Mobile Banking Service Quality and Customer Satisfaction of Deposit Money Banks in Port Harcourt

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Abstract: *This study tried investigating mobile banking service quality and customer satisfaction of deposit money banks in Choba, Port Harcourt. And the problem that necessitates this study is the issue of customers' complaint of the long time it takes to do cash transfer at deposit money bank premises within Port Harcourt or automated teller machines (ATM). The study suggests mobile banking as the solution to the problem. Data were drawn from copies of questionnaire distributed to 169 students of the department of nursing, school of basic studies as identified in 2018/2019 admission list. The data collection instruments were validated using Cronbach Alpha Test. Combination of descriptive and inferential statistics tools was employed to analyze data with the aid of SPSS (version 20.1) and spearman rank correlation coefficient and multiple regression were used to test hypotheses. The study revealed that all the dimensions of mobile banking service quality (mobile convenience, accessibility and security) have significant relationships with the measures of customer satisfaction (customer loyalty and word of mouth). Hence, the study recommends that management should ensure their mobile banking process is convenient for the customers to use through making it easy since it has been proven to help improve customer satisfaction, should also make the mobile banking process to be accessible all round through ensuring its sound and running with good networks for customers to use.*

Keywords: *Customer Complaint, Customer Satisfaction, Mobile Banking, Service Quality*

1.1 Introduction

Customer satisfaction is a key objective any bank that wants to survive and stay competitive in this dynamic business environment must try to achieve. Customers today changes their taste and preference more often to attune to the current trends and innovations. And for banks to satisfy their customers in this ever changing business environment have adopted the use of modern digital innovative technologies such as mobile banking. CIO (2018) defined mobile banking as "a service provided by a bank or other financial institution that allows its customers

to conduct financial transactions remotely using a mobile device such as a smart phone or tablet".

Nganga (2017) stated that the disrupting style of technology simply shows that customers does not necessarily have to visit a physical brick and mortar branch of their banks but can have access to the same services they get at the bank premises online or via their mobile phones. This is made possible due to e-banking. Rahman *et al.* (2017) opine that the banking industry of today concentrates on electronic banking technologies in order to offer their customers branchless banking service. E-banking brings about speedy, convenient, and dependable service to the customers (Nupur, 2010). Mobile banking services are the type of digital banking service that became very popular among customers of banks in recent times (Rahman *et al.*, 2017).

Several studies have tried evaluating mobile banking service quality and its impact on customers. Fozia, (2016) conducted an empirical study on "impact of mobile banking on overall customer satisfaction in India using regression analysis found that dimensions of mobile banking i.e. security & privacy in public banks, accessibility and ease of use variables have significant impact on overall customer satisfaction. Also, Amiri *et al.* (2012) conducted an empirical study on mobile banking service quality and customer satisfaction in Iran using Pearson moment correlation coefficient and found out that tangible, reliability, responsiveness and empathy has a significant relationship with customer satisfaction. Ramseook-Munhurrun and Naidoo (2011) examined the potential dimensions of mobile internet banking and its impact on customer satisfaction using factor analysis, paired t-test and regression analysis and found out that reliability-responsiveness and accessibility were important in determining overall customer satisfaction, with accessibility having the most significant impact.

But there exist scarce empirical studies on mobile banking service quality and customer satisfaction of deposit money banks within the context of Choba in Port Harcourt. And this creates a gap which this study will fill when conducted.

1.2 Statement of Problem

The problem of this study is the customers' complaint of the long time it takes to do cash transfer at deposit money bank premises within Port Harcourt or automated teller machines (ATM) which mostly customers have to join long queue when trying to make e-payments or transfer money electronically. This long queues consumes customers ample time and is physically stressful due to the long period of time customers have to stand on the line waiting for their turn either to use the ATM or get serviced at the counter.

Uwaleke (2017) states that "long queues at the Automated Teller Machines have become a common sight especially during festive periods". He also states that recent reports in the media speak of grueling experiences that bank customers went through in a bid to withdraw cash from the ATMs during the Eid el Kabir celebrations (Uwaleke, 2017). This study is pointing towards mobile banking as the solution to this problem so as to satisfy the customers.

1.3   Objectives of The Study

The aim of the study is to discover the impact of mobile banking service quality on customer satisfaction in deposit money banks in Choba, Port Harcourt.

While it's specific objectives includes:

1.   To investigate the extent mobile convenience affects customer satisfaction in deposit money banks in Choba, Port Harcourt.
2.   To investigate the extent accessibility influences customer satisfaction in deposit money banks in Choba, Port Harcourt.
3.   To find out the extent security affects customer satisfaction in deposit money banks in Choba, Port Harcourt.

1.4   Research Questions
1.   To what extent does mobile convenience affects customer satisfaction in deposit money banks in Choba, Port Harcourt?

2.   To what extent does accessibility influences customer satisfaction in deposit money banks in Choba, Port Harcourt?

3.   To what extent does security affects customer satisfaction in deposit money banks in Choba, Port Harcourt?

1.5   Research Hypotheses

From the research questions, we formulated the following hypotheses:

Ho_1: There is no significance relationship between mobile convenience and customer loyalty in deposit money banks in Choba, Port Harcourt.

Ho_2: There is no significance relationship between mobile convenience and word of mouth in deposit money banks in Choba, Port Harcourt.

Ho_3: There is no significance relationship between accessibility and customer loyalty in deposit money banks in Choba, Port Harcourt.

Ho_4: There is no significance relationship between accessibility and word of mouth in deposit money banks in Choba, Port Harcourt.

Ho_5: There is no significance relationship between security and customer loyalty in deposit money banks in Choba, Port Harcourt.

Ho$_6$: There is no significance relationship between security and word of mouth in deposit money banks in Choba, Port Harcourt.

1.6   Conceptual Framework for Mobile Banking Service Quality and Customer Satisfaction of Deposit Money Banks in Choba, Port Harcourt
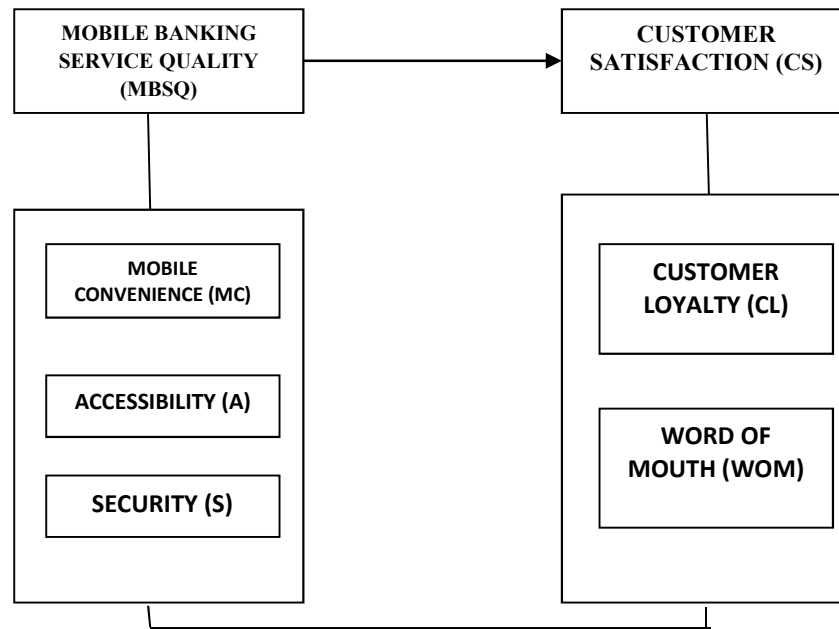
Source: Researcher's conceptualization from review of related literature (2021)

2.0   Literature Review

2.1   Theoretical Review

The theoretical underpinning to this study is the theory of service quality, "popularly known as the *gaps model* which was developed by a group of American authors, A. Parasuraman, Valarie A. Zeithaml and Len Berry, in a systematic research program carried out between 1983 and 1988". The model identifies the principal dimensions (or components) of service quality; proposes a scale for measuring service quality (SERVQUAL) and suggests possible causes of service quality problems. The model's developers originally identified ten dimensions of service quality, but after testing and retesting, some of the dimensions were found to be auto correlated and the total number of dimensions was reduced to five, namely - reliability, assurance, tangibles, empathy and responsiveness. These five dimensions are thought to represent the dimensions of service quality across a range of industries and settings (Zeithaml, *et al.*, 1988).

And this study on mobile banking service quality which is considering the quality in the use of mobile banking is underpinned to the SERVQUAL theory due to its applicability on the immediate dimensions of this work.

2.2   Concept of Mobile Banking Service Quality

Mobile banking according to Shilpa and Veena (2018) is "a system that allows customers of mobile financial institution (MFI) to offer banking services of making deposits, withdraw, and to send or receive funds from a mobile account through a mobile device such as a mobile phone or personal digital assistant". CIO (2018) defined mobile banking as "a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a smart phone or tablet". Also, Islam (2015) opine that "mobile banking offers services of banking such as, account information; payments, deposits, withdrawals, and transfers; investments and other content services". Ibrahim *et al*. (2006) defined "mobile banking as an application of mobile accessing which offers the customers with the support required to be able to bank anywhere, anytime using a mobile handheld gadget and a mobile facility such as Short Message Service (SMS)". While Parasuraman *et al*. (1985) defined service quality as "the difference between service expectation and service performance". Lewis and Booms (1983) saw it as "a comparison of perceived expectations (E) of a service with perceived performance (P), giving rise to the equation SQ = P-E".

Shilpa and Veena (2018) argues that "the customers in mobile banking services are increasing day by day due to the security measures taken by the banks and more and more numbers of customers are being drawn to the mobile banking as they have been satisfied due to the measures taken by banks to secure the mobile banking transactions". It is a known fact now that "through mobile banking customers can now add as many beneficiaries in the list as they want for fund transfer etc. and it saves huge amount of time for those kinds of transactions" (Sharma & Gautam, 2017). According to Shilpa and Veena (2018) "mobile phones can be carried everywhere and used by large number of people to complete the financial transactions by sitting at home". Ibrahim *et al*. (2006) also reasoned in this line of thought when they stated that "banks need to provide services to their customers whenever they require it and wherever they are and we can rather call this facility as anywhere and any moment banking, but it is confined to only information about an individual's account and not the cash services".

Banks need to provide services to their customers whenever they require it and wherever they are. We can rather call this facility as "Anywhere and any moment banking", but it is confined to only information about an individual's account and not the cash services. "In the age of globalization and digitalization mobile banking has shown a way to reach the top of the pyramid in the banking business through its variety of services" (Lalitha balakrishan, 2016).
Ibrahim *et al*. (2006) listed the following benefits of mobile banking:

a) **Time saving:** As an alternative for allocating time to walk into a bank, you can check account balances, schedule and get payments, transfer money and organize your accounts when you are on the go.

b) **Convenient:** The capability to access bank accounts, make payments, and also track investments irrespective of where you are can be a big benefit. Do your banking at any time and place that suits you, instead of waiting in long lines.

c) **Secure:** Predominantly, good mobile banking applications have a safety guarantee or send you an SMS verification code you have to input to authorize a payment for additional safety. Mobile banking is supposed to be even more safe than online or internet banking.

d) **Easy access to your finances:** With the emergence of mobile banking, you are able to avail your financial information even surpassing the working hours. It helps to access banking facilities even by making a call to the bank.

e) **Increased efficiency:** Mobile banking operations are functional, efficient, effective and competitive. It even helps in decongesting the banking halls and discards the amount of paperwork for both the banker and the consumer.

f) **Fraud reduction:** One very real benefit to implementing mobile banking. Consumers are being deputized in real time to check their accounts.

g) It avails oneself of the mobile networking of telecom operators and therefore does not demand for an internet connection.

h) You can watch out on your account balance, re-evaluate recent transaction, transfer funds, pay bills, locate ATMs, deposit cheques, handle investments, etc.

i) Mobile banking is accessible anywhere and anytime by anyone who wishes to, it is easy and convenient and a suitable choice for accessing financial facilities for most mobile phone owners in the rural areas.

2.2.1 Dimensions of Mobile Banking Service Quality

Fozia (2016) used security & privacy, accuracy, accessibility and easy to use as dimensions of mobile banking service quality. While Ramseook-Munhurrun and Naidoo (2011) used security, responsiveness, convenience, reliability, satisfaction, accessibility and ease of use. Amiri, Aghdaie and Faghani (2012) used five dimensions of SERVEQUAl to measure mobile banking service quality and these include: tangibles, reliability, responsiveness, assurance and empathy. Rahman *et al*. (2017) listed reliability, responsiveness, assurance, empathy and tangibles as the dimensions of mobile banking service quality.

In this study, we selected convenience, accessibility and security as our dimensions for mobile banking service quality.

2.3 Concept of Customer Satisfaction

Customers are the key to any organizations survival and no company can exist without customer patronage. Therefore, Baruk (2008) opine that "a crucial factor of building a long-

term success of the company is ongoing satisfaction of client's needs". According to Gomachab and Maseke (2018), "customer satisfaction is a measure on how the services provided or supplied by an organization meets or exceeds the expectations of a consumer". Farris, Neil, Philip and David (2010) defined it as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals". While Hansemark and Albinson (2004) saw it as "an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some needs, goals or desire".

Gitman, and McDaniel (2005) asserts that "in a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy". This implies that businesses can differentiate themselves based on the rate of satisfaction they give to customers. Customers will likely re-patronize any business that offers them the highest satisfaction. That is why Angelova and Zekiri (2011) opine that "satisfied customers form the foundation of any successful business because customer satisfaction leads to repeat purchases, brand loyalty, and positive word of mouth".

2.4   Measures of Customer Satisfaction

Several measures have been used for customer satisfaction. Smith (2014) listed the following as measures of customer satisfaction: survey customers, understand expectations, pinpoint specifics, assess the competition and measuring emotional aspect. Felix (2017) measured customer satisfaction using; customer loyalty and word of mouth.

In this study we measure customer satisfaction with customer loyalty and word of mouth according to Felix (2017).

2.4.1 Customer Loyalty

Customer loyalty according to Beyond Phylosophy (n.d.) "is the result of consistently positive emotional experience, physical attribute-based satisfaction and perceived value of an experience, which includes the product or services". Management study guide (2018) defined customer Loyalty as "the measure of success of the supplier in retaining a long term relationship with the customer". Uncles *et al*. (2002) "used the term customer loyalty as opposed to brand loyalty; this is to emphasize that loyalty is a feature of people, rather than something inherent in brands".

Isoraite (2016) states that "loyalty can be treated as a customer desire, willingness to be a regular customer for a long time, buying and using the goods of the chosen companies by

recommending them to friends and colleagues". Hence deposit money bank customer loyalty happens when they are satisfied with the banks services over and over again, then they will stick to that very bank and will not want to defect to competitors.

2.4.2 Word of Mouth

Word of mouth, or viva voce is the passing of information from person to person by oral communication, which could be as simple as telling someone the time of day (www.thefreedictionary.com). Westbrook (1987 as cited in Chan & Ngai, 2011) described WOM as "all informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers". File et al (1992 as cited in Cengiz & Yayla, 2007) define WOM as recommending the firm and the service to others".

Story telling is a common form of word-of-mouth communication where one person tells others a story about a real event or something made up. Khazaei *et al*. (2014: 17) assert that:

> "In the past, consumers used to talk to other people when looking for opinions on a particular brand, product or company. This became known as word of mouth (WOM) in the marketing literature. WOM is probably the oldest mechanism by which opinions on products, brands, and services are developed, expressed, and spread".

2.5 Empirical Review on mobile Banking Service Quality and Customer Satisfaction

Several empirical works have pointed to the fact that mobile banking service quality which mostly used SERVQUAL constructs has a significant influence on customer satisfaction. Take for instance, Amiri *et al*. (2012) study which evaluates "customer's perception of mobile banking quality in Iran concludes that increase in service quality of the mobile banking can satisfy and develop customer satisfaction that ultimately retains valued customers". The study of Jannat and Ahmed (2015) "revealed that the most influential factors that have an influence on customer satisfaction of mobile banking of second-generation banks includes - security and trust, convenience accuracy of transaction, ease of use, system availability, responsiveness, transaction speed, and cost effectiveness are the most influential factors for customer satisfaction".

Kahandawa and Wijayanayake (2014) conducted an empirical study on "impact of mobile banking services on customer satisfaction: and the study revealed that "mobile banking customer satisfaction is influenced by relative advantage, perception on risk and user lifestyle and current needs of customers. It brings out a positive relationship and highlights the factors which any bank or financial institution should focus on improving mobile banking services". Rahman *et al*. (2017) also conducted a study on "the influence of mobile banking service quality

on customer satisfaction in Bangladesh using Pearson correlation and multiple regression analysis found out that the four variables tangible, reliability, responsiveness, and empathy have significant positive relationship with customer satisfaction". The empirical works evaluated above points to the fact that mobile banking service quality has a positive influence on the satisfaction of customers, hence we will try to individually investigate the impact of our dimensions (mobile convenience, accessibility and security) on customer satisfaction.

2.5.1 Mobile Convenient and Customer Satisfaction

Convenience according to Chang and Polonsky (2012) is the ability to reduce consumers non-monetary costs (i.e. time, energy and effort) when purchasing or using goods and services. Thuy (2011) defined Service convenience "a judgment made by consumers according to their sense of control over the management, utilization and conversion of their time and effort in achieving their goals associated with access to and use of the service". "It has been reported that 52 percent of consumers surveyed want to spend less time shopping in the future (Seiders *et al*., 2000), thereby highlighting the importance of convenience" (Khazaei, *et al*., 2014).

Several empirical studies have tried proving the relationship that exists between convenience and customer satisfaction. For instance Kaura (2013) conducted an empirical study on service convenience, customer satisfaction, and customer loyalty: study of Indian commercial banks using structural equation modeling found out that service convenience has a significant impact on customer satisfaction which furthers leads to customer loyalty. Also, Khazaei *et al*. (2014) conducted an empirical research on "the effect of service convenience on customer satisfaction and behavioral responses in bank industry using structural equation model (SEM) found out that service convenience has a positive effect on customer satisfaction and behavioral responses while customer satisfaction has a positive effect on word of mouth communication "The findings of Dai *et al*. (2001) also suggest that convenience influences Chinese internet shoppers' levels of satisfaction, which, in turn, influences their loyalty and word-of-mouth intentions". Chang and Polonsk, (2012) empirical studies confirm that "convenience is an important service attribute that influences consumers' evaluation of service encounters and that behavioral intention are important outcomes of consumer satisfaction". Chang *et al*. (2010) in their own empirical research "reported that in a Taiwanese fast-food context, convenience influences satisfaction and that satisfaction, in turn, influences loyalty". Colwell *et al*. (2008) conducted an empirical study and found that "all five types of convenience influence satisfaction in the Canadian internet context"

Based on these assertions and findings, we formulate our first set of hypotheses:

Ho_1 There is no relationship between mobile convenience and customer loyalty.

Ho_2 There is no relationship between mobile convenience and word of mouth.

2.5.2 Accessibility and Customer Satisfaction

Accessibility of digital banking according to Muluka *et al*. (2015) "has to do with the ease with which customers have access to financial tools, their accounts, ease of making payments from their accounts and access to money available in the accounts using various digital channels namely, online banking facilities, ATMs, POS terminals, mobile banking to mention but a few". Villers (2012) states that "It determines whether customers find the products to be serving their needs when they want it, in a way that makes their banking convenient". Hence the accessibility of mobile banking is that it helps consumers get the services they so desire at the time and place it is needed. Tamin (2000) opines that "accessibility indicators include time, distance and transportation costs".

Several empirical studies pointed to the fact that convenience is a crucial factor that determines customer satisfaction. Muluka *et al*. (2015) conducted an empirical study on "accessibility of digital banking on customer satisfaction: National bank of Kenya using both Pearson moment correlation coefficient and chi-square found out that a significant relationship exists between accessibility of digital banking and customer's satisfaction". Also Jannang and Abdullah (2016) conducted a study on "effect of Servqual and accessibility on customer loyalty through customer satisfaction (study at Ternate Jati land mall) using GSCA (Generalized Structured Component Analysis) and found that service quality and accessibility has a significant effect on customer loyalty through customer satisfaction".

The empirical study of Ernawati and Laksono (2008) show that "health centers accessibility and equity services create fairly high level of satisfaction". Jannang (2010) reinforced these findings by his discovery that "accessibility can enhance customer satisfaction".

Therefore, we develop our next set of hypotheses:

Ho$_3$ There is no relationship between accessibility and customer loyalty.

Ho$_4$ There is no relationship between accessibility and word of mouth.

2.5.3 Security and Customer Satisfaction

Deposit money banks mobile app security is very vital to customer usage and satisfaction with electronic banking. Park and Kim (2006) "define security as the ability of online shop in controlling and guarding the transaction data". WhatIs.com defined mobile app security as "the extent of protection that mobile device applications (apps) have from malware and the activities of crackers and other criminals". "The term can also refer to various technologies and production practices that minimize the risk of exploits to mobile devices through their apps" (WhatIs.com).

RiverWind Bank (2018) asserts that "mobile banking is safe and secure and all reputable banks and financial institutions use encryption to safeguard and protect your privacy and identity information on mobile apps". And also More, Park and Kim (2006) says that "the security guarantees plays an important role in the establishment of trust to reduce consumer concern about the misuse of personal data and transaction data that can be easily damaged". This

implies that the security aspect of mobile banking app will encourage customers to use the app without fear of losing money and private information when using the app. That is why Safitri (2017) asserts that "when the level of security can be accepted is when it meets the expectations of consumers, then consumers may be willing to open their personal information and will buy with a secure feeling".

Empirical works have proven the importance of security towards customer satisfaction. Safitri (2017) conducted an empirical study on "security and ease of use effect on customers' satisfaction shopping in Tokopedia using Structural Equation Model (SEM) found out that security has a positive and significant effect on the customer satisfaction". Asfour and Haddad (2014) also conducted an empirical study on "the impact of mobile banking on enhancing customers' e-satisfaction of Jordanian banks using simple regression and found that significant relationship exists between security and e-satisfaction of customers". Maseke (2018) carried out an empirical study on "the impact of mobile banking on customer satisfaction of Commercial banks of Namibia, using descriptive statistics; this included mean, mode, standard deviation, frequency and found a significant relationship between security and customer satisfaction." Deyalage and Kulathunga (2019) conducted an empirical study on "work factors affecting online customer satisfaction: the Sri Lankan perspective, using multiple regression analysis and found that security perception were significantly associated with online customer satisfaction".

Therefore, we develop our next set of hypotheses:

Ho_5 There is no relationship between security and customer loyalty.

Ho_6 There is no relationship between security and word of mouth.

3.0 Research Methodology
The philosophical stand for this study is that of objectivist view point since the research adopted a quantitative method of Nomothetic approach. The target population comprised of 294 Uniport students of the department of nursing, school of basic studies as identified in 2018/2019 admission list (Source: https://www.uniport.edu.ng/news/latestnews/1283-school-of-basic-studies-2018-2019-admission-list.html). A sample of 169 was generated from the population of 294 using Taro Yamen formula. And the sample of 169 was actually selected from the 294 using simple random sampling which is a probability sampling techniques. Both primary and secondary data collection method was used in the study, and the main research instrument which is the copies of questionnaire was validated via an expert checking. While Cronbach's Alpha technique was used to check for its reliability. The reliability coefficients of our constructs were above 0.70 benchmark recommended by Nunnally (1978).

Table 3.1 Reliability Statistics

S/N	Construct	No of items	Cronbach's Alpha
1.	Mobile Convenience	3	0.986
2.	Accessibility	3	0.926
3.	Security	3	0.955
4.	Customer loyalty	3	0.887
5.	Word of mouth	3	0.948

Source: SPSS Result

4.0   Analyses of Data

The statistical tool used to analyze the earlier stated hypotheses is Spearman's Rank Correlation Coefficient which was employed to test if a relationship exists between the predictor and criterion variables. These were transferred to SPSS spread sheet for easy, clear and timely computation.

4.1   Questionnaire Distribution and Retrieval

Table 4.1: Questionnaire Administration and Responses

	Number Involved	Percentage (%)
Distribution	169	100
Useful Copies Returned	140	82.8%
Discarded Reponses	23	13.6%
Lost in Transit	6	3.6%

Source: Field Survey, 2021.

The table 4.1 above shows that 169 copies of the questionnaire were distributed amongst students of the department of nursing, school of basic studies as identified in 2018/2019 admission list. Out of the 169 copies of questionnaire administered, only 140 copies returned were considered useful. This accounted for 82.8% responses rate. Due to obvious mistakes and incomplete responses, 23 copies accounting for 13.6% were dropped, while 6 copies representing 3.6% could not be retrieved due to misplacement and other reasons given by the respondents. Therefore, the total response rate that formed the basis of our analysis was 140 representing 82.8%.

4.2 Test of Hypotheses

The hypotheses earlier stated in chapter one was tested in this section. Two – tailed test was used and the significant level was 0.01.

Decision Rule

The decision rule was that the null (H_0) should be rejected if p-value < 0.01 for 2 – tailed test and conclude that there is a significant relationship between the two variables involved.

Test of Hypothesis 1

Ho_1: There is no significance relationship between mobile convenience and customer loyalty in deposit money banks in Choba, Port Harcourt

Ha_1: There is a significance relationship between mobile convenience and customer loyalty in deposit money banks in Choba, Port Harcourt

Table 4.2: Correlation Analysis on Mobile Convenience and Customer Loyalty

	Variables 1	Statistics	Mobile Convenience (MC)	Customer Loyalty (CL)
	Mobile Convenience	Correlation Coefficient	1.000	.831**
	(MC)	Sig. (2-tailed)	.	.000
Spearman's rho				
	Customer Loyalty (CL)	Correlation Coefficient	.831**	1.000
		Sig. (2-tailed)	.000	.

**. Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N = 140

Source: SPSS Output (based on 2021 Field Survey Data)

Table 4.2 above explains the outcome of the correlation analysis, which the spearman's rank correlation coefficient is estimated as 0.831**. This proves that a significant positive relationship exists between mobile convenience and customer loyalty. Since the p-value (0.000) < 0.01, we reject the null hypothesis while accepting its alternative and conclude that a significant relationship exists between the two variables.

Test of Hypothesis 2

Ho$_2$: There is no significance relationship between mobile convenience and word of mouth in deposit money banks in Choba, Port Harcourt.

Ha$_2$: There is a significance relationship between mobile convenience and word of mouth in deposit money banks in Choba, Port Harcourt.

Table 4.3: Correlation Analysis on Mobile Convenience and Word of Mouth

	Variables 1	Statistics	Mobile Convenience (MC)	Word of Mouth (WOM)
	Mobile Convenience	Correlation Coefficient	1.000	.864**
	(MC)	Sig. (2-tailed)	.	.000
Spearman's rho				
	Word of Mouth (WOM)	Correlation Coefficient	.864**	1.000
		Sig. (2-tailed)	.000	.

**. Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N = 140

Source: SPSS Output (based on 2019 Field Survey Data)

Table 4.3 above indicates that the correlation coefficient (r) is 0.864. This shows that a very strong relationship exists between mobile convenience and word of mouth. Again, the sign of (r) value is positive, indicating a direct link between the variables. Since the probability value (p-value) = 0.000 < 0.01, we conclude that a significant positive relationship exists between mobile convenience and word of mouth.

Test of Hypothesis 3

Ho$_3$: There is no significance relationship between accessibility and customer loyalty in deposit money banks in Choba, Port Harcourt.

Ha$_3$: There is a significance relationship between accessibility and customer loyalty in deposit money banks in Choba, Port Harcourt.

Table 4.4: Correlation Analysis on Accessibility and Customer Loyalty

	Variables 1	Statistics	Accessibility (A)	Customer Loyalty (CL)
	Accessibility	Correlation Coefficient	1.000	.800**
	(A)	Sig. (2-tailed)	.	.000
Spearman's rho				
	Customer Loyalty (CL)	Correlation Coefficient	.800**	1.000
		Sig. (2-tailed)	.000	.

**. Correlation is significant at the 0.01 level (2-tailed).

 b. Listwise N = 140

Source: SPSS Output (based on 2019 Field Survey Data)

Based on the result of the table above which shows a correlation coefficient (r) value is 0.800, we conclude that a strong relationship exists between accessibility and customer loyalty. The positive sign of the (r) value indicates a positive relationship. Again, the p-value (0.00) < 0.01 meaning that the relationship between accessibility and customer loyalty is statistically significant.

Test of Hypothesis 4

Ho_4:   There is no significance relationship between accessibility and word of mouth in deposit money banks in Choba, Port Harcourt.

Ha_4:   There is a significance relationship between accessibility and word of mouth in deposit money banks in Choba, Port Harcourt.

Table 4.5: Correlation Analysis on Accessibility and word of mouth

	Variables 1	Statistics	Accessibility (A)	Word of Mouth (WOM)
	Accessibility	Correlation Coefficient	1.000	.810**
	(A)	Sig. (2-tailed)	.	.000
Spearman's rho				
	Word of Mouth (WOM)	Correlation Coefficient	.810**	1.000
		Sig. (2-tailed)	.000	.

  **. Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N = 140

Source: SPSS Output (based on 2019 Field Survey Data)

Also, Table 4.5 above shows that the correlation coefficient (r) is 0.81. This implies that there is a very strong relationship between accessibility and word of mouth. The sign of the estimated value of (r) is positive while the p-value is 0.000 < 0.01. Therefore, we reject the null hypothesis and conclude that there is a significant positive relationship between accessibility and word of mouth.

Test of Hypothesis 5

Ho$_5$: There is no significance relationship between security and customer loyalty in deposit money banks in Choba, Port Harcourt.

Ha$_5$: There is a significance relationship between security and customer loyalty in deposit money banks in Choba, Port Harcourt.

Table 4.6: Correlation on Security and Customer Loyalty

	Variables 1	Statistics	Security (S)	Customer Loyalty (CL)
	Security (S)	Correlation Coefficient	1.000	.758**
		Sig. (2-tailed)	.	.000
Spearman's rho				
	Customer Loyalty (CL)	Correlation Coefficient	.758**	1.000
		Sig. (2-tailed)	.000	.

**. Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N = 140
Source: SPSS Output (based on 2019 Field Survey Data)

As revealed in table 4.10 above, the estimated value of the coefficient of correlation is 0.758. This indicates a strong positive relationship between security and customer loyalty. The p-value of 0.000 < 0.01, further proves that the said relationship is significant thereby supporting the rejection of the null hypothesis and concluding that there is a statistical significant relationship between security and customer loyalty.

Test of Hypothesis 6

Ho$_6$: There is no significance relationship between security and word of mouth in deposit money banks in Choba, Port Harcourt.

Ha$_6$:   There is a significance relationship between security and word of mouth in deposit money banks in Choba, Port Harcourt.

Table 4.7: Correlation Analysis on Security and Word of Mouth

	Variables 1	Statistics	Security (S)	Word of Mouth (WOM)
	Security (S)	Correlation Coefficient	1.000	.876**
		Sig. (2-tailed)	.	.000
Spearman's rho				
	Word of Mouth (WOM)	Correlation Coefficient	.876**	1.000
		Sig. (2-tailed)	.000	.

**. Correlation is significant at the 0.01 level (2-tailed).
 b. Listwise N = 140
 Source: SPSS Output (based on 2019 Field Survey Data)

The correlation analysis as shown in table 4.11 above indicates that the correlation coefficient (r) = 0.876. This implies that a moderate relationship exists between security and word of mouth. The direction of the relationship as indicated by the sign of the correlation coefficient is positive, suggesting that the more security the mobile banking process has, the more customers will tell their friends about it through word of mouth. Also, the probability value (p-value) = 0.000 < 0.01, therefore, we conclude that there is a significant relationship between security and word of mouth.

4.3   Discussion of Findings

The focus of this section is to discuss the findings obtained from the study in comparison with findings of similar studies by other scholars.

4.3.1   Mobile Convenience

The study found that mobile convenience has significant positive relationship with the measures of customer satisfaction (Customer Loyalty and Word of mouth). This finding was realized from the test of hypotheses H$_{o1}$, H$_{o2}$. The test of H$_{o1}$ had r = 0.831, p-value< 0.01, hence we proposed that the more mobile banking process is convenient with customers use, the more loyal customers will to the deposit money bank.

Test of H$_{o2}$ had r = 0.864, p-value< 0.01 which reveals that mobile convenience results in a significant positive correlation coefficient and indicates that increase in mobile convenience will bring about an increase in word of mouth.

These findings are in line with that of several authors which include Kaura (2013) who found out from his empirical study that service convenience has a significant impact on customer satisfaction which furthers leads to customer loyalty. Also, Khazaei et al. (2014) discovered that service convenience has a positive effect on customer satisfaction and behavioral responses while customer satisfaction has a positive effect on word of mouth communication. Salam and King (2001) findings also suggest that "convenience influences Chinese internet shoppers' levels of satisfaction, which, in turn, influences their loyalty and word-of-mouth intentions".

4.3.2   Accessibility

Accessibility was found to have a significant positive relationship with the measures of Customer Satisfaction (Customer Loyalty and Word of Mouth).

In H_{03}, r = 0.800, p-value < 0.01 indicating that accessibility attracted significant positive correlation coefficient and also strong positive relationship exists between accessibility and customer loyalty. In terms of H_{04}, the result shows that accessibility also attracts significant positive relationship as indicated by significant correlation coefficient (0.810, p-value < 0.01). Therefore, increase in accessibility commands an increase in word of mouth by customers.

From the above, it is evident that accessibility has a significant positive relationship with Customer satisfaction in terms of customer loyalty and word of mouth. This implies that accessibility of mobile banking enables deposit money banks generate customer satisfaction. This finding agrees with the submission of Muluka, Kidombo, Munyolo and Oteki (2015) who found that "a significant relationship exists between accessibility of digital banking and customer's satisfaction". Also Jannang and Abdullah (2016) found out that "accessibility has a significant effect on customer loyalty through customer satisfaction".

4.3.3   Security

Security was found to have a significant relationship with the measures of customer satisfaction. This claims resulted from the findings of the statistical test of hypotheses H_{05}, and H_{06}. In testing H_{05}, security attracted significant positive correlation coefficient (0.758, p-value < 0.01) implying strong positive relationship between security and customer loyalty. In terms of H_{06}, the result shows that security also attract significant positive relationship as indicated by significant correlation coefficient (0.876, p-value < 0.01). Hence, increase in mobile banking security commands an increase in word of mouth by the customers who tells their friends and relative about how safe it is to use the mobile banking.

Our findings are in agreement with popular views in literature. Safitri (2017) found out that security has a positive and significant effect on the customer satisfaction. Also in Maseke (2018) finding proves that a significant relationship between security and customer satisfaction.

Kulathunga (2019) empirical study discovered that "security perception were significantly associated with online customer satisfaction."

5.0 Conclusion, Recommendations and Contribution

From our discussion of finding, we conclude that mobile banking service quality has significant positive impact on customers' satisfaction in deposit money banks in Choba, Port Harcourt. .

The study therefore recommends that deposit money bank management should ensure their mobile banking process is convenient for the customers to use through making it easy since it has been proven to help improve customer satisfaction. Secondly, management should also make the mobile banking process to be accessible all round through ensuring its sound and running with good networks for customers to use. Lastly, management should often do routine maintenance on their mobile banking applications and processes to ensure it's free from loop holes that will allow hackers to hack customers account and banking details.

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