

# Impact And Adoption Of Mobile Banking On The Nigerian Customers In A Covid 19 Pandemic Era (A case study of Kano state metropolis)

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## Abstract

*Internet technology holds the potential to fundamentally change banks and the banking industry. With the advent of the Coronavirus Pandemic, financial institutions have had to limit physical contact and in turn had to develop their mobile banking platforms to cater for their teeming customer bases. In light of these current situation, this research paper focuses on the impact and adoption of mobile banking services by customers while taking Kano State metropolis as a case study. The paper used a survey to capture data by administering questionnaires to 150 respondents from Kano metropolitan areas. It also employs Statistics and Qualitative methods to analyze the data. The analysis reveals that even though a number of factors hinder the adoption of mobile banking, yet the findings reveal that adoption rate was encouraging and mobile banking is being adopted by bank customers. The influencing factors are analyzed under the major factors such as benefits of mobile banking usage, operation of bank accounts, customer awareness and overall satisfaction are found to be positively related with the usages of Mobile Banking. Factors such age, highest qualification, reasons of mobile banking usage and know how skill negatively related with the intention to use mobile banking service. However, benefits gained from mobile banking and the overall satisfaction are the only two factors that were found significant at  $p < 0.001$  and  $p < 0.05$  respectively. Thus, the research recommends that the banking industry should put more emphasis on improvements on mobile banking techniques and customer awareness.*

**Keywords:** Adoption, Impact, Mobile Banking, Banking Industry, Metropolis.

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## Introduction

Mobile banking can be defined as a product or service offered by a bank or a microfinance institute (bank-led model) or MNO (non-bank-led model) for conducting financial and non-financial transactions using a mobile device, namely a mobile phone, smartphone, or tablet Shaikh and (Shaikh and Karjaluoto, 2015). Banks have been delivering electronic services to consumers and businesses remotely for years.

The use of mobile banking in Nigeria is not as prevalent as other developed countries, and the banking industry should channel its efforts to improving the access to mobile banking services. In developed countries, mobile banking is all but a requirement for consumers at this point in time and according to a Mobile Banking Competitive Edge Study in 2018, 89% of respondents said they use mobile banking, up from 83% in 2017 (Meola, 2021).

The need for a more in-person model of banking has never been more recommended than during the current COVID-19 pandemic period, whereby crowds that gather at the banking halls and ATMs have been highly discouraged so as to implement social distancing protocols and other health safety guidelines. Bazarbash et al., (2020) report shows that there is significant increase in using mobile money in many low-and middle-income economics due to COVID 19 pandemic.

As such, this study aims to find out the level of adoption and impact of mobile banking during the Coronavirus 19 (COVID 19) pandemic on the Nigerian banking industry, taking Kano State metropolitan local government areas (Dala, Tarauni, Gwale, Kumbotso, Fagge, Ungogo, Nassarawa and Kano municipal) as a case study. The output of the research will help both the government and the banks in making policies and decisions.

There are several related works that investigate the adoption and impact of mobile banking. Agu, Simon and Onwuka, (2016) investigate the attitude of bank customers on the adoption of mobile banking services, the paper shows that the level of adoption is low among the middle aged compared to aged. The study was conducted in Enugu, Nigeria. Gao and Owolabi, (2008) study the effect of demographic factors on the adoption of mobile banking. In another work, Oluwaseun, (2020) pointed out the socio economic factors that influence consumers readiness to use mobile banking in Nigeria. The results shows that age, income, level of education, and position are factors that influence mobile banking adoption in Nigeria. In the other hand, By, Rashed and Noori, (2016) study the impact of mobile banking on service delivery.

Hanafizadeh *et al.*, (2014) attempted to answer question that whether bank customers' awareness of the services and advantages of Internet banking is effective in reducing the negative effect of customers' perceived risk on their intention of Internet banking adoption. Any decision to adopt internet banking is normally influenced by a number of factors. These include customer service enhancement and competitive costs, all of which motivate banks to assess their electronic commerce strategies Kondabagil, (2012). Furthermore, studies conducted in developing countries identify social and culture factors as strong influences on m-banking adoption Bankole, Bankole and Brown, (2011). Similarly, combining these factors with a range of demographic factors indicates that the impact of social and cultural features is significant (Crabbe et al., 2009).

Ezeoha, (2005) presented a dissertation that applies theoretical frameworks which have been developed from existing literatures on innovation of adoption to collect the responses from

270 users and non-users of mobile banking services in Nigeria. Each respondent provided answers for various eight dimensions of the questionnaire namely awareness, perceived usefulness, perceived ease of use, compatibility, social influence, perceived credibility, perceived self-efficacy, and perceived financial cost. The results of these findings reveal that each factor has some level of significance effect on consumer intention to adopt and use mobile banking in Nigeria.

Awamleh and Fernandes, (2005) adopted Diniz model to evaluate websites of foreign and local banks in the United Arab Emirates (UAE). The study analyzed the websites of banks on the United Arab Emirates using the Diniz model to access the extent of adoption of Internet banking. The results revealed that internet banking in the UAE is still in its infancy. The authors want proper development in the design, infrastructure and interface of Internet banking in the UAE to be established for customers to be encouraged to take full advantage of this technology. Khan and Khan, (2004) tested whether consumer adoption of online banking is affected by the distance to one's bank branch. The research estimated a model for online banking use with household level data from the USA from 1998 to 2001. The results showed that in the 1998 SCF, 5% of the respondents' report used online banking as a channel for doing business with their main financial institutions. By 2001, this share increased to 17%. The results however revealed that distance to the closest bank branch does not affect likelihood of online banking use by a household and that household income and education positively and significantly affect adoption.

### **Methodology**

The primary instrument used in this research paper is questionnaire. The questionnaire contains two sections, section one deals with the general information and the other one contains the demographic information which includes gender, age and educational status. Also, interview was used to gather more information for the study. The population of the study defines the category of people engaged in the research. The target population was made up of the bank customers from Kano State metropolitan areas (Dala, Tarauni, Gwale, Kumbotso, Fagge, Ungogo, Nassarawa and Kano municipal). The customers answered questions on how they perceived the adoption and impact of mobile banking on the Nigerian banking industry in the sampled area.

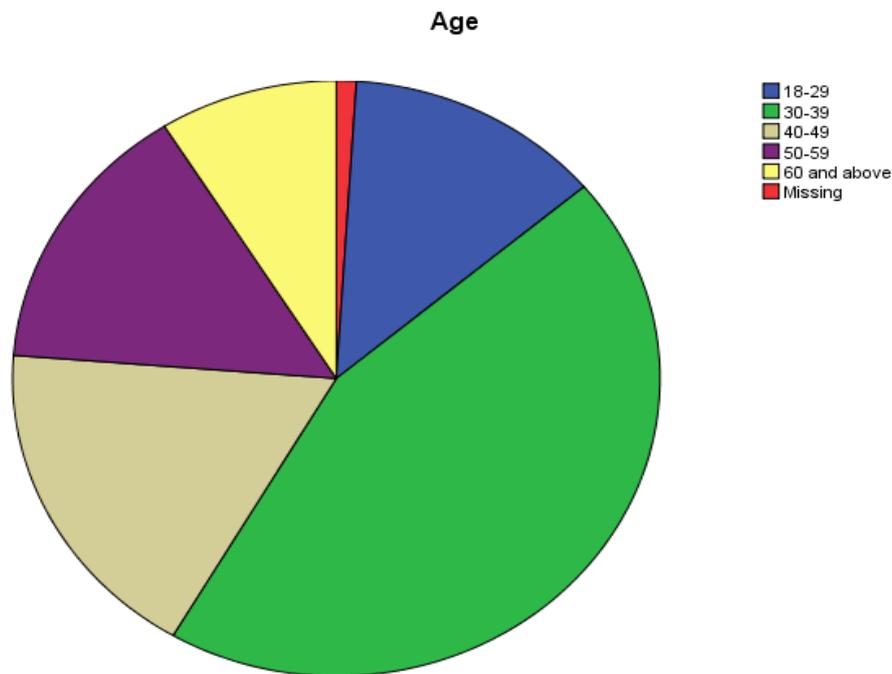
The paper also employed the use of the Statistical Package for the Social Sciences (SPSS) which was first launched in 1968 and was acquired by IBM in the year 2009. SPSS was chosen because of the following features; powerful for manipulation survey data, flexibility, can perform complex data analysis, and has more features than excel. Information gathered was presented in tabular form. The qualitative data gathered from observations, commentaries and also statements were linked to the quantitative information and conclusions drawn accordingly.

Descriptive statistics will be used to describe the basic features of data collected especially socio-demographic and general information attributes of the selected sample area. The goal is to present the result of the surveyed data in a more meaningful way, which allow for simpler interpretation of data. The data of the current study were collected from October 2020 to December 2020

### **Results and Discussion**

A total of 150 questionnaires was administered, 120 were returned, 100 are valid and 20 considered invalid. The reason for administering 150 is that; people are not willing to respond to questionnaire. Descriptive statistics was presented to summarize the features and

variability of the data collected on the mobile banking users and non-users as the case may be together with the socio-demographic and general information of the respondents.



**Figure 1: Age distribution of the respondents**

The pie chart shows the frequency distribution of socio-demographic characteristics of the respondents where their respective ages range from 18-60 and above years. Majority of the respondents (62.4%) are in their early and late thirties and forties as well, very few (8.9%) are between the ages of 60 and above years. This reveals that those respondents between the age of 30-39 are more into mobile banking than the rest of the distribution.

**Table 1 Usage and satisfaction of using phone for banking transaction**

		Do you use phone for mobile banking transactions?							
S/N		Strongly disagree	Disagree	Neutral	Strongly agree	Agree	Total	Statistics	
1	Overall satisfaction	4(4.8%)	5(6.0%)	11(13.3%)	29(34.9%)	34(41.0%)	83(83.0%)	X <sup>2</sup> =13.418 Df=4 p=0.009 Statistically Significant	
	Yes	2(11.8%)	0	0	1(5.9%)	14(82.4%)	17(17.0%)		
	No								
	Total								

Table 1 shows that there is statistically significant association between usage of phone for banking transactions with the overall satisfaction (p=0.009). This could be due to the favorable network service, benefits and other factors that the respondents are residing in that particular area.

The results shows that the range of ages of the respondents between 30-39 and 40-49 years are those that participate more in mobile banking, this could be due to most of the respondents chosen are predominantly workers and businessmen which could be an influencing factor to them in carrying their day-to-day activities. Only (8.9%) people of age between 60 and above years are the least users of mobile banking, even though they have an interest in it. More so, the gender distribution of the respondents is predominantly male with (65.3%) while the rest of (33.7%) are females. This could be probably due to majority of the workers and businesspeople are from male, the level of exposure and also in this our society most of the females are not opportune to do so many things as compared to their male counterparts.

Equally, the highest qualification distribution reveals that majority of the respondents (60.4%) who uses mobile banking the most are degree holders, this could be due to the era that we are in now where majority of the inhabitants of the states are acquiring more knowledge than before and probably due to the presence of almost 3 universities in the state. While only (5.9%) have third degree, this could be due to most of the educated people are not furthering their carrier after that first degree which is not encouraging. Also, (91.9%) have mobile phones which could probably be due to the fact that with one thousand naira only you can afford to buy phone even if it's not an android version, only (7.9%) of the rest that doesn't own a phone and it could be due to their self interest and other factors. However, (82.2%) among the respondents are using their mobile phones for banking transaction, this may probably be due to the free cost and internet connection needed to carry out mobile banking service. While only (16.8%) are not doing with their phones.

Holding the influence of know how skills problem from the respondents as a problem of mobile banking adoption, shows that most of them (28.7%) are facing some challenges of the technology in terms of how to operate and adopt mobile banking despite the fact that majority of the respondents are predominantly literate. From this knowledge, banks in Nigeria should create more awareness through social media ads and other forms of communication with their customers, develop quality initiatives in order to build customer's confidence and equally, banks should also review the cost of mobile banking service in Nigeria.

Looking at the age distribution and highest qualification of the respondents, it implies that these parameters are inconsistent in terms of mobile banking adoption and the impact with a prior expectation of the researcher, the level of knowledge and the range of ages are statistically insignificant at all levels.

As well, the influence of customer awareness which reached up to 82.5%, it shows that awareness in the technology is statistically significant. Among non-users, few confirmed that the lack of awareness is their main reason for not using mobile banking service and this is similar to the findings of Laforet and Li, (2005) in their study of mobile banking adoption in China that lack of awareness is the main reason for not adopting mobile banking. This is also similar to the findings in Australia that consumers are not aware about the pros and cons involved with online banking. Gao and Owolabi, (2008) found the level of awareness to be an important factor in encouraging consumers to adopt related self-service facility (internet banking) in Nigeria.

Therefore, the awareness about mobile banking has a positive effect on consumer intention to adopt and use mobile banking. This research finding shows that awareness is very important and if customers are well informed about the advantages/disadvantage and the benefits involved in general, it will be embraced. This shows that awareness has a positive influence on consumers intention to adopt and use mobile banking service. This could be due to operating bank accounts and using mobile phones for banking transactions.

More so, the overall satisfaction is statistically significant with p value of ( $p=0.009$ ) which is consistent with prior expectation of the researcher because it is expected that bank customers be encouraged and satisfied with mobile banking technology as part of the internet banking services. This could be as a result of the benefits of the technology, closure of the banks during this period, social distancing measures and 24/7 access to bank services.

### **Conclusion**

The paper utilizes a cross-sectional data in exploring the adoption and impact of mobile banking on the Nigerian banking industry during COVID 19 era. A sample of 150 respondents was drawn using structured questionnaire, from Eight selected local government in Kano state. The result clearly shows that there is a high level of customer knowledge about mobile banking in Nigeria and the impact was utilized during COVID 19 lockdown in Nigeria to achieve social distancing protocol laid by government. There are several benefits of using of mobile banking, which includes; conveniency, time-saving, secured, 24/7 access (accessibility). Hence customers are satisfied with the mobile banking services offered by the banks.

Though there have been improvements in the Nigerian banking industry in respect to mobile banking, but there is still more to be desired. The research study has the following recommendations: it is recommended that sensitization is a key tool for improving the level of awareness of mobile banking adoption. Banks in Nigeria must put in place the necessary measures to create the needed awareness on the impact, benefit and how secure is mobile banking to customers.

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