .05 and accept H<sub>0</sub> if P value is > .05

**Table 2:** Hypothesis One: One-Sample Test

| Test Value = 0   |        |                 |                 |   |      |       |
|--|--------|-----------------|-----------------|---|------|-------|
| T  | Df     | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |      |       |
| Lower  |        |                 |                 |   |      | Upper |
| E-banking has not improve customers' satisfaction in Nigeria | 16.357 | 70              | .000            | 2.652                                     | 2.23 | 2.75  |

**Source: Field Survey (2018)**

The details provided by table 5 above show that there is a means score of 2.652 with t-value of 16.357. The mean score is higher than all the mean values in table one which by implications indicate that, electronic banking is strongly linked to the issue of customer satisfaction. Decision: The result is significant at a value of  $p < 0.000$ ; the null hypothesis which states that E-banking has not improved customers' satisfaction in Nigeria is rejected.

**Table 3:** Hypothesis One: One-Sample Test

| Test Value = 0      |        |                 |                 |   |       |       |
|---------------------|--------|-----------------|-----------------|---|-------|-------|
| T                   | Df     | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |       |
|                     |        |                 |                 |   | Lower | Upper |
| Improve the economy | 16.452 | 70              | .000            | 2.237                                     | 2.09  | 2.43  |

**Source: Field Survey (2015)**

Table 3 above shows that there is a mean score of 2.237 with t value of 16.452. Some of the mean scores in table one above are higher than this mean score and by implication indicate that the economy is still improving and has not attained full growth. The result is significant at a value of  $p < 0.000$ ; hence the null hypothesis which states that e-banking has not improved the economy is rejected.

## 5. RECOMMENDATIONS

The study recommends the following for effective and efficient e-banking in Nigeria:

(i) There should be adequate legislation on all aspects of the operations of e-banking so that both the operators of the system and the public can be adequately protected while ensuring economic growth.

(ii) There should be improvement in internet services in banks so that it will not erode the gains of e-banking.

(iii) Government through the Central Bank of Nigeria should ensure that almost all bank services should be done electronically while at the same time creating job and financial empowerment for staffs whose jobs would be replaced by the use of computer.

(iv) Banks should ensure adequate awareness and training of e-banking services to the Nigerian populace who still prefer the manual ways of carrying out banking operations.

(v) Low or no bank charges should be used by banks to motivate their customers to use e-banking services.

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