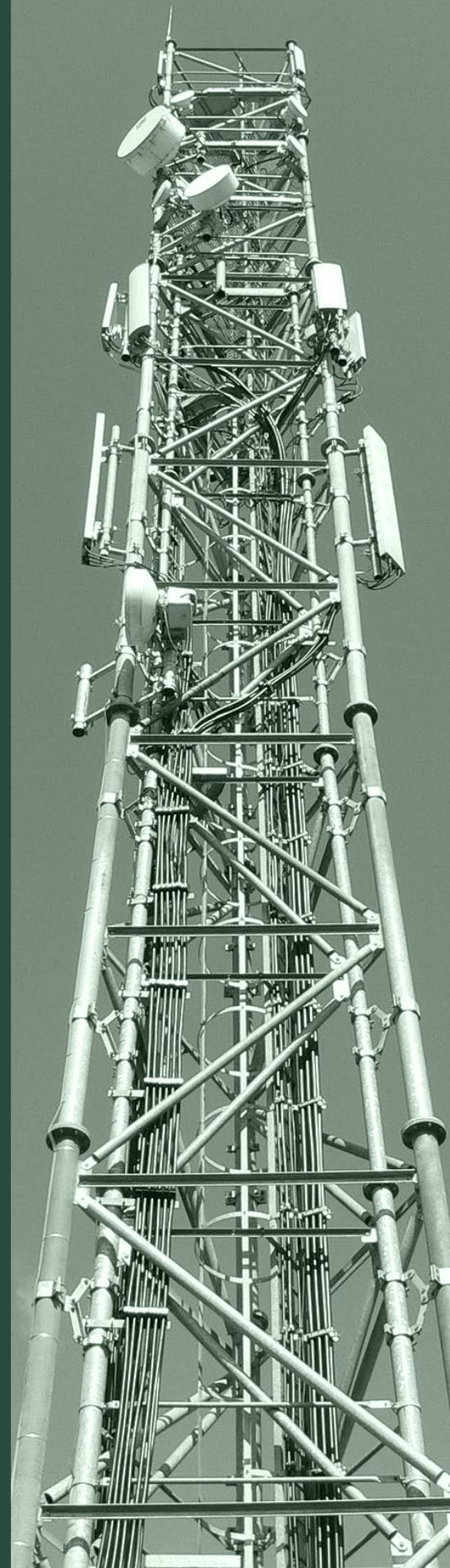


**Agpaytech's Research**  
**3rd April, 2023**

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# **Payment Service Bank: What it Means For Bank-Led Mobile Payment in Nigeria**

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## Executive Summary

Nigeria, Africa's largest economy is missing out on the region's most exciting financial innovation, which is mobile money. Although Nigeria has a large unbanked population and high levels of telecommunications penetration, the mobile money experience has not yet been so successful. This is primarily due to the regulatory approach to mobile money payment services.

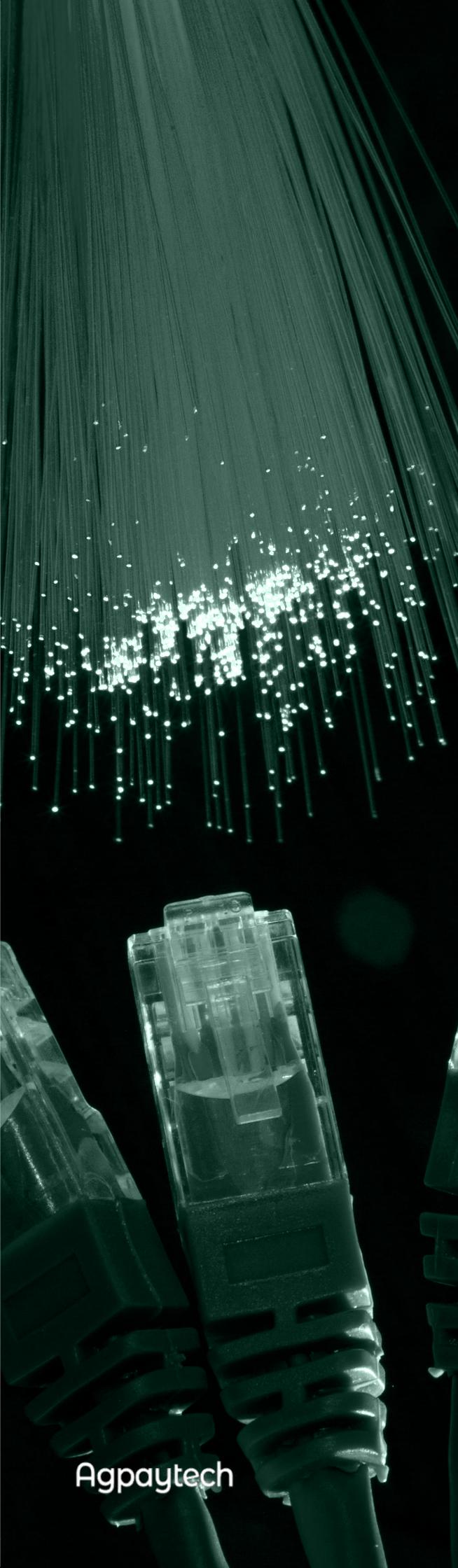
The Regulatory Framework for Mobile Money Services in Nigeria identified two models; thus bank-led, and non-bank-led. While the Central Bank of Nigeria recognizes the importance of Mobile Network Operators (MNOs) in the operations of mobile money services and appreciates the criticality of the infrastructure they provide, the MNOs are excluded having adverse effects in rural areas where banks or banking agents cannot extend the mobile money services.

However, on 27th August 2020, the CBN issued guidelines for licensing and regulation of payment service banks in Nigeria. The framework approved for telecoms/MNOs to operate financial services in the country's huge unbanked

population. Currently, MTN Nigeria and Airtel Africa, have received approval in principle from the CBN to operate payment service banks (PSBs). With this, the MNOs can maintain savings accounts and accept deposits, carry out payments and remittances (including inbound cross-border personal remittances) services through various channels within Nigeria, issue debit and pre-paid cards, operate electronic purses, and invest in CBN securities.



With the large MNOs customer base and subscribers, should the traditional banks, non-bank mobile money agents, fintech, and small and medium enterprises be bothered by PSBs? Will the MNOs utilize their infrastructure and wider accessibility to provide consumer-preferred services?



## Table of Content

- 02** Executive summary
- 04** Introduction
- 05** Current State of the Banking Sector in Nigeria
- 06** Telecommunication Service Industry
- 07** Contribution of the Nigeria Telecom to Economic Growth
- 08** How Banks are Providing Financial Services to its Customers via Telecom Network
- 11** Payment Service Bank (PSB)
- 12** The Mobile Money Payment Models
- 16** Why Telcoms Could Disrupt Bank-led Mobile Money Approach
- 18** Conclusion

# Introduction

In the past decade, regulatory changes and advanced technologies have brought the banking and telecommunication industries closer than ever in the financial landscape. In recent days, many commercial banks and telecommunication companies have signed a strategic partnership to provide financial services. The result is increased competition in providing financial services previously dominated by banks, including overdraft, leasing, loans, withdrawals, deposit-taking, large and low-value transfers, issuing and processing credit cards, interest payments, cross-border transactions, personal remittances, pensions and other third-party services.

Today, banking competitors, particularly telecommunication companies, are diversifying their business operations, while banks remain constrained by antiquated rules and regulations. In Nigeria, banking institutions are investing substantial amounts of money to position themselves to provide many direct retail services as well as collaborating with fintech companies to modernize facilities to enter the consumer or retail payment market. However, telecoms seem to have a higher advantage both in terms of regulatory and market share in providing retail financial services.

## Banking Industry of Nigeria

The financial landscape of Nigeria has witnessed several developments over the past decades. The CBN supervises all the financial institutions in the country. All the financial institutions offer different, sometimes related services to promote the overall economic development of the country.



Bureaux-de-Change (BDCs)



Commercial Banks



Development Finance Institutions (DFI's)



Discount Houses



Finance Companies (FCs)



Holding Company (HCs)



Merchant Banks



Micro-finance Banks (MFBs)



Non-Interest Banks



Primary Mortgage Banks (PMBs)



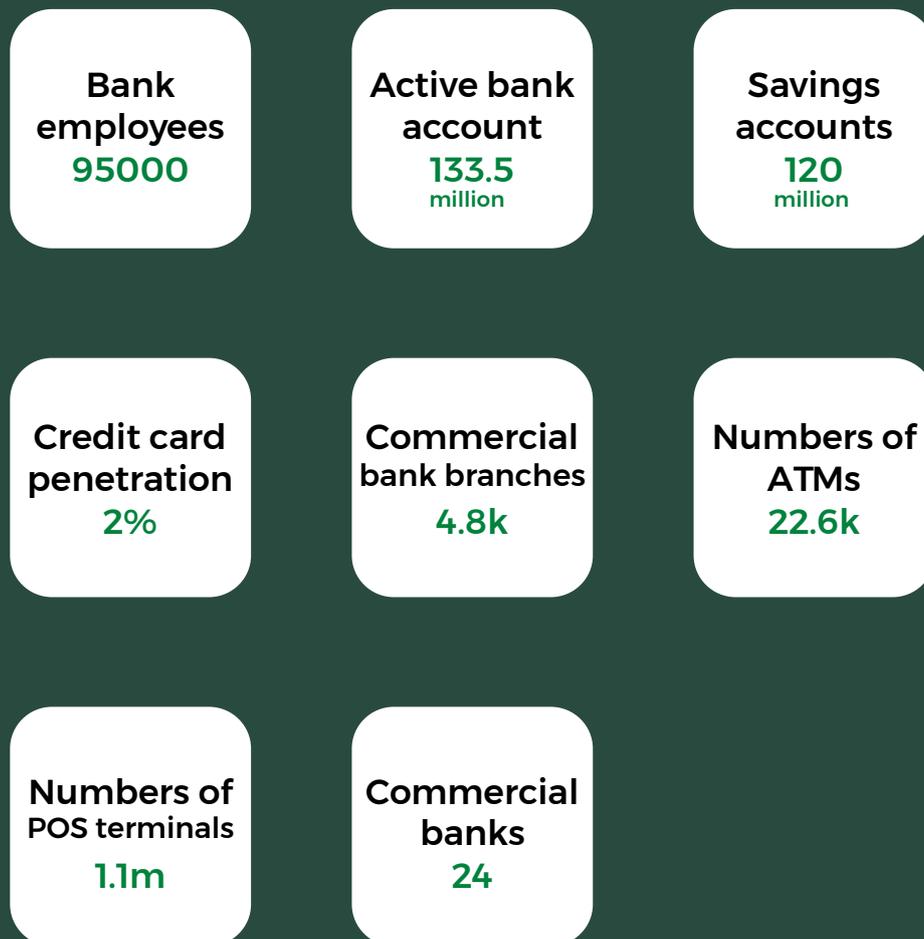
Payment Service Banks (PSBs)

Source: Central Bank of Nigeria

# Current State of the Banking Sector in Nigeria

The banking industry in Nigeria is the backbone of the financial development and stability of the nation. The banks are essential for their increasing provision of financial services, products, and access. With many technological improvements and resilient market and asset growth of the banking sector, it employs over 95,000 bank employees in the country as of the fourth quarter of 2020 (Statista). These employees directly or indirectly facilitate banking operations and introduce products to potential clients, including account opening, whether savings or current, and credit and debit card services.

As of 2021, the number of active bank accounts in the country amounted to around 133.5 million, while savings accounts added up to approximately 120 million. To help ease access to banking services, there has been a growing trend in providing products and service locations. This includes new bank branch openings, as well as an increasing number of automated teller machines (ATM) and Point-of-Sales (POS) terminal installations (Statista, 2022).



# Contribution of the Nigeria Telecom to Economic Growth

The Nigerian telecommunications industry contributed **15% to the Gross Domestic Product (GDP)** as of the second quarter of 2020 (NCC, 2022). Besides, 99.84% used the Global System for Mobile Communications (GSM) network technology in Nigeria.

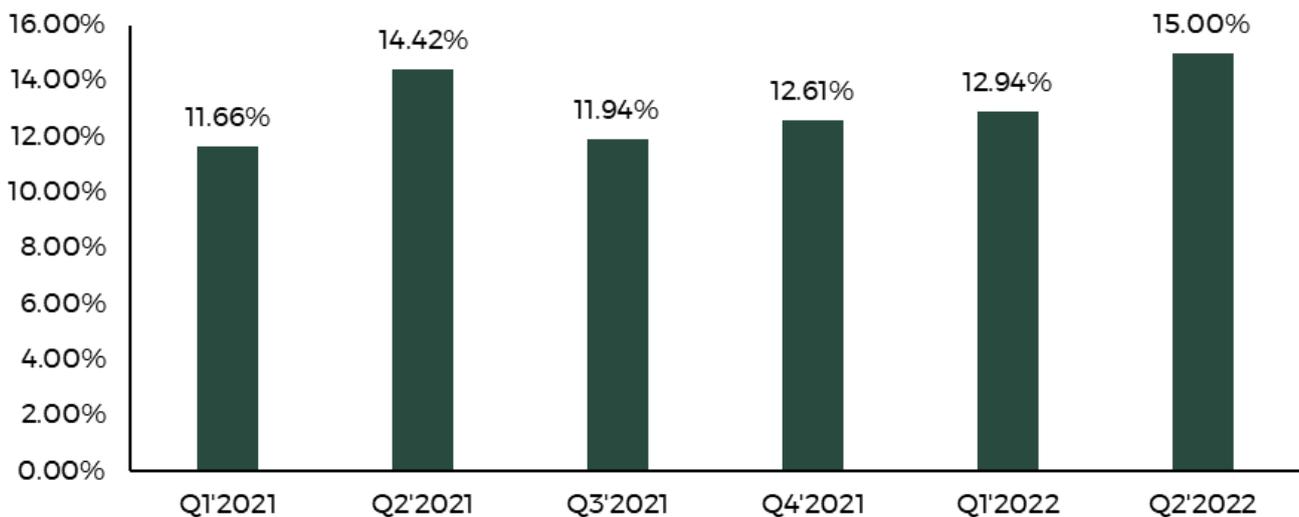


The telecom industry has provided employment opportunities to both the formal and informal sectors, while it has eased access to the mobile transaction. For instance, the Nigeria Interbank Settlement System (NIBSS) indicated that there were over 265 thousand mobile money agents enrolled in Nigeria, while the volume of financial transactions through mobile devices has more than doubled in 2019. Besides, the volume of mobile transactions has

increased by 150.8% to 66.7 million in August 2022 from 26.6 million in August 2021 (NIBSS data, 2022).

The surge in the use of mobile for financial transactions was buoyed by the rising mobile connections across the country. According to the Nigerian Communications Commission, active subscriptions for mobile services across the networks of MTN, Airtel, Globacom, and 9mobile rose by 14.4 million in the first 8 months of 2022.

Figure 1: Telecom's contribution to GDP

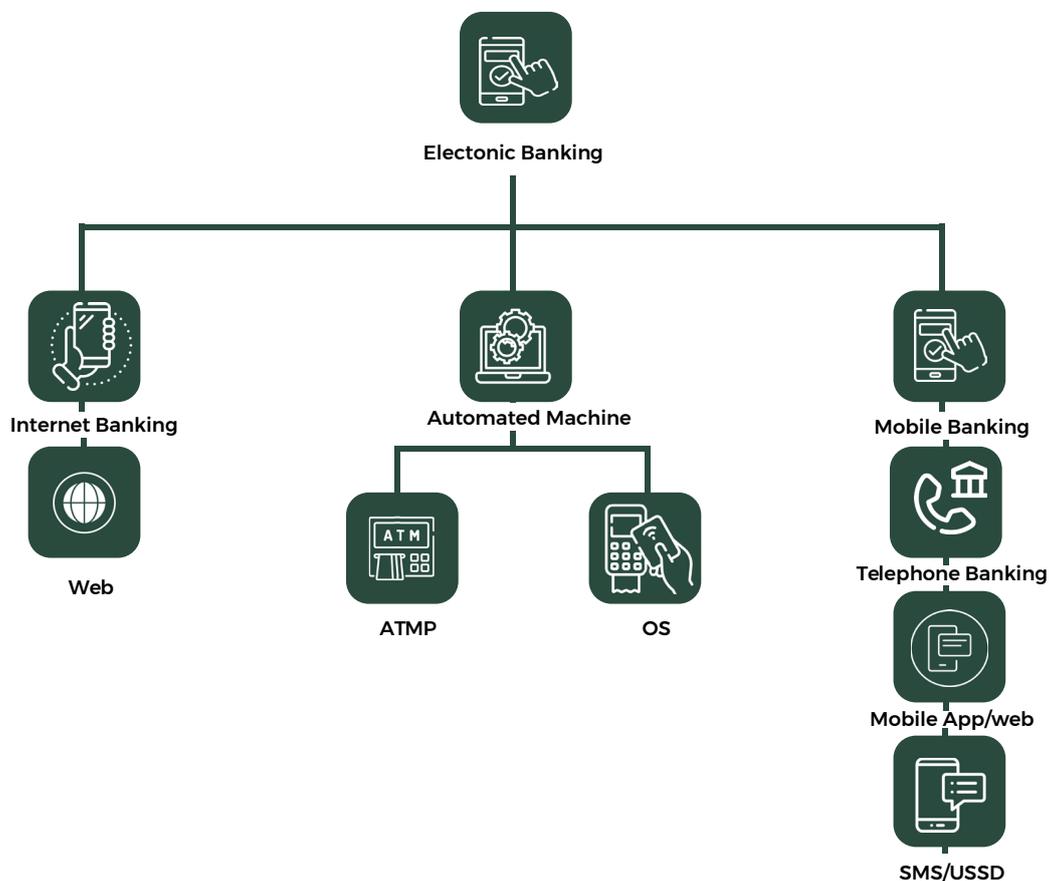


Source: Nigeria Communication Commission

# How Banks are Providing Financial Services to its Customers via Telecom Network

Financial institutions are partnering with telecoms networks to leverage the use of financial technology in providing convenient financial services to customers. One key example is the numerous electronic banking models such as ATMs, POS, Internet Banking and many others. Conventional banks are embracing electronic and other digital strategic alliance opportunities to expand their customer share base and improved their banking services through speed, security, convenience and cheap transactional cost. With bank services like mobile banking, internet, or ATMs, traditional banks can reach large and rural areas and provide essential financial services. The main banking model channeled through network partnerships is shown in the figure 2;

Figure 2: Banking service via telecom networks



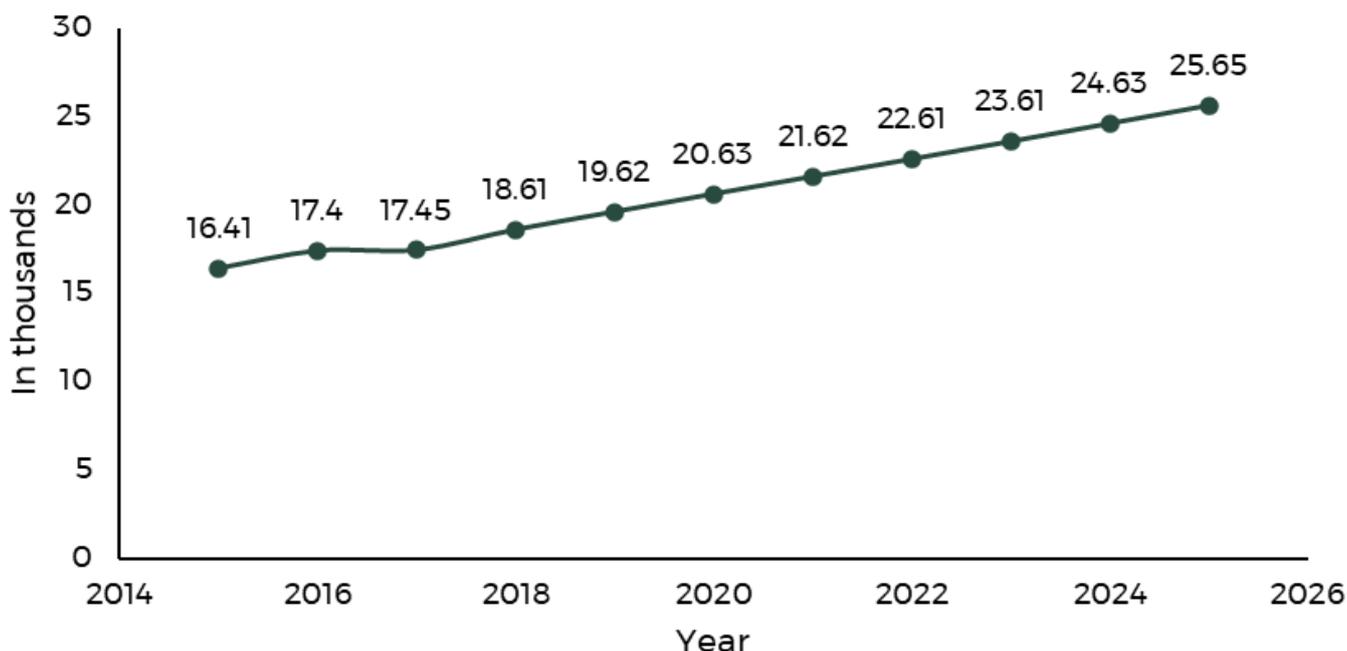
Source: Agpaytech

## ATM

Today, technological advances have equipped banks to provide direct services to customers through automated teller machines (ATMs). ATM is an electronic bank that allows customers to complete basic transactions without a branch or teller. ATMs have become a critical component

of a bank's ability to communicate with customers and are the most recognizable electronic financial service. ATMs allow the use of the telecommunications network for remote withdrawals, deposits, and account information retrieval 24/7 any day. Between January and August 2020, online transfers made up the largest number of e-payments in Nigeria. ATM transactions followed or second with 968,433,479 million. Besides, ATM transaction in value was recorded at ₦12,004,067,823,108 (CBN, 2020). This statistic shows a forecast of the estimated total number of automated teller machines (ATMs) in Nigeria until 2025. It is projected to reach 25.65 thousand by 2025

Figure 3: Total number of ATMs from 2015 to 2025



Source: Statista

## Point of Sale (POS)

Another avenue for banks to provide direct services to their customers or card users both merchant and individuals over network services is through POS. A POS system is a combination of hardware and software required to accept and process different forms of digital payments. The POS machines are electronic devices that have secure network connectivity to a global network of card providers, using which the merchants can facilitate card transactions for their customers. A bank issues a POS against a current account. The process is a win-win for both banks, POS acquirers, and users. The consumer is free of carrying money to shopping centers, easy to pay from the bank, while the banks enjoy discount rate. POS in banking means that you use your debit card to purchase at a point of sale (POS) location, such as a store's cash register or POS system. The Central Bank of Nigeria's e-payment statistics showed that POS transactions were 382,845,859 in volume and ₦ 2,806,304,086,834 in value.

## Internet or web banking

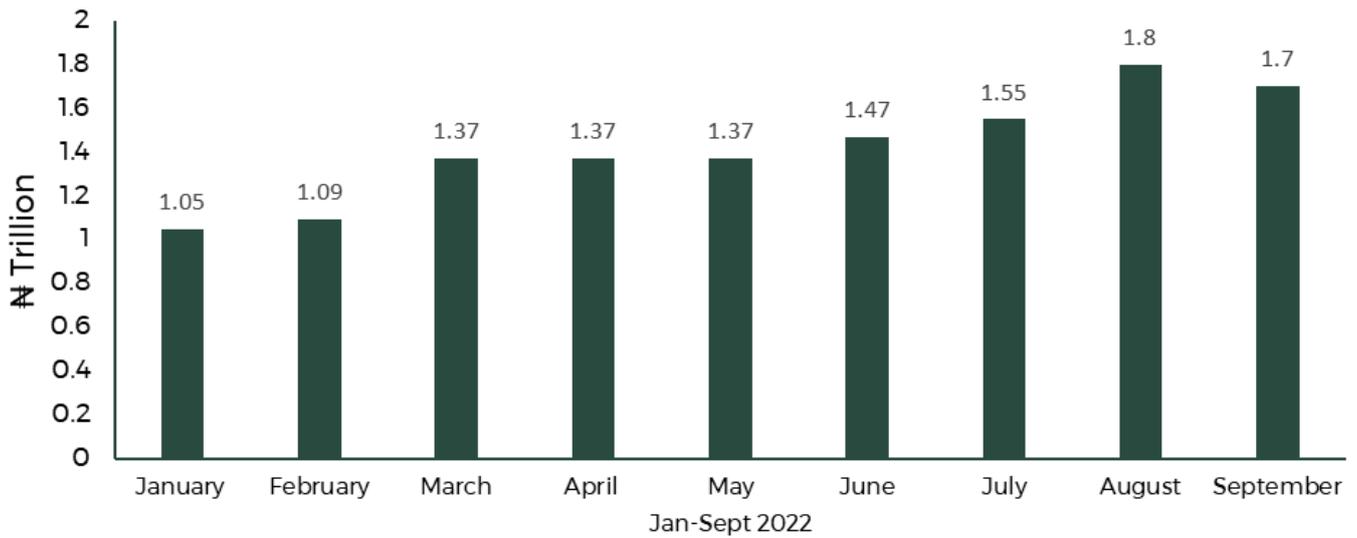
Banking activities in Nigeria have increased thanks to the development of technology. The terms “Internet Banking” Web banking, and “Online Banking” are interchangeable. Internet banking is the ability to perform electronic banking services and transactions via the internet. Common services which can be performed via internet banking include bill pay, funds transfers, viewing statements, contact information updates, etc. Internet banking services can be accessed via the web browser. These systems allow customers to access banking services from remote locations, using networks that may be public (public phone network), private (private access terminals), or both. The CBN guidelines provide minimum standards and requirements for the processing of transactions via the web (internet) channel. According to data from the Nigeria Inter-Bank Settlement System (NIBSS), online transactions hit 569 million by the end of Q3 2020, up 41% from 403 million in Q2 2020. The value of these transactions increased by 50% from 29.6 trillion (\$77 billion) to ₦44.3 trillion (\$116 billion).

## Mobile banking

The deployment of mobile banking and payment applications has recorded tremendous growth over the years in Nigeria. This is due to several reasons, including increased mobile phone penetration; financial inclusion efforts of governments; and the demand for more efficient means of payment by financial market participants (Omotosho, 2021). Traditional banks with limited availability of physical infrastructure across many states in Nigeria are now using the mobile banking model to increase their customer base, and provide timely financial services via the mobile phone.

The Nigeria Inter-Bank Settlement System (NIBSS) has revealed that bank customers in Nigeria transferred a total of ₦12.8 trillion over mobile devices between January and September 2022. The NIBSS data for mobile money transfers for the 9-month-period indicates a surge in the use of mobile for financial transactions, as the value of deals through the channel has already surpassed the ₦8 trillion recorded in the full year 2021. In August a total of ₦1.8 trillion was transferred over mobile devices. This came as an all-time high monthly value recorded since the deployment of the mobile inter-scheme platform. The value of mobile transactions in September stood at ₦1.7 trillion

Figure 4: Bank customers' transactions via mobile transfers



Source: NIBSS

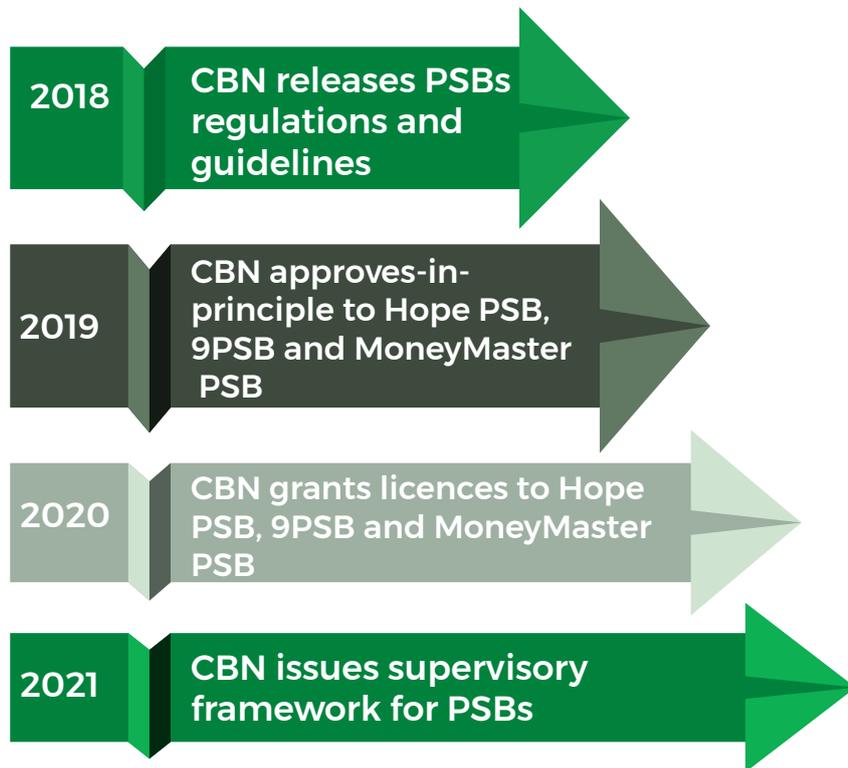
## Payment Service Bank (PSB)

A PSB is a company allowed to leverage on technology and agency banking to mobilize deposits and facilitate transfers from unbanked person in the rural areas and in any location in Nigeria. A PSB is like a retail bank, except it does not give loans.

The Central Bank of Nigeria has approved for telecoms to operate financial services in a bid to make a dent in the country's huge unbanked population. On 27th August 2020, the CBN issued guidelines for licensing and regulation of payment service banks in Nigeria. The eligible promoters include telecommunications companies through subsidiaries. MTN Nigeria and Airtel Africa, two of Nigeria's largest telecommunications companies, announced in November they have received approval in principle from the Central Bank of Nigeria (CBN) to operate payment service banks (PSBs).

In 2015, the CBN published both a Regulatory Framework for Mobile Money Services in Nigeria and Guidelines on Mobile Money Services. The Regulatory Framework makes provision for only two specific models, namely bank-led, or non-bank-led (a corporate organization duly licensed by the CBN). This guideline and regulatory purported banks to link with telecom partners to provide mobile transactions.

Figure 5: Development of PSBs in Nigeria



Source: Agpaytech

The CBN has established a Payment Service Bank (PSB) to enhance financial inclusion in rural areas by increasing access to deposit products, payments, or remittance services to small businesses, low-income households and other entities through high-volume and low-value transactions. The PSBs guidelines provide eligibility to banking agents, telecommunication companies through subsidiaries, retail chains (supermarkets), mobile money operators. The PSBs are motivated to be technology-driven and shall conform to best practices on data storage; security and integrity; and set up consumer help desks (physical and online) at its main office and coordinating centers. According to CBN the PSBs are permissible to undertake the following activities.

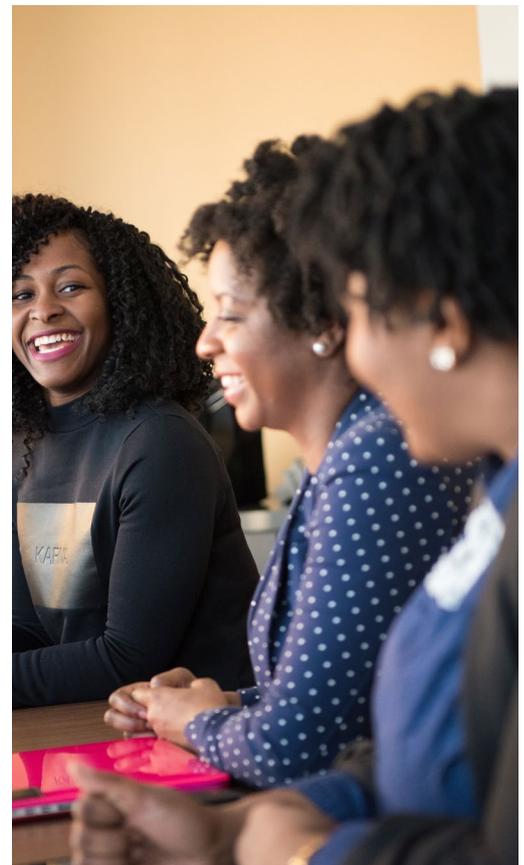


Table 1: Permissible and non-permissible activities of PSB

Permissible activities	Non-permissible activities
<ul style="list-style-type: none"> <li>◆ Maintain savings accounts and accept deposits from individuals and small businesses, which shall be covered by the deposit insurance scheme</li> <li>◆ Carry out payments and remittances (including inbound cross-border personal remittances) services through various channels within Nigeria;</li> <li>◆ Issue debit and pre-paid cards</li> <li>◆ Operate electronic purse</li> <li>◆ Invest in FGN and CBN securities</li> <li>◆ Carry out other activities prescribed by CBN</li> </ul>	<ul style="list-style-type: none"> <li>◆ Grant any form of loans, advances, or guarantees</li> <li>◆ Trade in foreign exchange except point 2</li> <li>◆ Insurance Underwriting</li> <li>◆ Undertake other transactions which not prescribed by this PSBs guidelines</li> <li>◆ Establish any subsidiary except as prescribed by CBN regulation on Scope of Banking No.3, 2010</li> </ul>

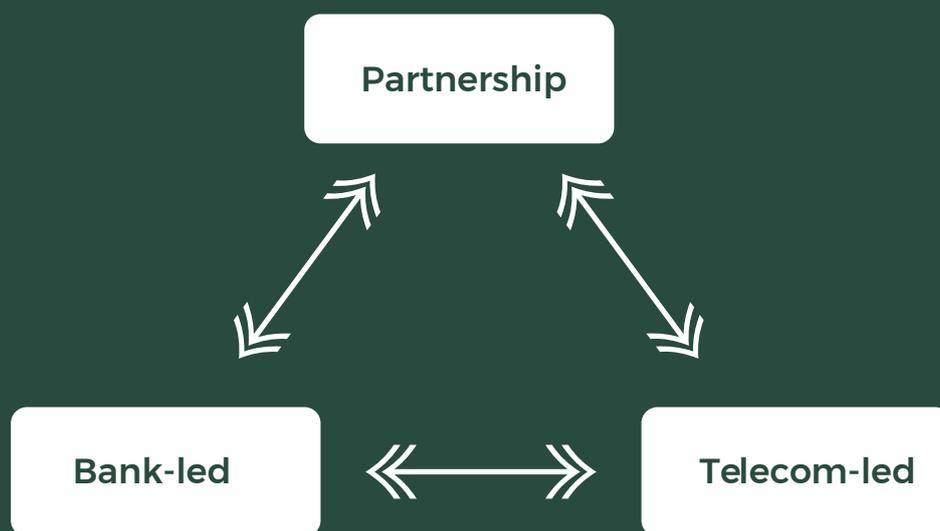
Source: Central Bank of Nigeria

## The Mobile Money Payment Models

Mobile money is widely recognized as a payment service that telecom subscribers performed from a mobile phone (smart or non-smartphone). The basic features of mobile money services are sending and receiving money, and self-services like buying data, airtime, paying for DSTV, or other bills. Today, mobile money is evolving into a platform to also includes a wide range of financial services. Telecoms company allows users to access their money anywhere and at any time without the need for a traditional bank account, and can provide financial inclusion for the low-income and rural masses. The mobile money operations have been implemented widely under three approaches; the bank-led, the telecom-led, and partnership model. In practice, the service requires a telecommunication operator to provide the infrastructure, as well as a bank to provide the financial framework under the partnership model.

The telecom-driven model restricts or eliminates the involvement of banks and other financial institutions in the delivery, clearing, and settlement of mobile money. Thus, the MNO leverages its ability to reach large numbers of people in remote locations to deliver mobile money with the help of local agents. With the bank-led model, the bank is the principal player that controls the relationship with clients. In contrast to the two previous models, the partnership model involves a collaboration between an MNO and banks to offer mobile money.

Figure 6: Mobile money model



Source: Agpaytech

## Bank-Led Model Mobile Money in Nigeria

Although Nigeria has a large unbanked population and high levels of telecommunications penetration, the mobile money experience has not yet been so successful. In July 2021, the Central Bank of Nigeria issued a Regulatory Framework for Mobile Money Services in Nigeria. The Framework defines the regulatory environment as a policy path toward achieving the availability, acceptance, and usage of mobile payment services. According to CBN, the organizations approved to perform the role of Mobile Money Operations are Banks and Corporate Organizations. All obligations arising from mobile money transactions are to be settled into settlement accounts held with Deposit Money Banks. The framework identified two models for the implementation of mobile money services namely;

- ◆ Bank Led – Bank and/or its Consortium as Lead Initiator.
- ◆ Non-bank Led- A corporate organization duly licensed by the CBN as Lead Initiator.

According to CBN, it recognizes the importance of Mobile Network Operators (MNOs) in the operations of mobile money services and appreciates the criticality of the infrastructure they provide. However, the telco-led model (where the lead initiator is an MNO), shall not be operational in Nigeria. While some policymakers have criticized the approach and appraising M-Pesa of Kenya telecom-led model, the CBN elaborated that the exclusion of MNOs will enable the CBN to have full control of monetary policy operations, minimize risks and ensure that the offerings of financial services are driven by organizations that have been licensed by the CBN to do so.

Table 2: Difference between Bank and MNO mobile money model

Features	Bank-led approach	MNO-led approach
Mobile money issuer	Bank	MNO
Payment service provider	Bank/MNO/third-party	MNO / third-party
Agent network manager	Bank/MNO/third-party	MNO / third-party
Deposit holders	Bank	Bank
Telcom channel provider	MNO	MNO

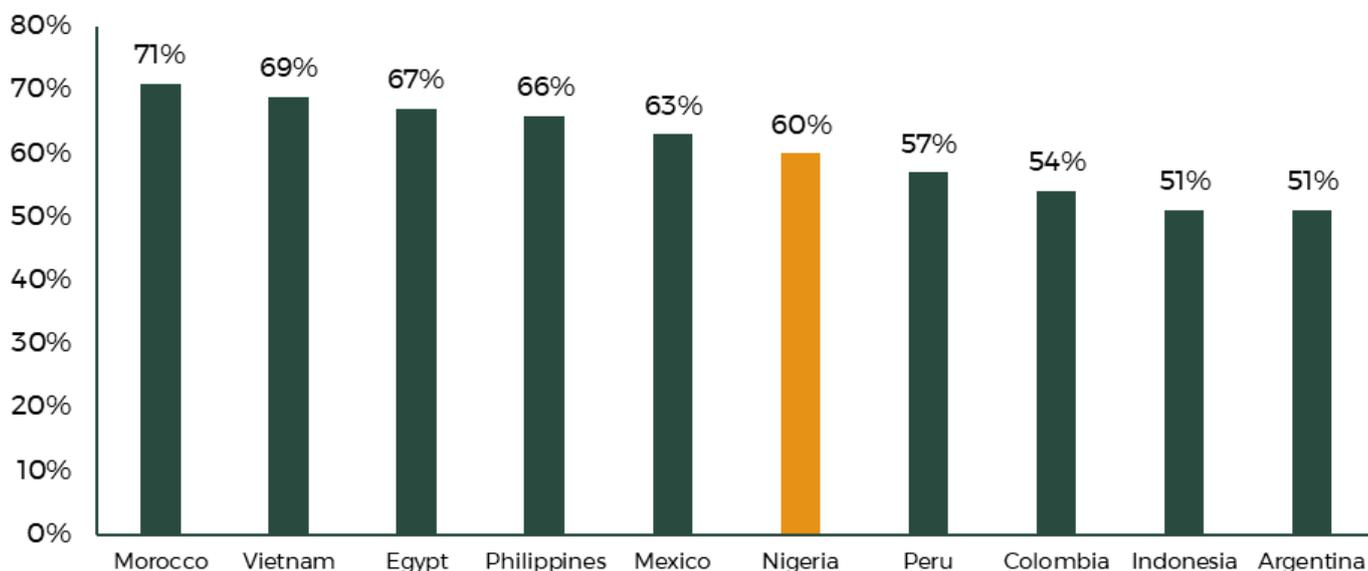
Source: Central Bank of Nigeria

## Why Bank-Led Mobile Money is not Yielding Efficient Results in Nigeria

Nigeria is one of the largest emerging economies in the world and the country with the greatest population in Africa, but it is home to a considerable unbanked population (45%); thus, there is a growing interest in mobile money to gain access to financial services (World Bank, 2021). Nigeria does not operate a telco-led mobile money model. Unlike other African countries like Ghana and Kenya, the government employs bank-led and non-bank-led models. Essentially, only banks or licensed corporate organizations can be Mobile Money Operators (MMOs). Statista reported that the share of the population without access to the services of banks or similar organizations in Nigeria was 60%. This means a larger share of the Nigerian population is excluded from mobile money services.

Secondly, Fintech investment in the country is also growing. Nigerian fintech startups raising an estimated \$800 million in 2021. Recently, CBN introduced the Startup Law to provide the foundation for many fintech to operate in retail financial services.

Figure 7: Share of the population without access to the services of banks

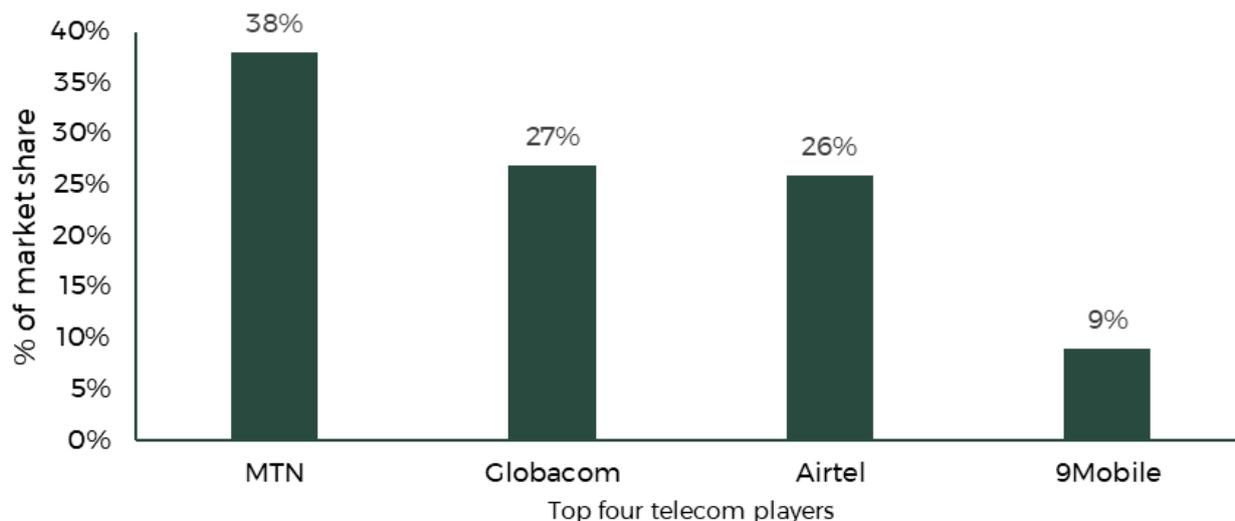


Source: Statista

## Telecommunication Service Industry

The telecom industry of Nigeria is one of the largest in Africa and it is dominated by four network players; MTN, Globacom, Airtel and 9Mobile. The industry analysis trend revealed that as of June 2019, MTN was Nigeria’s largest mobile telecoms operator, with 38% of the market share. Globacom and Airtel followed directly, holding 27% and 26% of the total market share, respectively (Statista, 2022). The growth in the industry is mainly due to the increasing population with the rising adoption of mobile phones that supports 3G, 4G and 5G services across the country. The Telecom sector is further expected to have strong growth over the forecast period with rising adoption of the Internet of Things (IoT) in the sector that connects with wired and wireless broadband (NCC, 2022).

Figure 8: Market share of mobile telecommunication operators in Nigeria as of June 2019



Source: Nigeria Communication Commission

## Why Telecoms Could Disrupt Bank-led Mobile Money Approach

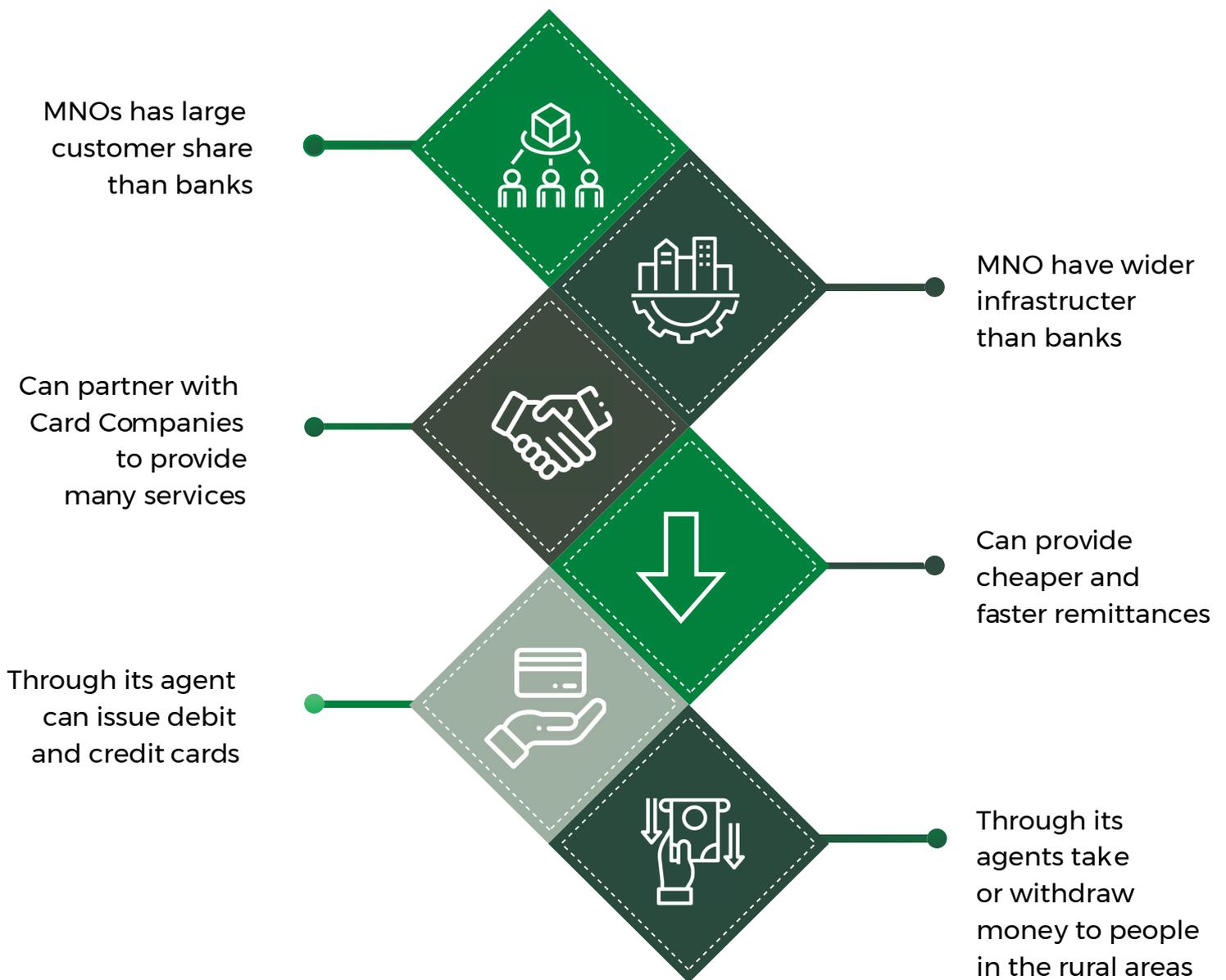
Mobile Networks Operators (MNOs) role in PSB is a positive argument for the banking sector to support the government's drive toward financial inclusion in Nigeria. Many Nigerians, especially those in rural areas, will be attracted to the ease of banking with telecoms instead of conventional banks due to its simple onboarding requirements. Like the telecoms leading mobile money, retail financial services to consumers are both convenient for urban centers and markets, but also people in rural and remote areas of the country who remain excluded from the financial banking system benefited the most.

However, innovations in modern payment systems have always been seen as a threat to conventional banks. For the past decades, fintech and telecoms have given traditional banks a run for their money. With several digital and innovative financial services, traditional banks will have to brace for the challenge and adapt to create new banking business models to compete fairly. There is no immediate threat to the banks in Nigeria but an opportunity to partner with the MNOs who have the customer numbers and infrastructure to penetrate far-flung areas the banks have historically struggled to reach.

The MNOs can partner with Card Companies, global remittance bodies, fintechs, etc., to provide unlimited electronic services to their large customers based. When MNOs can provide quality, faster, secure, and cheaper financial services, they will likely outperform bank-led mobile money services.



Figure 9: MNOs advantages of PSB



Source: Agpaytech

## Conclusion

The Nigerian conventional banking industry is at a crossroads. Change in the industry is inevitable, and the direction of that change may well transform banking in Nigeria into something wholly different from what exists today. With technological advances, banks can serve their customers more efficiently. The banking industry has invested billions of dollars in new technology and has gained the capability to provide services well beyond the traditional, narrow sphere of financial services.

Moreover, mobile phones, digital technologies, and telecommunications technology have also made it possible for new competitors to provide banking services. Telecommunications companies, realizing that modern banking is merely the moving of electronic transactions from location to location, have entered the financial services industry to capitalize on their networking and computing strengths.

While Nigeria adopted the bank-led approach in mobile money payment services, limiting the inclusion of MNOs has not lived up to expectations. Although the guidelines of mobile money and payment in Nigeria have not changed, the introduction of a payment service bank by CBN now allows MNOs to operate and

maintain savings accounts and accept deposits, carry out payments and remittances, issue debit and pre-paid cards, operate electronic purse and invest in FGN and CBN securities. This PSB regulation will encourage new competitors (MNOs) to challenge the banking establishment and provide retail banking services to over 90 million customers both in urban and rural areas.



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## **About Agpaytech**

Agpaytech Ltd. is a company pioneering in the Fintech Space with a focused approach to building robust technologies for eCommerce Card Processing Solutions for Payment Service Providers (PSPs). Additionally, we provide Compliance and Regulatory Umbrella, Remittance-as-a-Service White-Label Solution, Foreign Exchange, Cross Border Payments, and digital currency technology. We have partnered with multiple banks, non-banking financial institutions, and corporate organizations to create a solid service delivery model for them and their customers to ease their international remittances and payments concerns.  
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