



---

# AN ASSESSMENT OF MOBILE BANKING APPS SERVICES DELIVERY AND CUSTOMERS SATISFACTION IN BAUCHI METROPOLIS

**ABDULLAHI MUHAMMED**

Business Administration/Management Science, Saadu Zungur University,  
Bauchi

[abdulmk1960@gmail.com](mailto:abdulmk1960@gmail.com)

**Abstract:** The study assessing the assessment of mobile banking apps services delivery and customers' satisfaction in Bauchi metropolis. The aim of the study was to investigate the assessing the significant relationship between services quality and Mobile Apps in banks customers, significant relationship between information quality and Mobile Apps in banks customers and significant relationship between system quality and Mobile Apps in banks customers in Bauchi Metropolis. Using the questionnaire method, data was gathered from 306 respondents and analyzed to bring out the findings. With the help of a five (4) point likert scale responses were gathered for both services quality, information quality and system quality and Mobile Apps in banks customers the repeated measure regression was used to allow comparisons among the variables under each condition. For finding depicts many factors like services quality, information quality and system quality to the Mobile Apps customers. The finding shows that if banks provide them necessary services quality, information quality and system quality. The present study, exploratory in DeLone and McLean Information Systems (IS) model of Mobile Apps users, was intended to develop a comprehensive conceptual framework from which researchers could examine and explain the relationship between customers' services quality, information quality and system quality usefulness of online banking and the relative advantages of online banking, its website quality, knowledge & support, information quality and customer in Bauchi state university. Multiple regressions were conducted to test the above-mentioned relationships. The recommendation made was that banks must take a critical look at the dimensions used 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 to the gaps that exist between services quality, information quality and system quality to the Mobile Apps customers.

**Keywords:** Mobile banking apps, Service quality, Information quality, System quality, Customer satisfaction

## **Introduction**

Electronic Banking is more commonly referred to as internet banking or simply net banking (Rahman, 2024). It is an electronic payment system supported by a website that offers an array of products and services of any bank that is possible to work electronically, like payments, transfers, deposits and more. Online banking offers customers almost every service traditionally available through a local branch including deposits, transfers, and online bill payments. Virtually every banking institution has some form of online banking, available both on desktop versions and through mobile apps (Nupur, 2024). With online banking, consumers aren't required to visit a bank branch to complete most of their basic banking transactions.

Mobile banking App requires a computer or other device, an Internet connection, and a bank or debit card. In order to access the service, clients need to register for their bank's online banking service. In order to register, they need to create a password. Banking transactions offered online vary by the institution. Most banks generally offer basic services such as transfers and bill payments, some banks Omoola (2024), also allow customers to open up new accounts and apply for credit cards through online banking portals. Other functions may include ordering checks,

putting stop payments on checks, or reporting a change of address. Checks can now be deposited online through a Mobile App Fozia, (2024). The customer simply enters the amount before taking a photo of the front and back of the check to complete the deposit. Online banking does not permit the purchase of traveler's checks, bank drafts, certain wire transfers, or the completion of certain credit applications like mortgages (Gomachab & Maseke, 2024). Convenience is a major advantage of online banking. Basic banking transactions such as paying bills and transferring funds between accounts can easily be done 24 hours a day, seven days a week, wherever a consumer wishes. Online banking is fast and efficient. Funds can be transferred between accounts almost instantly, especially if the two accounts are held at the same institution. Consumers can open and close a number of different accounts online, from fixed deposits to recurring deposit accounts that typically offer higher rates of interest. Consumers can also monitor their accounts regularly closely, allowing them to keep their accounts safe. Around-the-clock access to banking information provides early detection of fraudulent activity, thereby acting as a guardrail against financial damage or loss (Rahimi & Kozak, 2024).

Mobile Banking App services are available on all 7 days all-round the hours of the day. It is a convenient way to access account information and allied services related to the account from the comfort of your home and a stable internet connection. These services are made to be secure against cyber-attacks too. These net banking portals can only be availed through User IDs and passwords, by generating OTPs and catch as while logging in. Internet banking has reduced the stress on banking institutions as well as its customers (Farayibi, 2024). A customer may not need to go to the bank each time they want a different query addressed; in fact, the accessibility of chat bots and support services on the site make understanding and executing processes on the site easier for both the user and the provider (Proença & Rodrigues, 2024). A customer can access their account information, avail loans and keep check on the balance, make payments and transfer funds with security and ease. Nowadays, when an account is opened with a bank, online banking services are automatically offered. Opening an account with a bank is also possible online. Online banking also keeps and provides a track on all the transactions and activity done during an active session.

E-Banking is secure and quick to access and process. Non-financial information such as bank news, checking statements, filling and submitting Roy (2024) applications and more is possible with only a click of a button.

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 Nganga (2024). 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 (2024) defined mobile banking as “a service provided by a bank or other financial institution that allows its customers Nganga (2024) 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. (2024) 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, 2024). Mobile banking services are the type of digital banking service that became very popular among customers of banks in recent times (Rahman et al., 2024). Several studies have tried evaluating mobile banking service quality and its impact on customers. Fozia, (2020) 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. (2024) 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.

Technology has helped to form an e-commerce platform that empowered companies to take advantage of the gigantic population and marketplace by reaching over the internet and sell to the potential customers worldwide. E-commerce is a system to make business in certain marketplaces which are able to decrease the costs, generate higher sales volume and provide more real-time information to customers (Mustafa, 2024). Business to Customer business (B2C) models is one of the characteristics of ecommerce. The Business to Customer model turned out to be extremely prevalent for banking, insurance as well as online shopping (Mustafa, 2024). Online shopping website is a form of E-commerce that let customers to legitimately buying services and products from the vendors over the Internet through a web browser. Potential customers can gain full information about the product through reviews shared by previous buyers on the websites

Mobile Banking App come from the word electronic banking, which is considered as an activity that transacts, payments, and other transactions via the internet using a website owned by a security system. Based on the summary of transaction in e-banking payment by Bank Negara Nigeria (2024), the transaction of e-banking payment include Automatic Teller Machine, Cash Deposit

Machine, internet banking, mobile banking, credit card and others transaction. According to Akinci et al. (2024), in banking world, developments in information technology give a major impact on the development of more flexible payment methods and more user-friendly banking services. Electronic payment systems are, the new development and

dissemination of this technology by financial institutions is expected to produce more efficient banking system. However, e-banking is the transformation of the technology in banking which is the transaction through the digitally interacts with connecting devices or computer by using internet without need a human contact like accounting or bankers.

### **Statement of the Problem**

The issue of customer service is an important part of the aims and goals of banks in Nigeria. The problem of the customers' complaint of the long time procedures for traditional transaction such as cash transfer at deposit money bank premises within Nigerian Banking by automated teller machines (ATM) which mostly customers have to join long queue when trying to make e-payments or transfer money electronically.

Mobile banking customer, using systems for the first time may present challenges that prevent transactions from being processed, which is why some consumers prefer face-to-face transactions with a teller. Mobile banking doesn't help if a customer needs access to large amounts of cash. While he may be able to take a certain amount at the ATM—most cards come with a limit—he will still have to visit a branch to get the rest. Although online banking security is continually improving, such accounts are still vulnerable when it comes to hacking. Consumers are advised to use their own data plans, rather than public Wi-Fi networks when using online banking, to prevent unauthorized access. Additionally, online banking is dependent on a reliable Internet connection. Connectivity issues from time to time may make it difficult to determine if banking transactions have been successfully processed.

This long queues consumes customer's example time and 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 (2024) 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, 2024). This study is pointing towards mobile banking as the solution to this problem so as to satisfy the customers.

Poor internal control is also a byproduct of poor, incompetent and fraudulent management. are in most cases unable to attract good and competent management staff as they could not compete with conventional banks. They therefore resort to recruiting dismissed bank staff or appoint inexperienced. There is the need to know from time to time how customers feel about the quality of service they get from their bankers so as to re-strategize to give an appreciable service quality. This study therefore hopes to document from the customers the truth in the problems indicated above and their perception of the quality of service that they are currently receiving from their bankers and investigate their main sources of dissatisfaction.

### **Purpose of the Study**

1. The general objective of this study is to assessment of the Mobile Apps service delivery and customer's satisfaction in Bauchi Metropolis
2. To examine the significant relationship between services quality and Mobile Apps in banks customers in Bauchi Metropolis.
3. To examine the significant relationship between information quality and Mobile Apps in banks customers in Bauchi Metropolis.
4. To examine the significant relationship between system quality and Mobile Apps in banks customers in Bauchi Metropolis.
5. To examine the significant relationship between security quality and Mobile Apps in banks customers in Bauchi Metropolis.

### **Research Hypotheses**

From the research questions, we formulated the following hypotheses:

**H<sub>1</sub>**: There is a significant relationship between service quality and Mobile Apps in banks customers in Bauchi Metropolis.      **H<sub>02</sub>**: There is a significant relationship between information quality and Mobile Apps in banks customers in Bauchi Metropolis.

**H<sub>3</sub>**: There is a significant relationship between system quality and Mobile Apps in banks customers in Bauchi Metropolis

**H<sub>4</sub>**: There is a significant relationship between security quality and Mobile Apps in banks customers in Bauchi Metropolis

### **Literature Review**

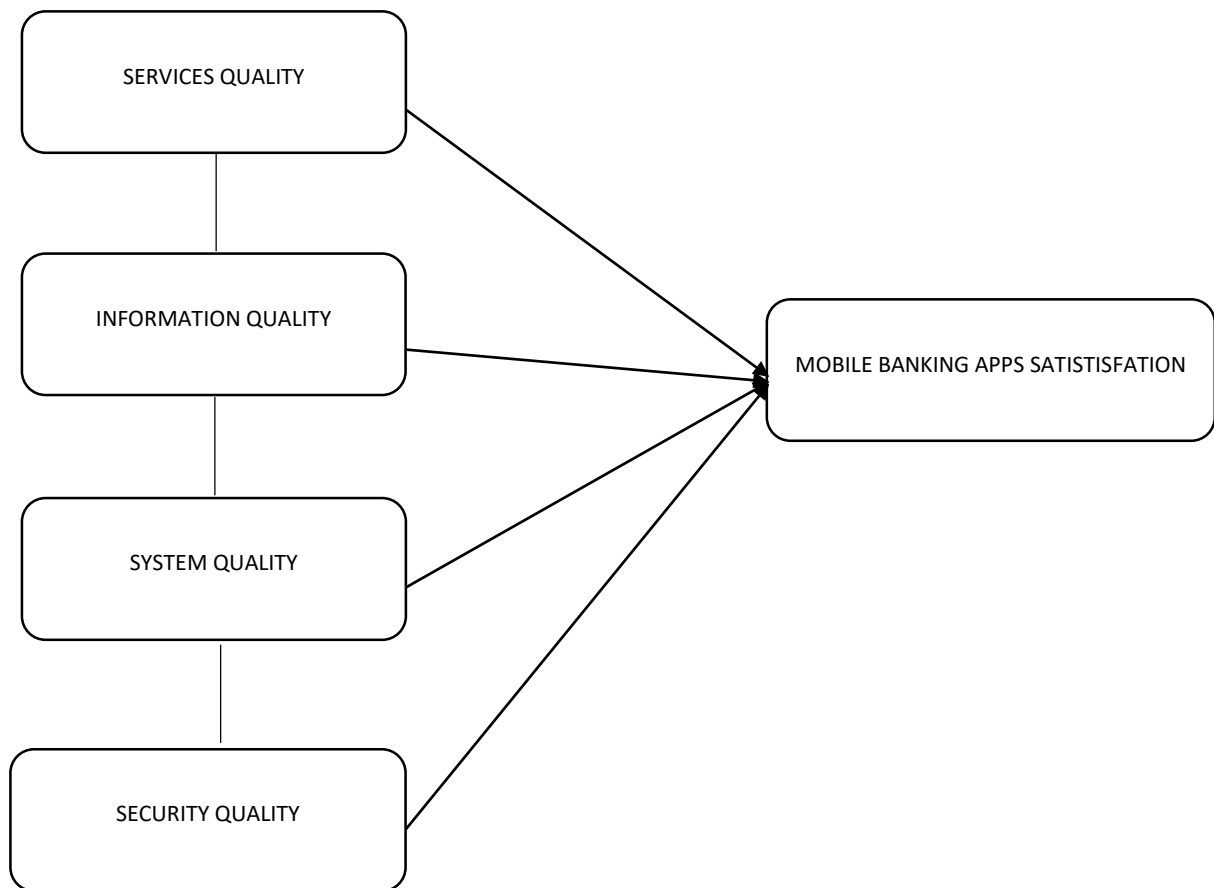
The literature review chapter looks at the various works done that bothers on quality of service in the service sector in general and the banking sector in particular. The review helps to answer some of the questions raised in the objectives and also provides supportive information that is necessary to the study. This review is picked from books, articles and

research works that cover the areas of consumer behaviour; the concept of service; service quality, customer satisfaction and loyalty; as well as service quality measurement models, empirical review on Mobile Banking App use and customer satisfaction contains on system quality and Mobile Apps user satisfaction.

**Conceptual Framework**

Independents Variable

Dependents Variable



**Figure. 1. Framework the independents variable and dependents variable**

***The Concept of Mobile Banking***

Mobile Banking Service according to Shilpa and Veena (2020) 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 (2020) 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”. Mobile banking (otherwise called Mbanking) is a name utilised for performing account exchanges or transactions, bill payments, credit applications, balance checks, and other financial exchanges through a mobile phone like a Personal Digital Assistant (PDA) or cell phone.

**Characteristics of The e-banking**

**i. Mobile Banking**

Mahad et al. (2022) in their study of the effect of perceived trust of mobile banking services in Nigeria, mobile banking is known as the usage of cellular phone or mobile gadgets to conduct the tasks of online banking using a personal computer, such as transfer of money between accounts, reviewing the balance in the account, fund transfer and bill payments. The penetration rate of mobile banking in Nigeria is still in the minority compare to the total number of cellular telephone subscriptions. The issue of trust that may affect the user’s to adopt the mobile banking services.

**ii. Automatic Teller Machine (ATM)**

Shanmugam and Guru (2024) stated that the traditional understanding about the embanking in Nigeria is when the customer use the ATMs for check balance and make withdraws. However, the public awareness of e-banking among consumers has increased and so people are ready to migrate to technology applications. Guru et al. (2024) stated that

Nigeria introduced ATM as the first evidence of emerging e-banking in the 1980s. Hooy and Chan (2024) in their study about technological innovation in services and the efficiency of Nigerian Commercial Banks, Automated Teller Machine (ATM) established since the 1980s to electronic banking and electronic cards in the 1990s. ATM does not only provide services to withdraw cash, but it also offers multi-purpose functions which include credit upload and bill payments. This could be possibly explained by the fact that the function of ATM nowadays is much more sophisticated than those in the 1990s. Nowadays, besides cash withdrawal and checking account balances, customers can also purchase pre-paid cell phone credit, pay routine bills, transferring funds, paying Touch in reload and others. All these terminals facilitate customers to do banking activities without constraint to office hours.

### iii. Internet Banking

Sadeghi and Hanzee (2024) stated that internet banking differs from various aspects of traditional branch banking. One of the most notable differences is related to the bank's information processing system. Previously, customers had contacts with bank front desk workers, who had access to bank information systems. In addition, internet banking user performs transactions online like check account balance and transaction history, transferring funds between accounts, request credit card advances, pay bills, order checks and manage investments and trade stocks immediately by only using the internet banking without need the customer to go to the place to make the transaction or any payments. Internet banking is also involved other financial services such as submit loan applications, deposit cash, share trading and others.

## Research Framework

### Methodology

#### Research Design

The research used the descriptive survey design adopted a quantitative method because of its appropriateness to the topic under investigation. Survey design is a scientific method which involves observing and describing the behavior of the subjects without influencing of data for the purpose of answering research question under study (Gemson and Kyamru, 2024). The study is based on Mobile Apps service delivery and customers' satisfactions. It is based on an in-depth investigation of individual group, or even to explore causation in order to find the underlying principles.

#### Population of the Study

The population of the study comprises of the commercial banks customers that uses Mobile Apps within Bauchi state university Gadau. The target population comprised of 1285 students of the part time faculty of Social Science and Management Bauchi campus as identified in 2021/2022 retrieve from the deans of both faculties as at 1<sup>st</sup> February 2023 admission list.

#### Sample Size Sampling Techniques

Probability sampling techniques the researcher will be used to select the sample from the population. Due to the nature of this research project, it appropriated to use purposive sampling techniques because of its feature of flexibility. The sample size which to be used for the purpose of this research Yamane Formula for sample size, in which the sample size is (306) represented through the total population of (1285) as at 1<sup>st</sup> February 2023

$$n = \frac{N}{1 + N(e)^2}$$

Where;

n	=	Sample size
N	=	Total population
e	=	Error margin (5%)
1	=	Constant

Therefore using the above formula

n = sample size  
N = the total population of the commercial banks customers from the selected Banks

Therefore:

$$n = \frac{1285}{1 + 1285(5\%)^2}$$

$$n = \frac{1285}{1 + \frac{1285(0.05)^2}{1285}} = \frac{4.2}{1 + 3.2} = 306$$

The researcher will use stratified random sampling techniques to draw a sample of 306 from the population of 1400 commercial banks customers that in some selected Banks in Bauchi metropolis Bauchi state.

**Instrument for Data Collection**

The researcher developed the instrument used in this thesis in order to obtain the required information. The four (4) points Likert's scale was scored as follows: Strongly agree, 1 point; Agree, 2 points; Disagree, 3 points; and Strongly Disagree, 4 point. From the questionnaire consisted of four sections A to D. Section A, demographic information of the respondents; section B contains information on the level of banks customers' satisfaction on Mobile Apps services delivery in Bauchi Metropolis; section C, concern with the security trends in customer satisfaction regarding Mobile Apps and services delivery in Bauchi metropolis while, section D, contains information on the challenges of Mobile Apps and service delivery to the customers' satisfaction in Bauchi Metropolis

**Data Validation and Reliability**

In order to ensure the face and content validity of the instrument, the researcher structured questionnaire was submitted to supervisor for vetting so as to ensure their appropriateness, relevance and clarity.

**Pilot Study**

Test-re-test reliability method was employed to establish the reliability of this research instrument. According to Asika (2014) in test-re-test reliability, the same measuring instrument was used to obtain two separate measurements on the same population at different times. The higher the degree of correlation between the two measurements, the higher the reliability of the instrument. In this study, the instrument was subjected to pilot study using commercial banks customers in Bauchi metropolis.

**Method of Data Collection**

The researcher will be administering the instrument to the commercial banks customers through guiding them with some explanations on how to respond to the questions but allow independent responses. However, the questionnaires have been administered each, face to face method of administration of the instrument will be used, each respondent will be given a considerable time to answer the questions, after which the researcher collect the questionnaire in the four (4) selected Banks.

**Results**

The chapter presents the results of the study based on the data collected using the methodology espoused in the previous chapter. The data was analyzed using the Statistical Package for Solutions and Services (SPSS). This chapter is organized into two main sections. The first sections consist of the demographic information of respondents and Mobile Apps users in the study. In the second section, the main findings on the Mobile Banking Apps services delivery and customers' satisfaction in Bauchi metropolis customers are presented. This is followed by the measurement of the gap between service quality, information quality, system security and security quality of the using the regression analysis for measure. The final section entails the discussion of the results on Mobile Apps user to overcoming the quality of services delivery, faster and instant information quality and system quality, security quality and network stability for customer satisfaction.

**4.2 Section A: Demographic Information**

*Table 1: Gender Distribution*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	192	62.7	62.7	62.7
Valid Female	114	37.3	37.3	100.0

Total	306	100.0	100.0
-------	-----	-------	-------

Source: Data gathered from the field

The questionnaire was designed to firstly seek information about the respondents' gender, age, university educational level, and their account type. This is to give a brief idea of the kind of respondents that were available for the research. The analysis shows that 62.7 % of the respondents are males and 37.3 % are females. As shown in table 1, the gender distribution gives a brief information about the Mobile Apps user patronage behaviour of customers' males as against females. Most researches conducted, have proved the same about the gender distribution of respondents.

**Table 2: Age Distribution**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-30	69	22.5	22.5	22.5
31-40	116	37.9	37.9	60.5
41-50	80	26.1	26.1	86.6
51-60	41	13.4	13.4	100.0
Total	306	100.0	100.0	

Source: Data gathered from the field

The age distribution of our respondents also showed the majority of respondents being within the age group of 31 to 40 years representing about 37.9 % of the respondents. This was followed by respondents within the age group of 41 to 50 years which also constitute about 26.1 % of the respondents. The remaining 22.5 % is made up of respondents within the ages of 51 to 60 years forming 51 and 60 years and above making up 13.0%. A quick and clear statement on the age distribution can be seen in table 2 below labeled age of respondents.

**Table 3: University Level of Distribution**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 100 Level	5	1.6	1.6	1.6
200 Level	25	8.2	8.2	9.8
300 Level	89	29.1	29.1	38.9
400 Level	57	18.6	18.6	57.5
500 Level	77	25.2	25.2	82.7
600 Level	53	17.3	17.3	100.0
Total	306	100.0	100.0	

Source: Data gathered from the field

The level distribution of our respondents also showed the majority of respondents being within the 300 level of representing about 29.1 % of the respondents. This was followed by respondents within the 500 level of which also constitute about 25.2 % of the respondents. The remaining 17.3 % is made up of respondents within the 600 level while 100 level making up 1.6 % and 200 level also makeup 8.2 %. A quick and clear statement on the level distribution can be seen in table 3 below labeled age of respondents.

**Table 4 Types of Account Distribution**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Savings/investment	48	15.7	15.7	15.7
Current and Deposit	122	39.9	39.9	55.6
Fixed Account	69	22.5	22.5	78.1
Both Savings and				

Current	63	20.6	20.6	98.7
Total	306	100.0	100.0	100.0

Source: Data gathered from the field

On the quest above, most respondents indicated that they operate Savings/investment accounts.

This was made up of 39.9 % of the respondents as indicated in table 4 below. Moreover, about 22.5 % indicated that they have both saving and current they operate accounts with as against 20.6 % who indicated they operate current account with their banks. From the distribution, it can be deduced that people try to operate Savings/investment accounts due to certain qualities that they may not find in both saving and current.

**Table: 5. Mobile Apps for Payment and Transfer Money?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	171	55.9	55.9	55.9
No	135	44.1	44.1	100.0
Total	306	100.0	100.0	

Source: Data gathered from the field

The analysis shows that 55.9 % of the respondents were use Mobile Apps for payment and transfer money and 44.1 % were not use Mobile Apps for payment and transfer money. As shown in table 5, that are use Mobile Apps for Payment and Transfer Money distribution gives a brief information about the Mobile Apps user patronage behaviour of customers'. Most researches conducted, have proved the same about the gender distribution of respondents.

**Table: 6 Mobile Apps Users Distribution**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	48	15.7	15.7	15.7
2	123	40.2	40.2	55.9
3	70	22.9	22.9	78.8
Above 3	65	21.2	21.2	100.0
Total	306	100.0	100.0	

Source: Data gathered from the field

The Mobile Apps users' distribution of our respondents also showed the majority of respondents being within the one Mobile Apps users of representing about 40.2 % of the respondents. This was followed by respondents within the two Mobile Apps users of which also constitute about 22.9 % of the respondents. The remaining 21.2 % is made up of respondents within the three Mobile Apps users and three above making up 15.7 %. A quick and clear statement on the age distribution can be seen in table 6 below labeled Mobile Apps users of respondents

**Test of Hypotheses 1**

This study has one major hypothesis and four sub- hypotheses. A Pearson product moment correlation co-efficient analysis was used to test the null hypotheses at 0.05 levels of significance.

The results were presented according to each of the hypothesis stated.

**Major Hypothesis 2**

There is a significant relationship between service quality and Mobile Apps in banks customers in Bauchi Metropolis, the explosive growth of service quality and Mobile Apps, uses ease, proficiency of services and among the most significant contributions to the service quality of Mobile Apps in banks customers in Bauchi Metropolis.



## Conclusion

The study has shown that generally overall satisfaction of customers was low. This means that Mobile Apps service performing poorly in their customer service delivery. As was indicated in the study, customers are getting dissatisfied with the high charges on loans, Mobile Apps and continues breakdown of network connectivity as well as long turn-around time for service delivery. All the dimensions on quality that is, the tangibles, reliability, responsiveness, assurance and acceptability all received poor remarks from customers hence indicating that the quality of customer service is below expectation. To achieve excellence, there is the need to develop and implement an industry wide service improvement programme. This must meet a number of objectives including: defining the Mobile Apps in a customer focused way to defining the management behavior needed to support quality of services delivery, information quality and system quality to the customer focus; considering how to motivate Mobile Apps customers and maintain their system quality; and identifying how the success of services delivery and will be measured. The only real aim of any transaction contain services delivery, information quality and system quality instants information faster service delivery and network reliability is to win, satisfy, and hence retain, its customer base.

## Recommendations

The banks must take a critical look at the dimension areas used in the study, namely service quality delivery for Mobile Apps customers, information quality and reliability, system quality and responsiveness, assurance and of Mobile Apps customers and patch up any differences that may exist in the Mobile Apps 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. The general public should convince individual account holder to understand impacts of Mobile Apps services delivery from banks to individuals account holders. That can check account balances, schedule and get payments, transfer money by using Mobile Apps services quality delivery in their banks

The study recommended the banks customers to identify their right regarding the uses of Mobile Apps service delivery which involved technical errors and intellectual's problems and at the end they will be able to know how to tackles such problems. Service quality is important, service to managers should endeavour not only to measure service quality but to take steps to manage and improve quality service delivery. Additionally, managers must also find and manage factors which may be related to quality of service and which ultimately affect customer satisfaction. This may lead to service managers spending relatively more on increasing customer satisfaction so, in turn increasing customer's intention to purchase the service. This is particularly important because of the widely acknowledged belief that it is more cost effective to retain an existing customer than to attract a new one.

The study also recommends the banks management to understand their fault and to identify ways to tackles this problems of inadequacy of Mobile Apps of banks service delivery and customer satisfaction. Therefore, customers' needs and wants and try to increase satisfaction level of customers by providing tailor made services. There must be a consistent effort to collect information on customers' new expectations so as to fashion products that will meet them. Human needs are insatiable and they continue to change over time. What may be satisfactory to the customer today may not be considered satisfactory service at all in the near future

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.

## References

- Agbadudu, A., Gounaris, S. & Stathakopoulos, V. (2024). Behavioral responses to customer satisfaction: an empirical study. *European Journal of Marketing*, 35(5-6), 687-707.
- Akinci, S. F. & Faghani, F. (2024). Mobile banking service quality and customer satisfaction: (Application of Servqual Model). *International Journal of Management Business Res*, 2, 351-361.
- Angel, B. & Zekiri, J. (2022). Measuring customer satisfaction with service quality using American customer satisfaction model (acsi model). *International Journal of Academic Research in Business and Social Sciences* 1(3), 232-258.
- Asfour, H. K. & Haddad, S. I. (2024). The impact of mobile banking on enhancing customers' esatisfaction: An empirical study on commercial banks in Jordan. *International Business Research*, 7(10), 145-169.
- Baruk, A. I. (2020). *Nabywcy finalni jako podmioty marketingowego oddziaływania*. Dom Organizatora Ed. Toruń. 2008.
- Berry, L. L., Seiders, K. & Grewal, D. (2022). Understanding service convenience. *Journal of Marketing*, 66(3), 1-17 Beyond Philosophy (n.d.). Customer loyalty. <https://beyondphilosophy.com/customer-experience/custo-mer-loyalty/>

- Cengiz, E. & Yayla, H. E. (2024). The effect of marketing mix on positive word of mouth communication: Evidence from accounting offices in Turkey. *Innovative Marketing*, 3(4), 74-86.
- Chan, Y. Y. Y. & Ngai, E. W. T. (2024). Conceptualising electronic word of mouth activity: An input-process-output perspective. *Marketing Intelligence & Planning*, 29(5), 488-516.
- Chang, K. C., Chen, M. C., Hsu, C. L. & Kuo, N. T. (2022). The effect of service convenience on post purchasing behaviours. *Industrial Management & Data Systems*. 110(9), 1420-1443.
- Chang, E. & Polonsky, M. (2020). The influence of multiple types of service convenience on behavioral intentions: The mediating role of consumer satisfaction in a Taiwanese leisure setting. *International Journal of Hospitality Management*, 31(1), 107-118.
- CIO (2024). Mobile banking market: Mobile technology is revolutionizing banking sector. <https://www.cio.com.au/mediareleases/32115/mobile-banking-market-mobiletechnologyis/>
- Colwell, S. R., Aung, M., Kanetkar, V. & Holden, A. L. (2024). Toward a measure of service convenience: multiple-item scale development and empirical test. *Journal of Services Marketing*, 22(2), 160169.
- Dai, H., Salam, A. F. & King, R. (2024). Determinants and influences of service convenience in electronic mediated environment (eme): An empirical study of Chinese consumers. In: *Americas Conference on Information Systems*. Retrieved 25 March. 2009, from <http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1154&context=icis2008>.
- DeLone, W.H., and McLean, E.R. Information systems success: The quest for the dependent variable. *Information Systems Research*, 3, 1 (2011), 60-95.
- Deyalage, P. A. & Kulathunga, D. (2020). Factors affecting online customer satisfaction: The Sri Lankan perspective. *International Journal of Business and Management*, 14(2), 99-114.
- Ernawati, D. & Laksono, D. (2020). Kajian tingkat kepuasan peserta terhadap pelayanan ekuitas dan aksesibilitas JPKM. *Buletin Penelitian Sistem Kesehatan*, 11(2).
- Farris, P. W., Neil, T. B., Philip, E. P. & David, J. R. (2024). *Marketing metrics: The definitive guide to measuring marketing performance*. Pearson Education, Inc.
- Felix R (2024) Security quality and customer satisfaction in selected banks in Rwanda. *Journal of Business and Financial Affairs*, 6(246). doi: 10.4172/2167-0234.1000246.
- Fozia, D. (2021). Impact of mobile banking on overall customer satisfaction: An empirical study. *London Journal of Research in Management and Business*, 18(1).
- Gitman, L. J. & McDaniel, C. D. (2024). *The future of business: The essentials*. Mason, Ohio: SouthWestern. ISBN 978-0-324-32028-2.
- Gomachab, R. & Maseke, B. F. (2024). The impact of mobile banking on customer satisfaction: Commercial banks of Namibia. *Journal of Internet Banking and Commerce*, 23(2), 1-18.
- Ibrahim, E., Joseph, M. & Ibeh, K. (2024). Customers perception of electronic service delivery in the UK retail banking sector. *International Journal of Bank Marketing*, 24, 475-493.
- Işoraitè, M. (2024). Customer loyalty theoretical aspects. *Ecoforum*, 5(2/9), 292-299.
- Jannang, A. R. & Abdullah, W. J. (2024). Effect of Servqual and accessibility on customer loyalty through customer satisfaction (study at ternate jati land mall). *Australian Journal of Basic and Applied Sciences*, 10(16), 275-281
- Jannang, A. R. (2024). Pengaruh pelayanan dan aksesibilitas terhadap kepuasan pasien rawat jalan di rumah sakit umum daerah Dr. H. Chasan Boesoirie Ternate. *Jurnal Equilibrium*, 2(1), 301-313.
- Jannat, M. and Ahmed, I. (2024). Factors influencing customer satisfaction of mobile banking services: A study on second - generation banks. *European Journal of Business and Management*, 7(26), 8897.
- Kahandawa K, Wijayanayake J (2024) Impact of mobile banking services on customer satisfaction: A study on Sri Lankan state commercial bank. <http://www.ijcit.com/archives/volume3/issue3/Paper030311.pdf>
- Khazaei, A., Manjiri, A., Samiey, E. & Najafi, H. (2024). The effect of service convenience on customer satisfaction and behavioral responses in bank industry. *International Journal of Basic Sciences & Applied Research*, 3(1), 16-23.
- Kaura, V. (2024). Service convenience, customer satisfaction, and customer loyalty: Study of Indian commercial bank. *Journal of Global Marketing*, 26(1), 18-27
- Sultan, A. A., Alfaiza, S. A., & Riyadh, H. A. (2022). Impact of mass collaboration on knowledge sharing process using mediating role of innovation capability. *International journal of organizational analysis*, 30(5), 1085-1099.
- Sultan, A. A., Hassan, M. G., & Noor, S. M. (2017). E-Commerce Adoption Among Iraqi Companies: Does Context Matters? *QALAAI ZANIST JOURNAL*, 2(4), 339-348.
- Sultan, A. A., & Noor, S. M. (2017). Absorptive capacity, civil conflict and e-commerce adoption among Iraqi firms. *Advanced Science Letters*, 23(8), 7992-7995.

Sultan, A. A., Noor, S. M., & Nasirun, N. (2018). Technological factors and e-commerce adoption among small medium enterprises in Kurdistan, Iraq. *Int. J. Eng. Technol*, 7(3.5), 98-101.