IMPACT OF MOBILE BANKING ON CUSTOMERS’ SATISFACTION IN DEPOSIT MONEY BANK IN NIGERIA
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ABSTRACT
The study examined the impact of mobile banking on customer satisfaction in United Bank for Africa. Bank customers in Nigeria have been found to be dissatisfied with the quality of services provided by banks. This calls for the need to actually investigate how customers behave or get satisfied with regards to the services of commercial banks in Nigeria. No doubt that information from current technologies in banking operations has improved efficiency and effectiveness of their operations so that more transactions can be processed faster and most conveniently. The main objective of this study is to examine the impact of mobile banking on customer satisfaction in United Bank for Africa. Data was source basically from the primary source. Primary data are those data gotten from the field of study. Questionnaire was used as instrument of data collection, regression was used as a tool for data analysis. The findings of the study revealed that Automated Teller Machine (ATM), internet banking, telephone banking and mobile banking has significant impact on service delivery to customers. The study recommended that banks should provide more functional infrastructures to strengthen their e-business transaction. Standby electric power generating sets and inverters be provided to power the banking halls, information technology equipment and ATMs respectively whenever there is public power failure to ensure continued smooth operations.

INTRODUCTION
Satisfaction is a challenge particularly in a bank-based service, in that customers can easily switch from one bank to another of a better service delivery (Maemunah, 2020). However, almost every Nigerian bank encounter problem in meeting customers’ expectation of services and satisfaction. Despite the introduction of mobile banking, there is still long queue in the banking hall. The long queue and huge crowd in the banking halls are obvious indication that bank service delivery may not actually meet the needs of customers in a satisfactory way. Customer satisfaction is the foundation for any organisation to achieve its objective. In other words, the degree of customer satisfaction reflects the rate of achievement of organisational objectives. Customers that are satisfied tend to create favourable and friendly relationship with the organization (Srivastava, 2018).
Mobile banking System has become an important practice among commercial banks in Nigeria because the introduction of mobile banking in developed and some developing countries of the world has improved banking efficiency in rendering services to customers (Abdulsalam, 2018). Mobile banking started in Nigeria as a result of higher demand of banking services from the customers because of the advances made in the development of computer based technology payment instruments which led to improvements in the use of improved banking software, electronic products (like the smart cards, credit cards) and internet banking facilities. The banking industry in Nigeria is known to be of service oriented and the kind of customer patronage that they have and maintain depends largely on how effective their services are being managed. Nigerian banks in the face of increasing competition are currently facing enormous challenges, which have made survival increasingly difficult (Chowdhury, 2021).

With the role that Mobile Banking has played in the modernization of the banking sector, especially in terms of development of new banking products and the payments systems, as well as strategic management in the emerging market economics, there is no doubt that the future of the Nigerian banking industry will be technology driven (Anis, 2020). The performance of the banking sector is measure not only by the number and variety of services provided but also, more importantly by the speed efficiency and safety with which these services are provided.

**Statement of the Problem**
Bank customers in Nigeria have been found to be dissatisfied with the quality of services provided by banks. This calls for the need to actually investigate how customers behave or get satisfied with regards to the services of commercial banks in Nigeria. No doubt that information from current technologies in banking operations has improved efficiency and effectiveness of their operations so that more transactions can be processed faster and most conveniently (Islam, 2020).

The increasing volume, complexity, competitiveness, customer sophistication, and globalization of financial services have introduced a number of technological developments in the Nigeria banking industry. In spite of these innovations the level of banking technology remains relatively low, in terms of both international standard and local needs. The inability of some bank to effectively optimize the opportunities that are associated with the advancements in technology deployments especially the mobile banking has therefore, constituted a great challenged to the banking industry.
Empirical studies have been conducted on the impact of mobile banking on customer satisfaction (Maemunah, 2020). Most of the studies (i.e. Srivastava, 2018; Chowdhury, 2021; Joshi, 2019; Abdulsalam, 2018) fails to consider Automated Teller Machine (ATM), internet banking, mobile banking and telephone banking and their impact on customer satisfaction. This study will fill this knowledge gaps by critically examine the impact of ATM, internet banking, mobile banking and telephone banking on customer satisfaction.

Objectives of study
The main objective of this study is to examine the impact of mobile banking on customer satisfaction in United Bank for Africa. Specifically, the following objectives will be achieved:

i. To examine the extent to which Automated Teller Machine (ATM) impact on customer satisfaction.
ii. To determine the impact of internet banking on customer satisfaction.
iii. To analyze the impact of telephone banking on customer satisfaction
iv. To examine the extent to which mobile banking impact on customer satisfaction.

Hypotheses of the Study
The following hypotheses are formulated for testing in the course of this research, they include:

$H_0$: ATM has no significant impact on customer satisfaction.

$H_0$: Internet banking has no significant impact on customer satisfaction.

$H_0$: Telephone banking has no significant impact on customer satisfaction.

$H_0$: Mobile banking has no significant impact on customer satisfaction.

Scope of Study
The study covers the impact of mobile banking on customer satisfaction in United Bank for Africa Plc. The study will cover United Bank for Africa within Kaduna metropolis. The study covers the period of 2022.

LITERATURE REVIEW
In this chapter, the literature on mobile banking and customer satisfaction were reviewed.

Concept of Customer’s Satisfaction
Islam, (2020) customer satisfaction can be defined as satisfaction outcome or a process, outcome definition of customer satisfaction characterizes satisfaction as the end-state resulting from the experience of consumption. Khanh, (2020) customer satisfaction is a psychological concept that involves the feeling of well-being and pleasure that result from
obtaining what one hopes for and expects form an appealing product and/or service. Srivastava (2018) define satisfaction “as the customer subjective evaluation of consumption experience, based on some relationship between the customer’s perceptual objective attributes of the product”.

**Concept of Mobile Banking**
Mobile banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels (Chowdhury, 2021). Mobile Banking includes the systems that 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. Burr, (2016), Mobile Banking is also called Internet banking, online banking or PC banking. Mobile Banking may include ATMs, wire transfers, telephone banking, electronic funds transfers and debit cards. Nowadays, internet banking sites process customers’ services inquiries, allow transactions from one account to another, take loan applications, open new accounts etc.

**Reviews of Empirical Studies**
Several empirical studies have been carried out on Mobile Banking in Nigeria. Maemunah, (2020) used cluster sampling technique to study the impact of Mobile Banking in Nigerian banking system. He found out that banks have an effective Mobile Banking system which has improved their customer’s relationship and patronage. Joshi, (2019) used Statistical Package for Social Sciences (SPSS) to investigate the acceptance of Mobile Banking in Nigeria. The result shows that acceptance of Mobile Banking in Nigeria is significantly influenced by Age, Educational Background, Income, Perceived Benefits, Perceived Ease of Use, Perceived Risk and Perceived Enjoyment. Srivastava, (2018).

Abdulsalam, (2018) used qualitative survey to ascertain banker’s perceptions of Mobile Banking in Nigeria. The results suggest that bankers in Nigeria perceive Mobile Banking as a tool for minimizing inconvenience, reducing transaction costs, altering customers queuing pattern and saving customers banking time. Anis, (2020) used consumer acceptance theory to investigate customers’ perception of security indicators in online banking Sites in Benin, Nigeria. He found out that Security Indicators (SI)are not very effective at alerting and shielding users from revealing sensitive information to fool Mobile Banking sites in Nigeria.
Theoretical Framework
The theoretical framework of this study is Technology Acceptance Model and Diffusion of Innovation (DOI) Theory. Technology Acceptance Model (TAM) is an information systems theory that models how users come to accept and use a technology that will encourage economic growth.

RESEARCH METHODOLOGY
This section consists of the instruments employed, research population and sample size. The sampling procedures as well as statistical techniques used in analyzing the data collected.

Research Design
The research design adopted was a survey design method. This is due to the fact that it involves the collection of data through questionnaires, personal interviews or other method (instruments). It also involves assessing attitudes or opinions towards individuals, organizations or events.

Population of the Study
The population of a study comprise of group of people which are confined within the study of a research. It consists of the aggregate (total) element on which researcher is pursuing his/her study. The population of this research work comprises the Customer of United Bank for Africa, the customer is infinite do to day to day fluctuation in customer of the bank.

Sample and Sampling Techniques
A sample size is the representation of a population taken from the total population for close examination. The sample size was determined using Daniel’s (1999) formula. Therefore, the calculation for the sample size is given in the following equation.

\[
SS = \frac{Z^2 \times (p) \times (1 - p)}{C^2}
\]

Sample Size - Infinite Population (where the population is greater than (50,000)

\[
SS = \frac{Z^2 \times (0.5) \times (1 - 0.5)}{C^2}
\]

Therefore, since the number of subscribers of GSM is infinite, it means the population is greater than 50,000 subscribers.

Thus, \( SS = 1.96^2 \times (0.5) \times (1 - 0.5) \)
\[
\frac{(0.05)^2}{3.8416 \times 0.5 \times 0.5} \approx 0.0025
\]

So, the sample size of the study is \(318\).

Simple random sampling techniques was applied in the course of this research, in which each sample element has a known and equal probability of selection. This was targeted at achieving a high degree of accuracy, thereby avoiding any form of error that may arise from a personal choice of sampling unit.

**Sources and Tools of Data**
The study utilized primary source of data with questionnaire as instrument of data collection. Hypotheses were tested using regression.

**DATA PRESENTATION AND ANALYSIS**
This chapter contains data analysis and presentation according to questionnaire administration. The chapter employs statistical tools of analysis such as Frequency distribution table, percentages and regression.

From the 356 copies of questionnaire administered, three hundred and twenty (320) copies of the questionnaire were duly filled and returned. Therefore, analysis was done on the basis of questionnaires returned.

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer satisfaction</td>
<td>320</td>
<td>3.15</td>
<td>0.33</td>
</tr>
<tr>
<td>ATM</td>
<td>320</td>
<td>3.31</td>
<td>0.59</td>
</tr>
<tr>
<td>Internet Banking</td>
<td>320</td>
<td>4.11</td>
<td>0.37</td>
</tr>
<tr>
<td>Telephone banking</td>
<td>320</td>
<td>4.01</td>
<td>0.69</td>
</tr>
<tr>
<td>Mobile banking</td>
<td>320</td>
<td>4.07</td>
<td>0.55</td>
</tr>
</tbody>
</table>
The descriptive statistics for customer satisfaction, ATM, internet banking, telephone banking and mobile banking are as shown in table 4.6 above. All these variables were measured using a five-point Likert scale. From the table, a mean response of 3.15 and standard deviation of 0.33 were recorded for customer satisfaction and this is above the average (2.5) of the likert scale used in the study. This means that the banks perceived that customer are satisfied with their service. Also, a mean of 3.31 and standard deviation of 0.59 were recorded for ATM which is also higher than the average. For internet banking, the study recorded a mean of 4.11 and standard deviation of 0.37. Telephone banking disclosed a mean value of 4.01 and standard deviation of 0.69 which means that telephone banking is effective in the bank. Mobile banking has a mean and standard deviation of 4.07 and 0.55 respectively.

4.4 Test of Hypotheses
In testing the hypotheses, we made use of the data analysis tools discussed in chapter three.

Multiple Regression Results for Test of Hypothesis

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
<th>F</th>
<th>Sig</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>.664 a</td>
<td>.698</td>
<td>.665</td>
<td>.5673</td>
<td>392.564</td>
<td>000 a</td>
<td>1.567</td>
</tr>
</tbody>
</table>

Source: Regression Output 2022

The R² value of 0.698 and adjusted R² value of .665 showing how independent variables predicts the dependent variable. The model was significant at 1% level where F= 392.564. The above result shows the hypotheses tested at 1% (.001) significance level. When the observed probability p<α, we reject the null hypothesis.
From the above table it can be seen that Automated Teller Machine (ATM) has significant impact on service delivery to customers of United Bank for Africa i.e. Beta=.595, P = .006 at 1 percent. Therefore, since p<α, the research hypothesis is rejected. It implies that Automated Teller Machine has significant impact on service delivery to customers of United Bank for Africa.

For the second hypothesis, Internet banking has no significant impact on service delivery to customers of United Bank for Africa. Beta=.654, P = .000 at 1 percent. Therefore, since p<α, the research hypothesis is rejected. This implies that Internet banking has significant impact on service delivery to customers of United Bank for Africa.

For the third hypothesis, Telephone banking has no significant impact on service delivery to customers of United Bank for Africa. Beta=.763, P = .014 at 1 percent. Therefore, since p<α, the research hypothesis is rejected. This implies that Telephone banking has significant impact on service delivery to customers of United Bank for Africa.

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>T</th>
<th>Sig.</th>
<th>Zero-order</th>
<th>Partial</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATM</td>
<td>.546</td>
<td>.095</td>
<td>.595</td>
<td>2.76</td>
<td>.006**</td>
<td>.725</td>
<td>.665</td>
<td>.48</td>
<td>1.33</td>
</tr>
<tr>
<td>IB</td>
<td>.453</td>
<td>.114</td>
<td>.654</td>
<td>3.55</td>
<td>.000**</td>
<td>.876</td>
<td>.543</td>
<td>.65</td>
<td>1.24</td>
</tr>
<tr>
<td>TB</td>
<td>.564</td>
<td>.112</td>
<td>.763</td>
<td>2.45</td>
<td>.014**</td>
<td>.987</td>
<td>.658</td>
<td>.98</td>
<td>1.38</td>
</tr>
<tr>
<td>MB</td>
<td>.345</td>
<td>.186</td>
<td>.876</td>
<td>1.59</td>
<td>.111**</td>
<td>.879</td>
<td>.897</td>
<td>.57</td>
<td>1.87</td>
</tr>
</tbody>
</table>

a. Dependent Variable
Source: Regression Output, 2022
p<α, the research hypothesis is rejected. This shows that Telephone banking has significant impact on service delivery to customers of United Bank for Africa.

For the fourth hypothesis; Mobile banking has no significant impact on service delivery to customers of United Bank for Africa. Beta=.876, P = .011 at 1 percent. Therefore, since p<α, the research hypothesis is fail to be rejected. This shows that Mobile banking has no significant impact on service delivery to customers of United Bank for Africa.

Summary of Findings
The findings of the study revealed that Automated Teller Machine ATM, internet banking telephone banking and mobile banking has significant impact on customer satisfaction.

CONCLUSION AND RECOMMENDATIONS
Conclusions
From the findings of the study, it can be concluded that Automated Teller Machine ATM, internet banking telephone banking and mobile banking has significant impact on customer satisfaction.

Recommendation
Based on the findings of this study, the following recommendations are made that:

i. Since mobile banking has significant impact on customer patronage the Nigerian banking industry, banks should provide more functional infrastructures to strengthen their e-business transaction, more Mobile Banking facilities and ATMs must be deployed to make more cash accessible to more customers.

ii. Since there is significant relationship between mobile banking and the service delivery in the banking industry. Standby electric power generating sets and inverters be provided to power the banking halls, information technology equipment and ATMs respectively whenever there is public power failure to ensure continued smooth operations.

iii. Since there is significant relationship between expectations of mobile banking and customers service delivery. Banks should train and enlighten their staff, customers and the public/society on the use and safety precautions of various e-service facilities for efficient and convenient services to enhance stability and confidence in the economy.
Reference