



THE ROLE OF MOBILE BANKING AND MICROFINANCE SOLUTIONS IN PROMOTING FINANCIAL INCLUSION: A STUDY OF NIGERIA'S DIGITAL FINANCIAL ECOSYSTEM

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ABSTRACT

Regardless of the digital growth and financial reforms, numerous Nigerians still lack formal financial access, which raises the question of how effective mobile banking and microfinance have been in promoting financial inclusion. It is against this backdrop that this study aims to assess the role mobile banking and microfinance play in promoting financial inclusion within the Nigerian digital financial ecosystem, particularly in the northcentral region. To achieve this, the study adopted a quantitative approach using a structured and close-ended questionnaire to collect data. Both convenience and snowballing sampling techniques were used to sample population members. Data were analysed using descriptive statistics such as frequencies and percentages while inferential statistics such as structural equation modelling. These were done via the aid of SPSS 28 and AMOS 28. The study's results demonstrated that mobile banking and microfinance together account for 78% of financial inclusion in the region. It also showed that mobile banking has a positive but insignificant effect on financial inclusion [$b=0.132$, $t=1.379$, $p=0.168$] while microfinance has a positive and significant effect on financial inclusion [$b=0.827$, $t=5.514$, $p < 0.05$]. In addition, the study revealed that mobile banking and microfinance are widely adopted in the region, and identified concerns about fraud and security, poor internet connectivity, limited access to microfinance institutions amongst others as some challenges facing the wider adoption of these services. The study therefore recommends that the government should drive financial inclusion in the northcentral region by building more microfinance institutions since the people are more inclined towards such financial services. This study contributes to the extant literature on inclusive finance in emerging economies and is significant in light of the growing interest in the different ways financial technology is driving economic development in emerging economies.

KEYWORDS: Mobile Banking, Microfinance, Financial Inclusion, Emerging Economy

1.0 INTRODUCTION

Over the years, Africa has been known to be a continent with low financial inclusion. However, in recent times, the continent seems to have been experiencing a constant increase in its financial inclusion due to the widespread adoption of mobile banking (Favour, 2025). With this rapid increase, it is expected that Nigeria which is commonly regarded as the giant of Africa and the fourth country with the highest gross domestic product (GDP) in Africa according to Statista (2025), would be the country with the highest inclusion rate in Africa, but that is not the case. Unfortunately, Kenya leads the African continent with a financial inclusion rate of 90.1% with Nigeria trailing behind with a rate of 63.3% (World Bank, 2024). Although Nigeria may have a pass mark in the rate of financial inclusion prevalent in the country, it still has a financial exclusion rate of 36.7%. This means that only 150.8 million have access to financial services, while 87.42 million are financially excluded, using the current Nigerian population of 238.2 million provided by Worldometer (2025). Having such a large number of people without access to financial services is a lot, and means the economy is missing out on a great deal of growth due to these absent contributions. In other words,

the gap in financial inclusion is a major hindrance to the economic growth of a developing nation as it decelerates progress towards economic stability, poverty reduction, and social equity (Hasanov, 2025).

It is pertinent to state that the northern region is responsible for the relatively high financial exclusion rate in Nigeria (EfiInA, 2024). This recent exposition seems to reveal that there is no significant growth in the financial inclusion of the Northern region since 2012 (Central Bank of Nigeria (CBN), 2024). According to the report released by the CBN (2024), the financial exclusion rates are higher in the northern region with the Northwest having a rate of 63.8%, Northeast 59.5%, and Northcentral 32.4%. This validates the fact that the north still has the highest rate of financial exclusion in the country.

Financial inclusion which is defined as the process that ensures that both individuals and businesses, especially in marginalised areas, are given easy access to affordable financial products and services that satisfy their needs is crucial for economic development (Hasanov, 2025). In fact, it is believed to play a significant role beyond economic development to both social and political development in a nation (Isabwa, 2021). The



cruciality of this necessitates the introduction of strategies to enlarge the scope of financial inclusion in an emerging economy. This accounts for the emergence of mobile banking.

In Nigeria, which is a developing country, mobile banking has become a strategy through which the unbanked or underbanked are provided with financial products and services for the purpose of promoting financial inclusion (Ebole et al., 2023). Mobile banking refers to the utilisation of mobile devices to offer bank-related services (Munyoki, 2015). In this study, it is simply seen as the use of mobile devices such as phones and tablets to facilitate financial transactions. As the word, “mobile” means capable of being moved around easily, it therefore means any portable telecommunication device that can be used to facilitate banking services. The use of these devices to facilitate financial transactions brings a lot of advantages both for the banking institutions and end-users such as quick cash transfers, easy access banking, reduced cost of operations, etc. (Aker et al., 2016; Ebole et al., 2023).

Mobile banking seems to be a good strategy for driving financial inclusion due to the rapidly increasing penetration of mobile phones into rural areas where traditional banking infrastructure remains limited or absent (Sukuruman, 2025). It is reported that Nigeria has a mobile phone penetration rate of 87% and a smartphone penetration rate of 66%, making it the ninth country with the highest number of smartphone users in the world (Tinker, 2023). With these penetration rates, leveraging mobile banking for increased financial inclusion seems to be an ideal option.

In addition, with the poor performance of financial inclusion of Nigeria when compared to other African countries like Kenya and South Africa, installing microfinance in underbanked areas has been another option. This may be because microfinance are the institutions that provide a variety of financial services such as loans, savings, insurance, money transfers to end users who are poor, have low income, or microenterprises, usually in rural areas (Ejefobihi et al., 2019). Due to the hesitance of commercial banks to move into rural areas with high underbanked population despite the initiatives of the Central Bank of Nigeria (CBN) to encourage such move, microfinance has become an alternative and significant strategy for financial inclusion through the easy credit access it provides to low-income groups, usually in rural areas (Adeola and Evans, 2017; Ene and Inemesit, 2015). This implies that the gap left by commercial banks due to their refusal or reluctance to move into rural areas and render financial services seems to have been filled by microfinance institutions.

Based on the foregoing, it is expedient to examine empirically the impact mobile banking and microfinance has on the financial inclusion of individuals in the northern part of Nigeria specifically the Northcentral. It is due to this that this study was borne.

1.1 Statement of Problem

As earlier stated, the northern region of Nigeria is responsible for the relatively high financial exclusion rate in the country. This problem seems to negatively affect the economic growth of the nation as it reduces progress towards economic

stability (Hasanov, 2025). With this in view, different studies have been performed to see how financial inclusion can be improved in Nigeria (Adeola and Evans, 2017; Busari and Jayeoba, 2025; Ebole et al., 2023; Ene et al., 2019), however, there is a paucity of studies that utilised primary data and concentrated on the northcentral region of Nigeria. Due to this, this present study aims at examining how mobile banking and microfinance drives financial inclusion in northcentral of Nigeria, using Kogi State as a case study.

1.2 Research Questions

This study aims to provide answers to the following research questions:

- (i) What is the extent to which mobile banking and microfinance institutions contribute to financial inclusion in the northcentral region of Nigeria?
- (ii) How are mobile banking and microfinance used in the northcentral region of Nigeria?
- (iii) What are the challenges hindering the adoption and effectiveness of mobile banking and microfinance in the northcentral region of Nigeria?
- (iv) How can digital financial inclusion be improved in the northcentral region of Nigeria?

1.3 Research Objectives

The study's specific objectives are:

- (i) To assess the extent to which mobile banking and microfinance institutions contribute to financial inclusion in the northcentral region of Nigeria.
- (ii) To examine how mobile banking and microfinance are used in the northcentral region of Nigeria.
- (iii) To identify the challenges hindering the adoption and effectiveness of mobile banking and microfinance in the northcentral region of Nigeria.
- (iv) To offer recommendations for improving digital financial inclusion in the northcentral region of Nigeria.

2.0 LITERATURE REVIEW

2.1 Effect of Mobile Banking and Microfinance Institutions on Financial Inclusion

In the literature, several scholars have examined how mobile banking and microfinance influence financial inclusion in developing economies. Nnaomah et al. (2024) investigated the role of digital banking on financial inclusion in the US and Nigeria. From their findings, it was discovered that digital banking also known as mobile banking contributed greatly to financial inclusion. However, the research they performed was not empirical, and hence, their findings were based on already existing data which may not in tandem with current reality. Regardless, Osuma et al. (2025) who evaluated the link in microfinance and financial inclusion in alleviating poverty and achieving sustainable development in sub-Saharan Africa demonstrated that poverty is reduced through the presence of microfinance and mobile banking in sub-Saharan Africa. While this study was conducted using the quantitative approach, it focused solely on secondary data from 10 sub-Saharan African



countries, which limits the scope of capture of the different nature of microfinance and financial inclusion across various regional contexts. Adeola and Evans (2017) in a way supported the study of Osuma et al. (2025) by stating that microfinance positively affects financial inclusion but in an insignificant way in the short run, but has a significant positive effect on financial inclusion in the long run in Nigeria. Although this study provided strong results that is highly relevant to the Nigerian context, it also focused on secondary data which has the possibility of being inaccurate or unreliable since the researchers were not responsible for the process of data collection, measurement, or verification. The above studies highlighted showed that there is a paucity of research that examines the phenomenon using primary data in the context of Nigeria.

2.2 The Use of Mobile Banking and Microfinance

In developing economies, the adoption of mobile banking and microfinance seems to be on the rise. Nigeria, for instance, has experienced an exponential increase in the adoption of mobile banking and a slight increase in the use of microfinance. According to the report of NIBSS (2021), Nigeria has seen an astronomical rise in the banked population from 15.6% to 45.3% in 2021, due to the adoption of mobile banking. However, Kyari and Al Hudithi (2022) demonstrated through their study that mobile banking is not well accepted in Nigeria due to the potentiality of cybercrimes. This finding implies that mobile banking is not really accepted in Nigeria because bank users are concerned about the safety or security of their funds. However, it does seem that this finding has become obsolete as Burnett and Kinder (2025) reported that Nigeria is ranked second highest in the world with a percentage score of 82% in mobile banking adoption after Turkey with 85%. This means there is a wider acceptance of mobile banking by the Nigerian populace in 2025 than it was in 2022. Siano et al. (2025) corroborated this through their study that ease of using mobile banking, the safety concerns of cyber fraud and theft, and social influence of friends, relatives, and social trends are the factors driving mobile banking adoption in Nigeria. Despite this, the Northern region in the Nigerian context is reported as highly unbanked (CBN, 2024; EflnA, 2024). On the other hand, Sasu (2023) reported that about 3% only relied on microfinance banks in the fiscal year, 2023. Barisua (2025) corroborates this report by stating that about 3.8% only of the Nigerian population uses microfinance. Comparing both statistical reports, it is obvious that there was only a percentage increase of 0.8%, implying a little increase. Nonetheless, there seems to be a scarcity of knowledge on the extent of use of microfinance in the northern region of Nigeria. Hence, this calls for a thorough investigation on the extent of use of mobile banking and microfinance in the northern region of Nigeria.

2.3 Challenges Hindering the Adoption and Effectiveness of Mobile Banking and Microfinance

According to the literature, there are several challenges hindering the adoption and effectiveness of mobile banking and

microfinance in Nigeria. Adeniyi and Epetimehin (2025) identified regulatory constraints, high operational costs, inadequate infrastructure, and absence of financial literacy, as challenges faced by microfinance institutions in the Southwestern region of Nigeria. With reference to mobile banking, Amahi et al. (2025) categorised the challenges into two aspects – technical and user-related. For the technical aspects, poor network connectivity, application compatibility issues, frequent system failures, and technical glitches are some challenges hindering the adoption of mobile banking. For the user-related aspect, low digital literacy and poor customer support are some of the challenges hindering the adoption of mobile banking. Pankomera and Gruinen (2018) further identified lack of trust due to perceived security concerns and legal frameworks as some challenges affecting the effectiveness and adoption of mobile banking in Africa. These challenges, if not tackled, could inhibit economic growth and development of the nation. However, it is important to state that regardless of these identified challenges, few studies have actually investigated whether these challenges are also prevalent in the Northcentral region of Nigeria. This is one of the gaps this present study aims to fill.

3.0 METHODOLOGY

This research adopted a quantitative approach to examine the phenomenon of interest. The rationale behind the adoption of this approach is due to the positivist research philosophy of the researchers, where knowledge is generated in an objective way. To achieve the research objectives, descriptive statistics such as frequencies and percentages were used, and inferential statistics such as structural equation modelling (SEM) was used. These were done using SPSS 28 and AMOS 28 respectively.

A sample size of 150 residents in Kogi State, Nigeria was used, since focus was on the northcentral region of Nigeria. The sample size of 150 was used based on the assertion of Tabachnick and Fidell (2001) who stated that 100 is the minimum sample size for a study utilising SEM. However, the study got a response of 129, indicating a response rate of 86%. This response rate is sufficient to conduct the study based on the assertion of Sataloff and Vontela (2021) that a response rate of at least 70% is sufficient in survey research. Convenience and snowballing sampling techniques were used to identify members of the sample. In using convenience sampling, since one of the researchers is based in the region, he had easy access to some of the participants and also utilised social media platforms such as Whatsapp and Facebook to collect the data. In addition, snowballing sampling was used where already recruited participants were asked to refer their kind to participate in the research.

With respect to the research instrument, an electronic questionnaire using a five-point Likert scale of Strongly Disagree (1) – Strongly Agree (5) was used. This was subjected to both reliability and validity tests as shown below:

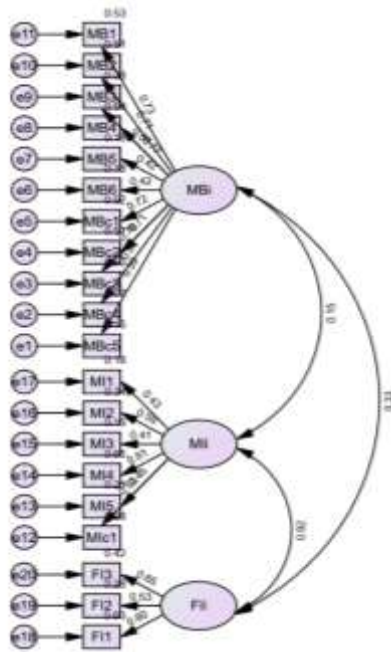


Figure 2: Model 1

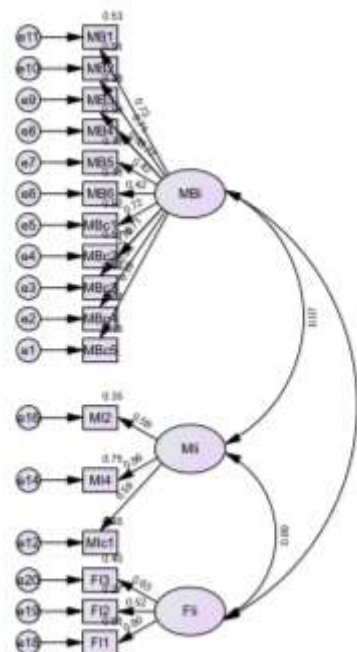


Figure 1: Model 2

In testing the research instrument, a pilot study comprising 20 participants was performed. The research instrument was subjected to both composite reliability and convergent validity tests. The results generated demonstrated that the research instrument was both reliable and valid using the Fornell and Lacker (1981) criterion which states that a research instrument is

deemed adequate for a study if its Average Variance Extracted (AVE) < 0.5, but Composite Reliability (CR) > 0.6. From the pilot study, all the constructs of the questionnaire met this criterion. However, this was after three indicators, MI1, MI3, and MI5 were removed from the MIi construct as shown in figure 2. This can be shown in the table below.

Table 3.1: Validity and Reliability Tests

Constructs	AVE	CR
Mobile Banking	0.44	0.858
Microfinance	0.48	0.730
Financial Inclusion	0.44	0.695

Source: Researchers' Computation (2025)

4.0 RESULTS

4.1 Socio-demographic Characteristics of Respondents

Table 4.1: Socio-demographic Characteristics of Respondents

Characteristics	Frequency	Percentages
Age		
18-28 years	18	14.0
29-39 years	66	51.2
40-50 years	35	27.1
Above 50 years	10	7.8
Gender		
Male	97	75.2
Female	32	24.8
Educational Qualification		
Senior secondary school qualification	6	4.7
Diploma	4	3.1
B.Sc./HND	52	40.3
Master's degree	34	26.4
PhD	33	25.6



Employment Status		
Unemployed	14	10.9
Self-employed	26	20.2
Employed	89	69.0
Location		
Kogi West	93	72.1
Kogi East	5	3.9
Kogi Central	31	24.0
Total	129	100.0

Source: Field Survey (2025)

The demographic profile of respondents is displayed in Table 4.1, and it shows that the majority of respondents (51.2%) are within the age range of 29-39 years, followed by 27.1% aged 40-50 years, followed by 14.0% aged 18-28 years, while only 7.8% are above 50 years. Also, most of the participants were male (75.2%) while females made up 24.8%. Regarding education, a majority of the participants hold B.Sc./HND degree (40.3%), while 26.4% possess Master's degree, and 25.6% possess a PhD, thereby demonstrating a highly educated sample. In terms of employment, Table 4.1 showed that majority of the participants are employed (69.0%), 20.2% are self-employed, while 10.6% are unemployed. With regards to geography, most of the respondents are from Kogi West (72.1%), 24.0% are from Kogi Central, while only 3.9% are from Kogi East. This analysis demonstrates that the sample is dominated by working-age, educated, and employed males who are concentrated in Kogi West.

4.2 RO1: Extent to Which Mobile Banking and Microfinance Institutions Contribute to Financial Inclusion in the Northcentral Region of Nigeria

In testing the relationships between mobile banking, microfinance institutions and financial inclusion, a structural equation model generated through AMOS was used. In using this model, a model fit was performed. Based on the criterion

postulated by Hair et al. (2010), a model is said to have a goodness-of-fit if the value of the CMIN/df is <5 , the goodness-of-fit (GFI) index; the Tucker and Lewis (1973) index (TLI); the confirmatory fit index (CFI) > 0.90 (Bentler, 1990; Hair et al., 2010). In addition, the model is said to have a reasonable fitting if its standardised root mean square residual (SRMR) value ≤ 0.08 (Hu and Bentler, 1999) and; the root mean square error approximation (RMSEA) is between 0.08 and 0.1 (Fabrigar et al., 1999). For this model, the fit indices shown in Table 4.2 fell within the acceptable range: CMIN/df = 2.185, the goodness-of-fit (GFI) = 0.910, TLI = 0.922, CFI = 0.946, SRMR = 0.07, and RMSEA = 0.096

The squared multiple correlation was: 0.78 for Financial Inclusion. This shows that 78% variance in Financial Inclusion is accounted by Mobile Banking and Microfinance Solutions.

The study assessed the impact of Mobile Banking and Microfinance Solutions on Financial Inclusion. The impact of Mobile Banking on Financial Inclusion was positive but insignificant ($b=0.132$, $t=1.379$, $p=0.168$), hence, H1 was not supported. The impact of Microfinance Solutions on Financial Inclusion was positive and significant ($b=0.827$, $t=5.514$, $p < 0.05$), supporting H2. Model fit indices and hypotheses results are presented in Table 4.2.

Table 4.2: SEM

Hypothesized Relationship	Standardized Estimates	t-value	p-value	Decision
MBi $\rightarrow$ FI	0.132	1.379	0.168	Not Supported
MI $\rightarrow$ FI	0.827	5.514	$P < 0.05$	Supported
R-Square				
Financial Inclusion	0.78			
Model Fit				
CMIN/df = 2.185, the goodness-of-fit (GFI) = 0.910, TFI = 0.922, CFI = 0.946, SRMR = 0.07, and RMSEA = 0.096				

Source: Field Survey (2025)



4.3 RO2: How Mobile Banking and Microfinance Institutions are Used in the Northcentral Region of Nigeria

Table 4.3: Extent of Use of Mobile Banking and Microfinance Institutions

Items	SD		D		N		A		SA	
	F	%	F	%	F	%	F	%	F	%
I regularly use mobile banking for transactions.	5	3.9	8	6.2	17	13.2	57	44.2	42	32.6
Mobile banking is part of my everyday financial activities.	2	1.6	12	9.3	15	11.6	59	45.7	41	31.8
Mobile banking is my preferred method for savings and transfers.	2	1.6	12	9.3	27	20.9	51	39.5	37	28.7
I use microfinance services (such as small loans or savings) when I need financial support.	6	4.7	2	1.6	9	7.0	70	54.3	42	32.6
People in my community make use of microfinance services.	4	3.1	25	19.4	16	12.4	55	42.6	29	22.5
I prefer using mobile banking or microfinance instead of going to a traditional bank	2	1.6	4	3.1	14	10.9	77	59.7	32	24.8

Source: Field Survey (2025)

The results in Table 4.3 show that mobile banking and microfinance are widely used in the region. A large majority of respondents regularly use mobile banking for transactions (76.8% agree/strongly agree) and consider it part of their everyday financial activities (77.5%). Similarly, 68.2% prefer mobile banking for savings and transfers, highlighting its role in personal financial management. Microfinance institutions are also heavily relied upon, with 86.9% reporting that they use microfinance

services such as small loans or savings when in need of financial support. At the community level, 65.1% observe that microfinance services are commonly used, indicating broad but uneven adoption across areas. Importantly, 84.5% of respondents prefer using mobile banking or microfinance instead of traditional banks, underscoring their centrality to financial inclusion and access in the northcentral region of Nigeria.

4.4 RO3: Challenges Hindering the Adoption and Effectiveness of Mobile Banking and Microfinance

Table 4.4: Challenges Hindering the Adoption and Effectiveness of Mobile Banking and Microfinance

Items	SD		D		N		A		SA	
	F	%	F	%	F	%	F	%	F	%
Slow or unreliable internet makes it hard for people to use mobile banking	1	0.8	4	3.1	13	10.1	59	45.7	51	39.5
Frequent system failures discourage people from using mobile bank applications	3	2.4	0	0.0	15	11.6	67	51.9	45	34.9
People are worried about safety or fraud when using mobile banking	2	1.6	0	0.0	6	4.7	36	27.9	85	65.9
Low digital literacy discourages people from using mobile banking.	2	1.6	6	4.7	7	5.4	33	25.6	81	62.8
High transaction charges discourage the use of mobile banking services.	7	5.4	0	0.0	4	3.1	42	32.6	76	58.9
Limited availability of microfinance institutions reduces access to financial services.	6	4.7	7	5.4	9	7.0	66	51.2	41	31.8

Source: Field Survey (2025)



The findings in Table 4.4 reveal several key barriers to the adoption and effectiveness of mobile banking and microfinance. Technical issues stand out strongly: 85.2% of respondents agreed that slow or unreliable internet hinders mobile banking, while 86.8% identified frequent system failures as discouraging factors. Security concerns are critical, with an overwhelming 93.8% expressing worry about fraud and safety in mobile banking. Similarly, 88.4% noted that low digital literacy limits usage, highlighting the challenge of technology adoption. Cost also plays a major role, as 91.5% reported that high transaction charges discourage them from using mobile banking services. Finally, access to financial services is constrained by geography, with 83% of respondents stating that limited availability of microfinance institutions reduces access in their communities.

5.0 DISCUSSION

This study aimed at examining the role mobile banking and microfinance play in promoting financial inclusion in the Nigerian digital ecosystem using the northcentral region as a reference. According to the study's findings, mobile banking and microfinance solutions account for 78% of financial inclusion in the northcentral region of Nigeria. This shows that when combined together, both financial services are strong predictors of financial inclusion in the region. However, individually, the study found that mobile banking has a positive but insignificant impact on financial inclusion. This means that although mobile banking positively drives financial inclusion in the northcentral region of Nigeria, it does it in an insignificant way. This negates the finding of Nnaomah et al. (2024) who demonstrated that mobile banking strongly and positively drives financial inclusion. Moreover, this present study found out that microfinance has a significant and positive influence on financial inclusion. This demonstrates the stronger positive influence of microfinance on financial inclusion in the northcentral region of Nigeria than mobile banking. This finding is in tandem with that of Adeola and Evans (2017) who asserted that microfinance has a strong positive influence on financial inclusion in the long-run in Nigeria. Although this present study was cross-sectional in nature, it still corroborates the longitudinal study conducted by Adeola and Evans (2017).

Furthermore, the study attempted to examine how mobile banking and microfinance are used in the northcentral region of Nigeria. It was discovered that mobile banking and microfinance are widely adopted in the northcentral region of Nigeria. This negates the assertion of CBN (2024) and (EfiInA, 2024) who revealed that there is no significant growth in the financial inclusion of the Northern region since 2012. From this result, it is implied that there is a possible increase in financial inclusion due to the wide adoption of mobile banking and microfinance in the region. According to the results, mobile banking is regularly used for savings, transactions, and daily financial activities, while microfinance is heavily relied upon for savings and loans. These findings also contradict the assertion of Kyari and Al Hudithi (2022) that mobile banking is not well accepted in Nigeria due to the potentiality of cybercrimes. However, it supports the finding of Burnett and Kinder (2025) who stated that Nigeria is ranked

second highest in the world with a percentage score of 82% in mobile banking adoption after Turkey with 85%. A reason for the disparity in the findings of the present study and that of Kyari and Al Hudithi (2022) could be the difference in time. As time progresses, more members of the Nigerian populace seem to be receptive to mobile banking than before.

These results demonstrate a strong preference for mobile banking and microfinance over traditional banking. Some factors responsible for this preference could be convenience, ease of access, and flexibility offered by these alternatives, particularly for populations in semi-urban and rural settings where traditional banks are scarce. These findings support earlier studies that mobile banking improves financial access by providing affordable, accessible, and convenient financial services (Nnaomah et al., 2024), while critical credit and savings opportunities for low-income earners are provided by microfinance (Makara et al., 2024). When joined together, these represent important drivers of financial empowerment in the region.

Nonetheless, regardless of the high level of usage and preference of mobile banking and microfinance, several challenges are observed to inhibit the full potential of these services. Amongst various challenges, some of the most prominent barriers are poor internet connectivity, concerns about fraud and security, frequent system failures, high transaction costs, low digital literacy, and limited access to microfinance institutions. These results echo the broader literature on the digital divide and the adoption of financial technology, which highlights trust deficits, infrastructure gaps, and affordability as persistent challenges in emerging economies (Nirman, 2025). In particular, the overwhelming concern about safety and fraud suggests that building trust in digital financial systems has remained a topmost priority for service providers and regulators.

6.0 CONCLUSION

Due to the study's findings, it is therefore concluded that microfinance solutions is a stronger driver of financial inclusion in the northcentral region of Nigeria than mobile banking. In addition, it was revealed that mobile banking and microfinance are widely adopted in the northcentral region of Nigeria, contrary to previous beliefs and statistics that demonstrate that they are scarcely adopted. However, the study also revealed poor internet connectivity, frequent system failures, high transaction costs, concerns about fraud and security, low digital literacy, and limited access to microfinance institutions as challenges that inhibit the full potential of these services.

7.0 RECOMMENDATIONS

Having revealed the findings of this study, below are some recommendations:

- (i) The government can drive financial inclusion in the northcentral region by building more microfinance institutions since the people are more inclined towards such financial services.
- (ii) There should be an increased investment in reliable ICT for stronger internet connectivity.



- (iii) The government should also create stronger cybersecurity and consumer protection frameworks so as to mitigate fraud and the security concerns of individuals.
- (iv) Digital literacy campaigns that educate residents of such region should be performed.
- (v) Policies that make transaction costs more affordable when using these financial services should be formulated.

8.0 STUDY LIMITATIONS AND SUGGESTIONS FOR FURTHER STUDY

While this study followed a rigorous process to achieve its objectives, it is still not without some flaws. One of its flaws is the limited geographical scope of Kogi State. Kogi State is not the only state in the northcentral region of Nigeria, hence, the generalisability of the results could be affected. Therefore, future research should focus on the entire states in the northcentral region so as to get a wholistic picture of the role mobile banking and microfinance play in driving financial inclusion. Also, the study was cross-sectional in nature, hence, it was unable to reveal the long-term effects of mobile banking and microfinance on financial inclusion in the region. Due to this, future research should adopt a longitudinal approach to examine this research phenomenon.

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