Research Article

Effect of Internet Banking On the Performance of First Bank Nigeria Plc Abuja

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Abstract:
The study examines the effect of internet banking on non financial performance of First bank Nigeria Plc, Abuja. The study used survey research design and employed the use of structured questionnaire administered to the employees of 41 branches of First Bank Plc, Abuja. A population of 2231 employees was targeted and a sample size of 337 was derived using Taro Yamane formula. Point in time data was collected from primary source and Ordinary Least Square was adopted in analysing the data. Findings reveal that internet banking proxies such as cheap internet costs, 24 hours internet services and ICT competence of customers contributed significantly to the performance of First Bank Nigeria plc Abuja. The study concludes that the effect of internet banking on the performance First Bank Nigeria Plc, Abuja is significant. It is therefore recommended that First Bank Nigeria Plc, Abuja should continue to adopt internet banking since it contributes significantly to their operational performance.

Key Words: Internet banking , commercial banks ,non financial Performance, efficiency.

Introduction

The banking industry of the 21st century operates in a complex and competitive environment characterised by changing conditions and a highly unpredictable economic climate. This to a large extent is as a result of technological improvement, increased awareness and demands that banks serve their customers electronically. Internet banking is a service of electronic banking (e-banking). It enables bank customers to access accounts and general information on bank products and services through the internet. This can be at the comfort of their homes or offices. However, banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity and profitability. However, to date researchers have produced little evidence regarding these potential changes. Nonetheless, recent empirical studies indicate that Internet banking is not having an independent effect on banking profitability, although these findings may change as the use of the Internet becomes more widespread. Internet banking in banks ensured that performance of banks improved more than when banks were using traditional system of banking in the organization.

The introduction of internet banking in the bank ensures that banks operate at a cheaper cost, have 24 hours internet service availability as well as encourage ICT competence of customers in order to realized high performance in terms of organizational effectiveness, efficiency and business expansion. This view is supported by Abubakar (2014) who explained that internet banking has the potentials to improve productivity, growth and profitability performance of banks due to low cost advantages associated with the delivery of its services. Again industry analysis outlining the potential effect of internet banking on cost savings, revenue growth and risk profile of the banks have also generated considerable interest and speculation about the effect of the internet on the banking industry (Berger,2003). One of the major problems of this study is that internet banking has replaced human with technology and hardly guarantees customers trust due to network failure. This study tries to fill the gap and complement previous researches available on electronic and internet banking in Nigeria. Although there are a lot of work done in this area both locally and internationally such as Abaenewe, Ogbulu, and Ndugbu (2013), Anu and Nwezeaku (2016), Taiwo and Agwu (2017), Malhotra and Singh (2009), Margaret, Julius and Job (2015), Dinh, Le and Le (2015), Batu, Necla and Ilyas (2015), most of them focused on electronic banking and financial performance of commercial banks only very few focused on internet banking which is an aspect of electronic banking.

This work is therefore unique and fills the research gap in that it investigates the effect of internet banking on the non financial performance of commercial banks in Nigeria. Again none of the previous studies focused on first bank branches in Abuja. The study adopted the model of a similar study conducted in Kenya by Stephanie and Moses (2015) with some modifications to apply the same model in the Nigerian context.

The main objective of this study is to examine the effect of internet banking on the performance of First Bank Plc, Abuja and the specific objectives of this study are to: determine the effect of cheaper internet connectivity on the performance of First Bank Plc, Abuja, find out the effect of 24 hours internet banking on the performance of First Bank Plc, Abuja and determine the effect of ICT competency of customers on the performance of First Bank Plc, Abuja.

The research hypotheses are stated below:

$H_0$: Cheaper internet cost does not significantly effect on the performance of First Bank Plc, Abuja

$H_a$: 24 hours internet banking does not significantly effect
on the performance of First Bank Plc, Abuja

H0: ICT competence of the customers does not significantly affect the performance of First Bank Plc, Abuja

The scope of this study is restricted to the effect of internet banking on the non financial performance of First Bank Nigeria Plc, Abuja. Internet banking is operationalised by (cheap internet cost, 24hrs internet banking and ICT competence of customers) while non financial performance is proxied by effectiveness, efficiency and business expansion. The period of study is 5years 2013 to 2015. This is the period when internet banking became popular in Nigeria. The study will concentrate on first bank branches in Abuja and staff from all the units will be sampled except the cleaners because of their perceived level of education.

Concept of Internet Banking

Internet Banking offers several types of services through which customers of the bank can request for, get information and can also carry out most of their banking transactions through their smart devices and computers (Suriya, Mahalakshmi & Karthik, 2012). Chang and Hamid (2010) defined Internet Banking as the process through which customers complete banking transactions electronically without visiting the banks physically or without visiting brick and mortar bank. Alsajja and Dennis (2010) defined Internet Banking as the process of providing banking services through technology without using physical resources of banks as well as staff.

According to Gerrard and Cunningham (2003) Internet Banking is defined as the usage of Internet and Telecommunication networks to deliver banking services to customers. Kim et al (2006) defined Internet Banking as the process whereby the customer is able to access, control and use his or her account over the Internet. They described Internet Banking as the act of conducting financial intermediation on the internet.

According to Arunachalam and Sivasubramanian (2007), Internet Banking is where a customer can access his or her bank account via the Internet using personal computer (PC) or mobile phone and web-browser. The growing acceptance of the digital lifestyle as stated in Salehi and Alipour (2010), has brought a significant transformation in customers expectations from their financial service providers.

Concept of Bank Performance

Performance refers to ability of an enterprise to achieve such objectives as high profit, efficiency, effectiveness, quality product, large market share, good financial results, and survival at pre-determined time using relevant strategy for action (Koontz & Donnell, 2003). Performance can also be used to view how an enterprise is doing in terms of level of profit, market share and product quality, expansion in relation to other enterprises in the same industry. Consequently, it is a reflection of productivity of members of an enterprise measured in terms of revenue, profit, growth, development and expansion of the organization.

Performance is associated with quantity of output, timeliness of output, presence or attendance on the job, efficiency of the work completed and effectiveness of work completed (Mathis & Jackson, 2009). The term performance is a controversial issue in finance largely because of its multidimensional meanings (Prahalathan & Ranjani, 2011). Strength of financial position of an organization is called financial performance (Leon, 2013). Financial analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account (Leon, 2013). Performance is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account (Leon, 2013). The performance of a firm has to be effective and efficient in order to achieve the set goals which may be financial or operational. The financial performance of a firm relates to its motive to maximize profit both to shareholders and on assets (Ishaya, Sannomo & Abu, 2014), while the operational performance deals with growth and expansions in relations to sales and market value (Ishaya & Abduljeel, 2014).

Empirical findings

Malhotra and Singh (2009) examine the effect of Internet banking on banks’ performance and risk. Using information drawn from the survey of 85 scheduled commercial bank’s websites, during the period of June 2007, the results showed that nearly 57 percent of the Indian commercial banks are providing transactional Internet banking services. The univariate analysis indicates that Internet banks are larger banks and have better operating efficiency ratios and profitability as compared to non-Internet banks. Internet banks rely more heavily on core deposits for funding than non-Internet banks do. However, the multiple regression results reveal that profitability and offering of Internet banking does not have any significant association, on the other hand, Internet banking has a significant and negative association with risk profile of the banks.

Taiwo and Agwu (2017) studied the role of e-banking on operational efficiency of banks in Nigeria. A study of Ecobank, UBA, GTB and First bank. Pearson correlation was used to analyse the result obtained using the statistical package for social sciences (SPSS). Findings revealed that banks operational efficiency has improved since the adoption of electronic banking compared to the era of traditional banking. Improvement was noticed in banks revenue and capital base as well as customers loyalty. The study concluded that the more active customers are with electronic transactions the more profitable it is for the banks.

Batu, Necla and Ilyas (2015) study the interaction between internet banking and bank performance is investigated by panel causality tests. Banking data of 30 European countries analyzed by Demirteşcu - Hurlin panel causality test for the period 2005-2013. ROA and ROE ratios were used as
measures of bank performance. Not only whole sample consisting of Euro Area and the others but also Euro Area and the other countries in Europe considered as samples and tested two sub-samples. Results show that a strong relationship through internet banking to the bank performance in the Euro Area countries and for the rest of the Euro Area countries are also not determined causation significantly in both directions. On the other hand, there is also a significant relationship between internet banking and performance of the bank considering the whole sample.

Stephanie and Moses (2015) determines the effects of internet-banking on financial performance of financial institutions in Kenya. The study adopted a descriptive survey design. The target population comprised of 31 employees of KCB, Treasury Square in Mombasa Kenya. Data collection was done through the use of questionnaires and analyzed using statistical tool. From the study, it was revealed that the effect of ICT adoption on the performance of the banking sector mainly refers to time reductions and quality improvements, rather than cost reductions as reported by many authors

Van, Uyen and Phuong (2015) evaluate the effect of internet banking on performance (profitability ratios, noninterest operating expenses and incomes) of banks in Vietnam in the period from 2009-2014. The study used random effect model (REM) and fixed effect model (FEM) to estimate the relationships between Internet indicators and bank’s performance. The results from the regression model showed that internet banking had an effect on bank profitability through an increase of income from service activities.

Margaret, Julius and Job (2015) effect of Internet Banking on the financial performance of listed commercial banks in Kenya. This study used descriptive survey design. The target population was all employees of listed commercial banks in Kenya. Simple random sampling method was used to identify the study respondents. Primary sources of information were used and were gathered using questionnaires. Finally data from the questionnaires was sorted, coded and input into a software for analysis. Data was analysed using statistical package for the social sciences (SPSS) to generate diagrams, frequencies, descriptive statistics and inferential statistics. The key finding of the study revealed that internet banking has positive influence on bank incomes, operating costs, and customer deposits.

**Unified Theory of Acceptance and Use of Technology (UTAUT)**

Unified Theory of Acceptance and Use of Technology (UTAUT) was developed by Venkatesh et al. (2003) through reviewing eight models which explain ICT usage, namely; Theory of Planned Behaviour (TPB), Diffusion of Innovations(DOI), Theory of Reasoned Actions (TRA), Technology Acceptance Model (TAM), the motivational model, a model combining TAM and TPB, the model of PC utilization, DOI, and the social cognitive theory. It was proposed and validated in order to provide a unified theoretical basis from which to facilitate research on information system (IS)/ information technology (IT) adoption and diffusion. The theory postulates that four core constructs – performance expectancy, effort expectancy, social influence, and facilitating conditions – are direct determinants of IS/IT behavioural intention and ultimately behaviour (Venkatesh et al., 2003).

The UTAUT model aims to explain a user’s intentions to use ICT and the subsequent user behaviour. It offers the manager with using tools, which the manager can use to weigh the introduction of new technology, predict, and explain the user’s behavior of accepting information technology. There are four key moderating variables: gender, age, experience, and voluntariness of use. Scholars and researchers have established that UTAUT provides the ability to assess the likelihood of success of technology introductions and to understand the drivers of acceptance in order to design interventions, which include, for instance training or marketing. UTAUT focuses on users who may be less willing to adopt and use new systems. The UTAUT model has been criticized by various scholars citing its inadequacies, while others have embraced its propositions. Bagozzi (2007) critiqued the model and its subsequent extensions, citing that it presents a model with 41 independent variables for predicting intentions and at least 8 independent variables for predicting behaviour, and that it contributed to the study of technology adoption “reaching a stage of chaos. On the contrary, he proposed a unified theory which consolidated the many splinters of knowledge to explain decision making.

Van Raaij (2008) criticized the UTAUT as being less thrifty than the previous Technology Acceptance Model and TAM2 because of its high determination coefficient, which is only achieved when moderating key relationships with up to four variables. They also called the grouping and labeling of items and constructs problematic because varieties of disparate items were combined to reflect a single psychometric construct.

**Methodology**

The study used survey design and primary method is used for the collection of data. Also, the use of survey research design is due to the fact that the data are point in time and with due recognition and emphasis on the use of questionnaires administered on the targeted respondents, so as to obtain factual information and also for clarity of analysis of the findings. The population of this study covers the entire employees of First banks Nigeria Plc in Abuja. The population is the larger set of observations while the smaller set is referred to as the sample. The target population comprises of 41 branches of first bank Plc in Abuja with a total number of staff of 2231.

The sample size is deduced using the computation below: According to (Yamani, 1967), the sample size of the study is derived as follows.

\[ n = \frac{N}{1+Ne^2} \]

Where \( N \) is the population size
\( e \) is the margin error (assume 5%)
\( l = \text{constant} = 0.05 \)
\( n = N/N + n (0.05)^2 \)
Simple random sampling technique is used in administering questionnaire to employees of First Bank Plc in Abuja and the reason is that it affords every member of the sample an equal opportunity of being selected and also to reduce bias to the barest minimum. This implies that the researcher selected the respondents based on chance. The study used structured questionnaire to elicit responses from the respondents who are employees of First Bank Plc, Abuja. A 5 point Likert scale type of questionnaire was designed to collect information from the respondents regarding the effect of internet banking on the performance of the bank. The questions were divided into two sections A and B, that is, internet banking related questions and performance related questions respectively. Questionnaire was used to collect primary data through a survey. Three hundred forty 340 questionnaires were distributed by the researcher with the help of research assistants who are also staff of the various branches studied. Completed questionnaires were collected. With the questionnaire coming from the staff, respondents were assured of the confidentiality of their responses. Not all the respondents returned their copies of administered questionnaire hence the copies of questionnaires returned were 211.

The questionnaires were tested to ensure that the questions were answered properly. The reliability and viability of the questionnaire are not more than the Alpha values of 0.6. The table below indicates the reliability value of the variables.

**Table 1: Reliability Test**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Banking</td>
<td>0.88</td>
</tr>
<tr>
<td>Bank Performance</td>
<td>0.69</td>
</tr>
</tbody>
</table>

**Source: researcher’s computation (2018)**

However, the Alpha values are reliable. Regression analysis is used when two or more variables are thought to be systematically connected by a linear relationship. It is used to establish cause and effect relationship between variables. The use of mathematical formula in a broad sense to properly establish the cause and effect relationship between the dependent and independent variable and the linear model is slanted below:

\[ Y = \alpha + \beta x \]

\( Y\) = dependent variable, \( \alpha \) = intercept, \( \beta \) = coefficient and \( x \) is the independent variable. However, the above model is elaborated in a single form. Thus, is expressed as:

\[ BPF = \alpha + \beta_2 CIC + \beta_3 24H + \beta_4 ICT + \mu \] …equation 1

Where BPF = bank Performance, \( \beta \) = coefficient, \( \alpha \) = Intercept, \( \mu \) = error terms, CIC = cheap internet cost, 24H=24 hours internet services and ICT= ICT competence of customers.

**Table 2: Cheap internet costs**

<table>
<thead>
<tr>
<th>Items</th>
<th>5(SA)</th>
<th>4(A)</th>
<th>3(U)</th>
<th>2(SD)</th>
<th>1(D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First bank Plc enjoys low internet transaction cost</td>
<td>55(26.07)</td>
<td>76(36.01)</td>
<td>23(10.90)</td>
<td>19(9.00)</td>
<td>38(18.00)</td>
</tr>
<tr>
<td>There is an extended client base as a result of cheap internet cost</td>
<td>65(30.81)</td>
<td>50(23.69)</td>
<td>11(5.21)</td>
<td>29(13.74)</td>
<td>56(26.54)</td>
</tr>
<tr>
<td>Cheap internet cost creates distinctive competency on the bank staff</td>
<td>41(19.43)</td>
<td>65(30.81)</td>
<td>33(15.63)</td>
<td>39(12.54)</td>
<td>33(15.64)</td>
</tr>
</tbody>
</table>

**Source: Survey, 2018**

The above table analyses the simple percentages of the respondents by indicating the percentage of the respondents in a bracket. The table show that majority of the respondents agree that first bank enjoys low internet cost, this led to extended client base and distinctive competencies by the staff.

**Table 3: 24 hours Internet Banking**

<table>
<thead>
<tr>
<th>Items</th>
<th>5(SA)</th>
<th>4(A)</th>
<th>3(U)</th>
<th>2(SD)</th>
<th>1(D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 hours internet availability creates loyal customers</td>
<td>67(31.75)</td>
<td>89(42.18)</td>
<td>13(6.16)</td>
<td>12(5.68)</td>
<td>30(14.21)</td>
</tr>
<tr>
<td>There is efficiency in internet operation which leads to saving time</td>
<td>78(36.96)</td>
<td>66(31.27)</td>
<td>16(7.58)</td>
<td>19(9.00)</td>
<td>32(36.96)</td>
</tr>
<tr>
<td>24 hours internet availability leads to strategic advantage against competitors</td>
<td>59(27.96)</td>
<td>81(38.39)</td>
<td>11(5.21)</td>
<td>24(11.37)</td>
<td>36(17.06)</td>
</tr>
</tbody>
</table>

**Source: Survey, 2018**

The above table analyses the simple percentage of the response rate by indicating the percentage of the respondents in a bracket. The above table shows that majority of the respondents strongly agree that 24hr internet availability creates loyal customers, saves time and leads to strategic advantage against competitors.

**Table 4: ICT Competency of the Customers**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Banking</td>
<td>0.88</td>
</tr>
<tr>
<td>Bank Performance</td>
<td>0.69</td>
</tr>
</tbody>
</table>
The above table analyses the simple percentage of the response rate by indicating the percentage of the respondents in a bracket. The table shows that majority of the respondents agree that customers knowledge of ICT contributes to the success of internet banking, that simplicity of the software application is important and that availability of ICT devices by the customers will determine the success of internet banking.

Table 5: Performance of First Bank Plc, Abuja

<table>
<thead>
<tr>
<th>Items</th>
<th>5(SA)</th>
<th>4(A)</th>
<th>3(U)</th>
<th>2(SD)</th>
<th>1(D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Bank Plc, Abuja is efficient in conducting their business in terms reduced time of attending to customers as a result of internet banking.</td>
<td>87(41.23)</td>
<td>78(36.97)</td>
<td>11(5.21)</td>
<td>9(4.26)</td>
<td>26(12.32)</td>
</tr>
<tr>
<td>First Bank Plc Nigeria is effective in customer service in terms of increase in the number of customers due to internet banking.</td>
<td>79(37.44)</td>
<td>90(42.65)</td>
<td>5(2.37)</td>
<td>18(8.53)</td>
<td>19(9.00)</td>
</tr>
<tr>
<td>First Bank Plc has expanded in terms of branches in Abuja over the years as a result of internet banking.</td>
<td>84(39.81)</td>
<td>76(36.01)</td>
<td>19(9.00)</td>
<td>22(10.42)</td>
<td>10(4.74)</td>
</tr>
</tbody>
</table>

Source: Survey, 2018

The analysis indicates that the coefficients for cheaper internet costs, 24 hours internet services and information and communication technology competency of the customers are significant in enhancing First Bank Plc performance in Abuja. The p-value and f-statistic values of the independent variables are significant at probability value of 0.000 for three variables. However, the f-statistic value of 1993.517 is significant at p-statistic value of 0.00, it indicates that the model is a good fit. Also there is evidence of existence of linear relationship between internet banking (cheaper internet costs, 24 hours internet services and information and communication technology competency of the customers) and performance of First Bank Nigeria Plc, Abuja. The $R^2 = 0.94$ indicates that 94% of internet banking (cheaper internet costs, 24 hours internet services and information and communication technology competency of customers) embarked upon by First Bank Nigeria Plc, Abuja can explain the changes in performance but 6% can be explained by other factors not
noted in the regression model which is referred to as error term. Therefore we accept the alternative hypothesis that there is a significant relationship between internet banking (cheaper internet costs, 24 hours internet services and information and communication technology competency of the customers) and Performance of First Bank of Nigeria Plc, Abuja.

Discussion of Findings

From the analysis, the effect of internet banking on performance First Bank Nigeria Plc, Abuja is significant. This shows that internet banking proxies such as cheaper internet costs, 24 hours internet services and information and communication technology competency of customers contribute significantly to the operational performance of First Bank Nigeria Plc, Abuja in terms efficiency, effectiveness and business expansion. The finding is in line with the findings of Malhotra and Singh (2009), Taiwo and Agwu (2017) and Margaret, Julius and Job (2015) who found that there is a significant relationship between internet banking and operational performance of banks.

Conclusion and Recommendations

Based on the findings of this study, the researcher concludes that the effect of internet banking on the performance First Bank Nigeria Plc, Abuja is significant. This shows that internet banking proxies such as cheap internet costs, 24 hours internet services and information and communication technology competency of customers contribute significantly to performance of First Bank Nigeria Plc, Abuja. It is therefore recommended that First Bank Nigeria Plc, Abuja should continue to adopt internet banking since it effects tremendously on their operational performance. The bank is advised to organise training on internet banking from time to time for the benefit of its customers, this will go a long way to enhance the benefits derived by the bank from internet banking.

References