



Effect of Electronic Banking on Customer Satisfaction in Deposit Money Banks in Gombe State Nigeria

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Abstract

The study investigated the effect of mobile banking on customer satisfaction of selected deposit money banks (DMBs) in Gombe state. Customer satisfaction is an important word specifically in the science of business marketing, many people tried to know customer Satisfaction by trying to know what customers are saying on a product or service. The independent variable of the study is mobile banking (MBB) while the dependent variable is Customer satisfaction. The study is survey in nature; therefore, the study used primary method of data collection where the populations of the study are the entire customers of the seven selected DMBs in Gombe state which is 307,571, the study used non probability sampling techniques and also used taro yamany's formula for sample determination to arrive at 399 sampled respondents, the study used structural equation model SEM in the data analysis to test the hypothesis. The study found that; mobile banking (MBB) has a significant positive effect on customer satisfaction. The study recommends in line with the findings, that the banks should find ways of improving their services especially on MBB, to provide better customer satisfaction.

Keywords: Electronic Banking, Customer Satisfaction, Deposit money banks, Gombe state.

1.1 Introduction

Customer satisfaction holds the potential for increasing an organization's customer base, increase the use of more volatile customer mix and increase the firm's reputation (Nwobum *et al.*, 2022). Chhatwal (2024) banks customers are switching from traditional banks (Deposit Money Banks) to Neobanks (Kuda Bank, ALART by Wema Bank, V Bank, Moniepoint, Opay, Palmpay, Paga and PocketApp by PiggyVest among others) this is due to the inability of the banks to provide reliable as well as tangible services that can satisfy their customers in terms of new technologies. Also, the customers are not assured about their transactions and complaints will be quickly responded by the banks. However, Neo-banks their focus is on providing a seamless and user-friendly banking experience. By eliminating the need for physical branches, Neobanks can reduce overhead costs and savings to their customers through lower fees and higher interest.

The complaints of customers of five banks rose to 6,865,217 as of June 2023 from 3,156,704 complaints on online transactions the same period in 2022, The PUNCH report (2023). Financial claims arising from the various complaints in the review period stood at N326.11bn, up compared with N83.78bn paid in claims in June 2022. The reviewed Lenders' reports obtained from the Nigerian Exchange Limited include United Bank of Africa (UBA), Fidelity Bank, Access Holdings, Zenith Bank Plc and Guaranty Trust Holding (GTCO).

Abimbola (2023) Customers' complaints of UBA rose to 1,930,518 as of June 2023, from 475,121 in the same period in 2022. This marked a 306.32 per cent increase and the highest among the reviewed banks. The monetary amount involved in the complaints was N125.26bn from N4.39bn as of June 2022. Access Holdings followed as it witnessed a 132.25 per cent jump in complaints between June 2022 and June 2023. Received complaints rose from 1,387,702 to 3,222,907 with the amount being disputed rising to N136.75bn from N57.87bn. Fidelity Bank also saw its received complaints rising by 77.69 per cent to 1,010,586 from 568,738 with the amount being claimed standing at N55.20bn, a 268 per cent increment. Also, for Zenith Bank Plc, received complaints rose by 12.55 per cent to 247,685 from 220,067 as of June 2022. The amount involved in the complaints was N8.38bn, which is about 66 percent appreciation on the H1 2022 figure of N5.04bn. However, only GTCO saw a decline in its received complaints, which went from 505,076 in H1 2022

to 453,575 in H1 2023, signalling about 10 per cent improvement. The disputed amount also dropped to N517.67m from N1.51bn.

In an attempt to come up with better electronic banking services National Policy on Fifth Generation (5G) Networks for Nigerian Digital Economy by the federal government of Nigeria in 2021 came up with a policy of Fifth Generation (5G) Networks which is currently in process of testing in the current 2024. Thus, this study is not sure whether the policy will enhance the electronic banking system to enable the financial institutions to make their customers satisfied.

Apart from that, so many studies were conducted on the electronic banking service and customer satisfaction which contributed a lot on how to solve some problems with respect to the electronic banking service quality to improve customer satisfaction (Ahmed *et al.*, 2020; Oyedele *et al.*, 2020; Rajasulochana *et al.*, 2022; Bashir *et al.*, 2023; Samuel *et al.*, 2023; Rajasekhar, 2022; Ahmed *et al.*, 2023; Beshir *et al.*, 2020; and Zewge, 2021).

Despite all the measures mentioned above (Ezugwu, 2023) reported on the Business Hallmark press held on the 18 December, 2023 that customers complain over delay in transactions in the banking halls of access bank, inability to access enough cash from banks, failed transactions on digital banking platforms as a result of network issues and system breakdown. Others complained bitterly over difficulties in accessing their mobile apps, while some complained about non-reversal of ATM failed transactions, among other issues. For some, the crowd in banking halls discouraged them from visiting the banks to lodge complaints.

In the course of this study, the study realised that there is a mixed findings from the existing studies related to the topic, some are showing the independent variable have significant effect on Customer satisfaction, Samuel *et al.*, (2023), Sudarshani *et al.*, (2022), Yusuf *et al.*, (2022), Huda (2022), reveals that some variables have no or negligible effect on the dependent variable. Also, others are showing the independent variable have positive significant effect on the dependent variable Rajasulochana *et al.*, (2022), Shimeles (2020), Sharma *et al.*, (2023), among others. However, most of the studies on the effect of electronic banking service on Customer satisfaction are conducted in different geographical areas such as UAE, India, Ethiopia, Bangladesh, Saudi Arabia, Sri Lanka, Libiya, Lebanon, Combodia, Indonesia, Pakistan, Palestine and so on which is outside Nigeria and its include; Sleimi and Sleimi (2020), Rajasekhar (2022), Zewge (2021), Bashir *et al.*, (2023), Alkhaibari, *et al.*, (2023), Sudarshani *et al.*, (2022), Ahmed (2020), Reddy (2021), Pheap *et al.*, (2021), Yusuf *et al.*, (2022), Ahmed *et al.*, (2020) and many others respectively. From reviewed literature only few studies were conducted in Nigeria and as well as in Gombe state on the topic under consideration; such as Raji *et al.*, (2021), Nwekpa *et al.*, (2020), Yusuf and Bala (2021) and few others. So also, all of the studies conducted from (2024) going back, while this study was conducted in (2025) which is more recent. However, most of the methods of data analysis used in the reviewed studies were not Structural Equation Model (SEM) as this study used it.

Following to the research gaps discussed, previous studies suffered from the practical, conceptual, geographical, methodological and theoretical limitations. This necessitates further research into the "effect of electronic banking on customer satisfaction of some selected DMBs in Gombe state".

2.1 Customer Satisfaction

Customer satisfaction, in general, identifies customers' reactions in the perspective of the institutions in fulfilling their obligations and customer judgment of the satisfaction concerning the service offered by the institutions (Claude, 2022). Customer satisfaction is defined as a collection of outcomes of perception, evaluation and psychological reactions to the consumption experience with a product/service. In other words, customer satisfaction is a result of a cognitive and affective evaluation where some comparison standard is compared to the actually perceived performance. If the performance perceived is less than expected, customers will be dissatisfied. On the other hand, if the perceived performance exceeds expectations, customer will be satisfied (Shimeles, 2020). Therefore, the level of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organizations products. Business organizations of all types and sizes have come to realize that their main focus must be to satisfy their customers.

2.2 Mobile Banking

Mobile banking (also known as M-Banking) is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA); The earliest mobile banking services were offered over SMS, a service known as SMS banking. Mobile banking is used in many parts of the world with little or no infrastructure, especially remote and rural areas, this aspect of mobile commerce is also popular in countries where most of their population is un-banked (Uchechukwu & Stella, 2019). Also, Tewodros (2020) reveals that literally this is banking conducted through the use of a mobile phone.

According to this study Mobile Banking (MBB) is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions using a mobile device such as a smart phone or tablet. Mobile banking is

usually available on a 24-hour basis. Also, MBB it has to do with making financial transactions using cell phones, it is used to make financial transactions such as receiving bank alert, transfer money, payment of bills balance check, account statements among others.

2.3 Measures of Electronic Banking on Customer Satisfaction:

However, the dimension of E-banking: Mobile Banking which is used to measure Electronic Banking was measured by using Reliability, Convenience, Security, Cost, Ease of Use and Efficiency.

2.3.1 Reliability: it simply has some high level of guarantee. Hadid (2020) in general understanding, when we say something" is reliable it connotes many positive aspects of that "something". If Person is reliable, it indicates that the transaction (financial or social) you want to have with the person will be successfully accomplished without any disruption, Meaning unfailingly.

2.3.2 Convenient: If something is convenient, it adds to your comfort, causes little trouble, or is easy to use, do, or reach. If you live close to your job, that's convenient. It's very easy to get there and get home. Abubakar *et al.*, (2014) several studies identified that convenience has an important adoption factor in electronic banking service delivery.

2.3.3 Security: it has to do with the safety and protection of customers in formation and transactions (Ahmed *et al.*, 2020). Security is defined as the freedom from danger, risk, or doubt. It involves physical safety, financial security and confidentiality (Shimeles, 2020).

2.3.4 Cost: Cost/Fee charge refers to the amount of money that customers have to pay for products and services to acquire the ownership or exchange. In the context of business, fee charge is observed that it has a close relationship with the quality. The e-banking with high quality at a lower price can enhance customer satisfaction, considered as a competitive advantage (Pheap *et al.*, 2022).

2.3.5 Ease of Use: This variable deals with the ease of using digital means of doing business and conducting transactions (Alkhaibari *et al.*, 2023). The website's navigational capabilities, such as how the links are structured, whether they are attractively presented, and how easy it is to navigate them, are some of the characteristics that fall under the category of technology usability.

2.3.6 Efficiency: the dimension of efficiency is defined as the speed and easiness of website and user-friendly attribute of the web site as well (Ahmed et Al., 2020). Efficiency is avoiding a waste of time, effort, or resources.

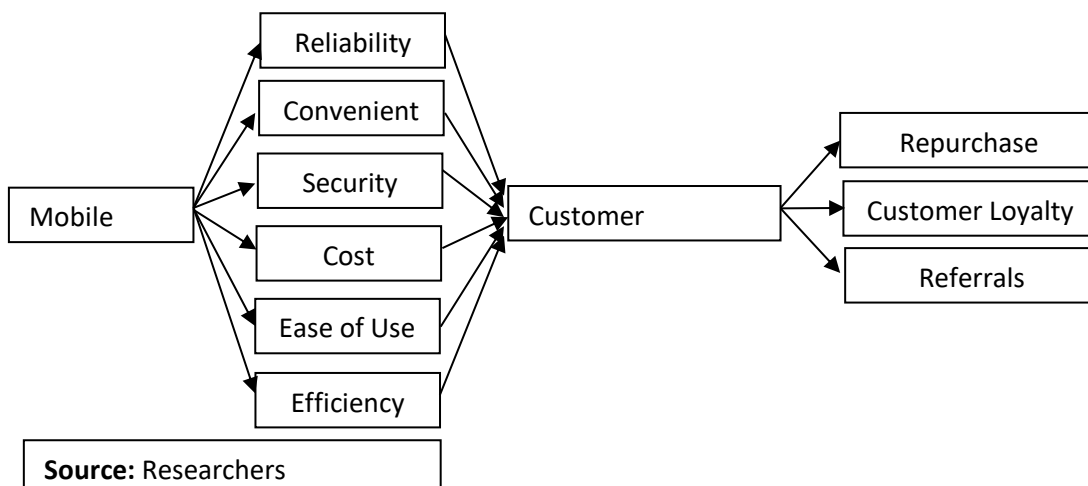
2.4 Measures of customer satisfaction

2.4.1 Repurchase Intention: Is the customers' actual behavior resulting in the repurchase of the same product or service. Uwabor *et al.*, (2021) repurchase Intention it has to do with willingness of consumer who already completed initial purchase and continues to use and buy from the same company.

2.4.2 Customer Loyalty: loyalty it has to do with willingness of customer to continue patronize a product or service for a business entity. A loyal customer he is ready to pay a reasonable amount to keep patronizing a product or service regularly, he will also spent money and time to search information on that product or service of that brand that he is loyal to, because the product or service use to make him more satisfied.

2.4.3 Referrals: referrals it has to do with a customer to share with one another about your particular product or service. Uwabor *et al.*, (2021) referrals marketing describes strategic method of maximizing words of mouth in order to promote product or service to potential buyers.

Figure 1: Conceptual Framework



2.5 Empirical Review

2.5.1 Mobile Banking (MBB)” and Customer Satisfaction

Zewge (2021) in Ethiopia conducted a Study on Effect of Electronic Banking on Customer Satisfaction: The main purpose of this study is to assess the effect of E-banking service quality on customer satisfaction of Hibret Bank. Primary data were collected by using 5-point Likert-scale questionnaire and the study participants were selected using a convenient sampling technique. From 396 questionnaires, 363 of them were properly filled and returned. The mean result revealed that customer satisfaction with the service dimensions of user friendliness and service security is good and their satisfaction on service reliability is moderate. The finding from the correlation between dependent and independent variable along with the casual effect result revealed that there is a positive and significant relationship between the service quality dimension Reliability and customer satisfaction. Perhaps the study was conducted in Ethiopia and this study was conducted in Nigeria. Also, it was conducted in 2021 and the current study was conducted in the year 2024. The study also used multiple regression model and correlation by using (SPSS) while this study used multiple regression analysis by using Structural Equation Model (SEM) to run the analysis. Unfortunately, the study used service quality measures in measuring e-banking which is totally wrong and therefore, the study does not capture appropriate variables. Therefore, this study used MBB proxiede by; Reliability, Convenience, Security, Cost, Ease of Use and Efficiency Hence, this study is unique as it is totally different with the previous studies of the same nature.

Ahmed *et al.*, (2020) in Pakistan examines ES-QUAL model and customer satisfaction in online banking: evidence from multivariate analysis techniques. This research used non probability sampling and purposive sampling. This research is a quantitative study using primary data based on a questionnaire distributed online to 110 e-banking users like respondents. The hypothesis testing in this study used the SPSS analysis tool through the IBM SPSS Statistics Version 22 application. The result illustrates that e-banking service quality, reliability influence both e-banking user satisfaction and e-banking user loyalty. The study was carried out in Pakistan and the current study was conducted in Nigeria. The study used service quality measures in measuring e-banking which is totally wrong and therefore, the study does not captured appropriate variables. Therefore, this study used MBB proxiede by; Reliability, Convenience, Security, Cost, Ease of Use and Efficiency Hence, this study is unique as it is totally different with the previous studies of the same nature. The study was also conducted in 2020 and this study was conducted in the year 2024 which is of more recent. The study used multiple regression analysis and correlation using SPSS, while this study used multiple regression analysis using Structural Equation Model (SEM) for the analysis.

Bashir *et al.*, (2023) in Bangladesh analysed Mediating Effect of Customer Perceived Value on the Relationship of Customer Satisfaction of E-Banking in Bangladesh. The data are collected from 323 e-banking customers taken from the four major cities of Bangladesh using structured questionnaire. Descriptive statistics including mean, standard deviation (SD), reliability, and correlation analysis are determined by using SPSS V23.0. Findings –Results show that there is a positive relation between the SQ reliability and CS. Similarly, SQ reliability has positive relationship with CPV and CPV have significant positive relationship with CS. It is also found from the results that CPV partially mediate on the relationship between SQ and CS. Originality/value. However, the study was conducted in Bangladesh and the current study was conducted in Nigeria. Also, the study was conducted in 2022 and the current study was conducted in the year 2024 to which is of more recent. This study used different tool of analysis multiple regression analysis using Structural Equation Model (SEM) in the data analysis in order and get more insight. More so, the study fails to identify the real measures of e-banking.

Samuel *et al.*, (2023) in Ethiopia conducted the research to examine the effect of electronic banking on customer satisfaction and loyalty: an implication for technological innovation. Data were obtained using a closed ended structured questionnaire from a total of 385 participants selected using a convenience sampling technique. Frequencies, percentage distributions, group modes, standard deviations, Chi-square correlations, and multinomial logistic regression were employed to analyse the quantitative data. The results confirmed a significant effect of the variable "reliability" on customer satisfaction. The adoption of electronic banking service that offers a meaningful guarantee takes care of problems promptly provides services precisely as promised, is always available and quick delivery enables customers to be better satisfied and thus create committed and loyal customers. Perhaps, Ethiopia is totally different with Nigeria. The study used SPSS while this study used Structure Structural Equation Model (SEM) and run the analysis and get better outcome. The dependent variable is not properly measured.

Shimles (2020) in Ethiopia conducted a study on the Effect of Electronic Banking on Customer Satisfaction: The Case of Dashen Bank S.co. The data was collected from a sample of 370 using a 5 point Likert scale questionnaire and it was analyzed and tested using multiple regression model to show the effects of the explanatory variable; reliability, system security. Ease of use, performance and availability of electronic banking service qualities on customer satisfaction. Based on the results of the statistical analysis, reliability of E-banking service qualities is found to have a significant effect on customer satisfaction in Dashen Bank. The study revealed areas of improvement with possible solutions that can solve the identified major problem areas of electronic banking service qualities in Dashen Bank, which includes continuous

reviewing and up grading of the existing performance of the service, reliability characteristic of electronic banking services of Dashen Bank. However, proper measures of e-banking are missing in the study. Therefore, this study used ATM, POS and MBB proxiede by; Reliability, Convenience, Security, Cost, Ease of Use and Efficiency Hence, this study is unique as it is totally different with the previous studies of the same nature. The study was also carried out in Ethiopia and current study was carried out in Nigeria. The study period also differs. The study employed SPSS using regression while this study used multiple regressions but using Structure Structural Equation Model (SEM) to get better results.

Mwiya *et al.*, (2022) in Zambia examined the effects of electronic on online banking customer satisfaction: Evidence from Zambia. The sample size of the study is 314 and multiple regression were used for the data analysis. The findings indicate that the E-SERVQUAL model is applicable in the Zambian context and that reliability is indeed relevant to electronic service quality and it affect customer satisfaction; the multiple coefficients of determination (51.1%) and correlation (71.5%) indicate a large effect size. This extends the E-SERVQUAL model into the under-researched developing country context of online banking in Zambia during the COVID-19 restrictions. However, the two studies shared different geographical area. Also, the measures used are not the right measures. Therefore, this study used MBB proxiede by; Reliability, Convenience, Security, Cost, Ease of Use and Efficiency Hence, this study is unique as it is totally different with the previous studies of the same nature. The study was conducted in 2022 and the current study was conducted in the year 2024. The study used multiple regression analysis using SPSS, while this study used multiple regression analysis by using structural equation Model (SEM) and get more insight.

Hadid *et al.*, (2020) in Malaysia carried research on The Effect of Digital Banking Service Quality on Customer Satisfaction: A Case Study on the Malaysian Banks. A developed and validated questionnaire was used to collect data from the sample of 384 participants selected form the five major commercial banks (May bank, Hong Long Bank, CIMB Bank, RHB Bank and Muamalat). The data collected were analysed using Partial Least Square Structural Equation Modeling (PLSSEM) using Smart PLS software. Measurement and structural model were assessed with all adequate validity and reliability evidences. The results revealed that, reliability has a positive influence on customer satisfaction (Pvalue 0.05). However, the study was conducted in Malaysia and this current study was conducted in Nigeria. Also the study used multiple regression analysis but using (SEM) for better results which is different with the one used in the study. Right variables are also missing. However, this study used MBB proxiede by; Reliability, Convenience, Security, Cost, Ease of Use and Efficiency Hence, this study is unique as it is totally different with the previous studies of the same nature.

Bali *et al.*, (2020) in Ethiopia examined The Impact of E-Banking Service on customer Ssatisfaction: the Case of Commercial Bank of Ethiopia in the Ethiopia. Sample of 164 customer is taken from the bank who has been using at list one of the e-banking types. A questionnaire was distributed to respondent who have been using e-banking to the minimum of more than one year in the selected banks where both qualitative and quantitative data was collected from primary data source. The collected data was analyzed using SPSS version 20 software where different statistical tools were used for elaboration of the basic objective. The result of the study revealed that reliability of service has maximum impact on customer satisfaction. However, the variables of the study are confusing. Therefore, this study used MBB proxiede by; Reliability, Convenience, Security, Cost, Ease of Use and Efficiency Hence, this study is unique as it is totally different with the previous studies of the same nature. Also, the study was conducted in Ethiopia and this current study was conducted in Nigeria. The study was conducted in 2020 and the current study was conducted in the year 2024 to date which is of more recent. The study employed reliability, factor analysis etc. and correlation while this study will use multiple regression analysis using Structural Equation Model (SEM) to run the test for better results.

Alkhaibari *et al.*, (2023) in Saudi Arabia examines the impact of e-banking on the sustainable customer satisfaction: Evidence from the Saudi Arabia commercial banking sector. Both quantitative and qualitative research methods were used in the study. A sample of 308 customers from the banking sector participated in this study. The researchers have developed a self-structured questionnaire to collect the relevant data. In addition, secondary data was gathered from published sources, including websites, journal papers, and publications of the chosen commercial banks. The findings of this study show that the service quality dimension; reliability have a significant impact on the level of user's satisfaction with e-banking in the Saudi Arabian commercial banks. However, the study was conducted in Saudi Arabia and this current study was conducted in Nigeria. Period of study also differs. The study used ANOVA and correlation while this study used multiple regression using Structural Equation Model (SEM).

Shanmugam and Chandran (2022) in India analysed the Relationship with Customer Satisfaction in E-Banking Service: A STUDY With Reference to Commercial Banks in Chennai City. Purpose: The researcher collected 600 responses through convenience sampling. Applied exploratory factor analysis, confirmatory factor analysis, regression analysis and structural equation model to conclude that service quality of electronic banking service is not a unique phenomenon. Findings: E-Banking depends upon the essential factor: reliability since the electronic banking services offered by

commercial banks are entirely based on the Internet process. Research, Practical & Social Implications: The study identifies the customer requirements and how commercial banks could satisfy such requirements with their banking strategies. Also, the study identifies whether any demographic difference exists among the customers of commercial banks in perceiving the quality of e-banking services. However, the measures used are surely not reliable. Therefore, this study used MBB proxied by; Reliability, Convenience, Security, Cost, Ease of Use and Efficiency Hence, this study is unique as it is totally different with the previous studies of the same nature. The study was conducted in India which is different with Nigeria. The study was conducted in 2022 and the current study was conducted in the year 2024 to date which is of more recent. The study used multiple regression analysis and correlation using SPSS while this study used Structural Equation Model (SEM) for better insight.

2.6 Theoretical Review

2.6.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) which was developed by Davis (1989) is adapted from the Theory of Reasoned Action (TRA) model, which can be defined as a reasoned theory of action with the premise that a person's reactions and perceptions of something will determine the person's attitude and behavior but explain and predict one's acceptance of information technology. Technology Acceptance Model (TAM) is used in Information Systems research as well; this is to explain the acceptance of a broad spectrum of new technologies such as technology operating systems to desktop application to online service. The purpose of this model is to explain the factors that cause users to accept technology (Indrasari *et al.*, 2022). In this study, the decision of e-banking users to accept e-banking is seen from the perspective of satisfaction of e-banking dimension measures (EBSM) Reliability, responsiveness, assurance, empathy and tangibility.

The Technology Acceptance Model (TAM) which was developed by Davis (1989) assumes that when users perceive that a type of technology is useful and also easy to use, they will be willing to use it. Consequently, the more employees recognize that the systems will make their tasks easier to perform; the higher is the probability that they will use it and accept the new technology as being useful.

This limitation was pointed out by Ngulube *et al.* (2015), who maintain that even established researchers and others tend to equate theoretical frameworks with conceptual frameworks, which could suggest that they are either unaware of the distinction between a conceptual and a theoretical framework or do not believe that there is one. Another, limitations of the TAM concern the variable which pertains to the behavior of users, which is inevitably evaluated through subjective means such as behavioral intention (BI) such as interpersonal influence. Nevertheless, interpersonal influence as the subjective norm is explained to mean when a person is influenced by words of mouth from a colleague, or a friend. While a superior can influence employee by directing a subordinate to perform a specific task with the use of technology, based on their IT policy, but a friend has no directive influence over staff who is a subject to the line manager. Another limitation is that, underlines of behavior cannot be reliably quantified in an empirical investigation, owing to a number of different subjective factors such as the norms and values of societies and personal attributes and personality traits.

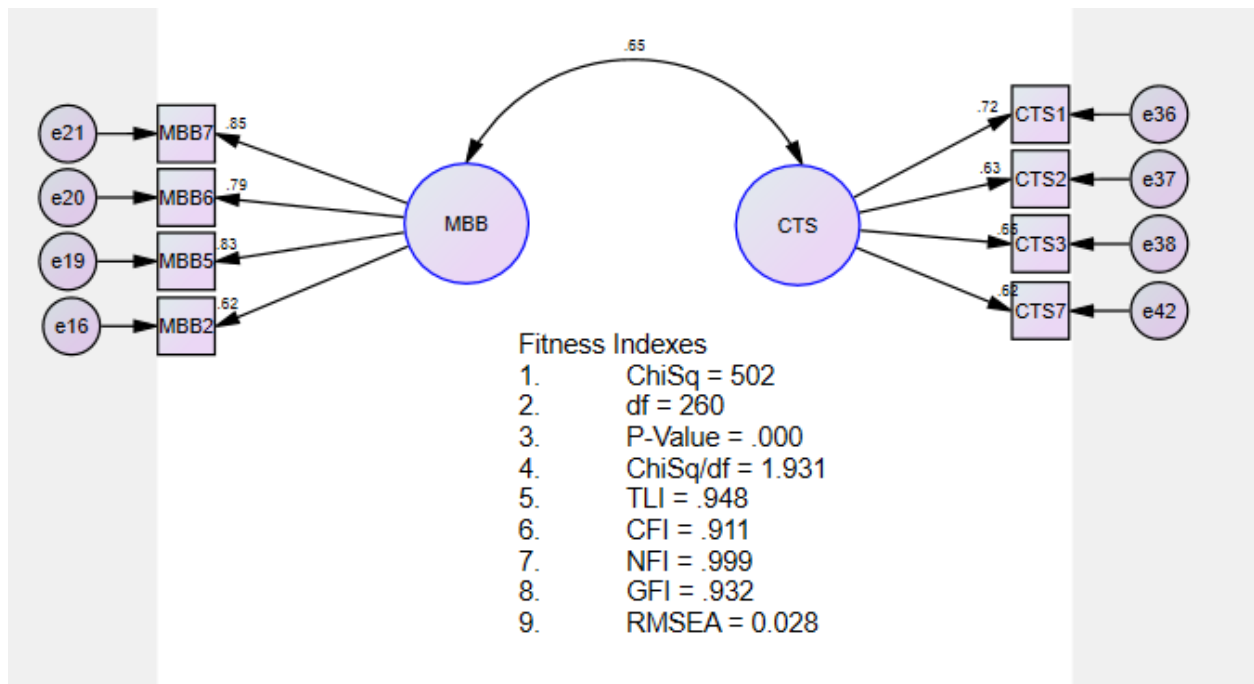
3.1 Methodology

The study used survey research design to obtain relevant data for the study, the population of this study consist of seven (7) selected DMBs out of seventeen (17) DMBs in Gombe State (Central Bank of Nigeria 2024), Fidelity Bank, GTbank, Jaiz Bank, Keystone Bank, TAJ Bank, United Bank of Africa, and Zenith Bank, where 399 customers of these banks are considered to be the sample size of the study. Structured questionnaire was considered as appropriate data collection instrument using five (5) Likert-scaled questionnaire, The study also adopted Structural Equation Model (SEM-AMOS) where multiple regressions were used to analyse the data that was collected, also Statistical Package for Social Sciences (SPSS) were used in analysing the descriptive data in the study.

4.1 Measurement model validity

Having established the validity and model fit of the individual constructs it is necessary to assess the validity of the entire measurement model of the research prior to evaluating the structural model. The rationale for conducting this analysis was to establish the validity of the entire constructs in unison, and to see the correlation between the constructs. The validity of the entire measurement model was determined by measuring the convergent and discriminate validity of the models constructs. Figure 6 shows the overall measurement model for the constructs.

Figure 1: Initial/Final Measurement Model



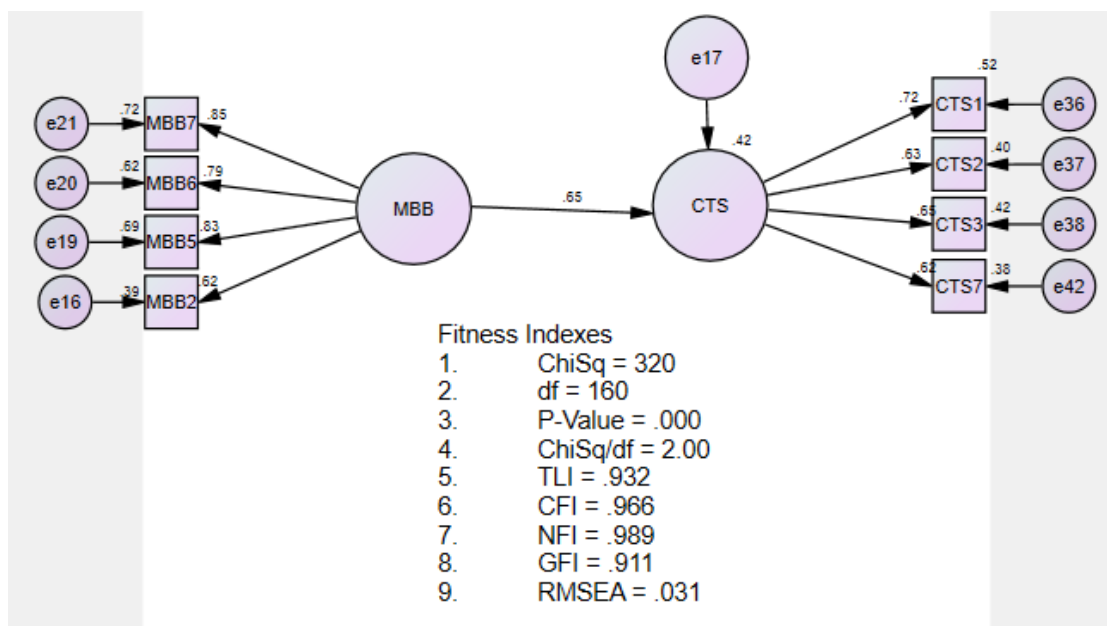
Source: AMOS Output, Version 23.0 (2024)

Figure 1 shows the output of the measurement model because, all the fitness indexes were achieved therefore, it does not need any re-specification. To ascertain the level of correlation between and among the construct, literature recommended that, for any correlated construct with a value higher than 85% (0.85), either of the two constructs should be dropped, as ‘one is a mirror to the other’.

4.2 Structural Model Evaluation

Upon satisfying the requirement for measurement model validity, the next stage in the SEM analysis involved the evaluation of the structural equation model in order to determine the causal relationship between the exogenous and the endogenous constructs. Using the AMOS graphics, the structural relationship between the constructs in the research framework was evaluated in line with the working hypotheses outlined.

Figure 2: Initial/Final Structural Model



Source: AMOS Output, Version 23.0 (2024)

Figure 2 above, displayed the AMOS graphic output for the structural model SM. This was achieved at the initial model and no any re-specification required base on the fitness indexes.

Table 1: Recommended Goodness-of-fit Indices and acceptance levels (Fox *et al*, 2020; Byrne, 2010)

Index Category	Indices Used	Acceptable level	Supporting source
Absolute fit	Chisq.	$P < 0.05$	Fuller <i>et al</i> , (2020)
Absolute fit	RMSEA	Value < 0.08	Sürücü and Maslakci (2020); Afthanorhan <i>et al</i> , (2020)
Absolute fit	GFI	Value > 0.90	Fox <i>et al</i> , (2020)
Incremental fit	AGFI	Value > 0.90	Fuller <i>et al</i> , (2020)
Incremental fit	CFI	Value > 0.90	Crandall, <i>et al</i> , (2020)
Parsimonious fit	Chisq./df	Value < 5.0	Sürücü and Maslakci (2020)

Table 2: Result of Hypotheses Testing of Structural Modelling

Path relationship	Estimate	S.E.	C.R.	P. V.	Result
MBB \rightarrow CTS	-0.358	0.141	2.544	0.011	Rejected

Source: AMOS SEM Output Version 23.0 (2024)

4.3 Ho Mobile banking (MBB) has no significant effect on customer satisfaction of some selected DMBs in Gombe State.

The study tested the above hypothesis with a P-value= 0.011 therefore, the null hypothesis is rejected and accepted the alternate hypothesis as: mobile banking (MBB) has significant effect on customer satisfaction in deposit money banks in Gombe State.

This finding is consistent with the work of Shimeles (2020) who investigate the effect of electronic banking service qualities on customer satisfaction: the case of dashen bank. Also, Mwiya *et al*, (2022) who Examines the effects of electronic service quality on online banking customer satisfaction: Evidence from Zambia.

5.1 Conclusion

To ensure profitability, customers must be satisfied by whatever means. Therefore, based on the reviewed literature; the Mobile Banking has positive effect on customer satisfaction in deposit money banks in Gombe state. Though, so many problems need to be addressed by the banks to enhance the customer satisfaction as well as to increase market share.

5.2 Recommendations

The deposit money banks in Gombe state should be doing periodically market research is significant to observe whether customers' needs, demands and expectations have changed or still remain on the current trends of mobile banking (MBB) to improve customer satisfaction.

5.3 Suggestion for Further Research

Upcoming studies can introduce more variable like ATM, POS Credit card, Debit card among others to see their effects on customer satisfaction. Future studies can also change the context of the studies from financial institutions to non-financial institutions. It's also suggested that the future researchers should change the location or add on the study area.

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