Digital Financial Services and Financial Inclusion in Nigeria: Milestones and New Directions

Chioma G. Nkechika *

Abstract

Digital Financial Services are ushering in an age of financial innovation and convenience with technology as the driver. It aims at solving several needs of the public, helping the governments tackle newer problems and identify the potentials of new technology that may be conceived in a competitive landscape. The aim of financial inclusion is to bring as many unserved and underserved Nigerians into the formal financial sector. Thus, digital financial services are revealing gaps in the market that will allow the Federal government intervene and cater to more members of the public than ever, using technology.

Keywords: financial services, financial inclusion

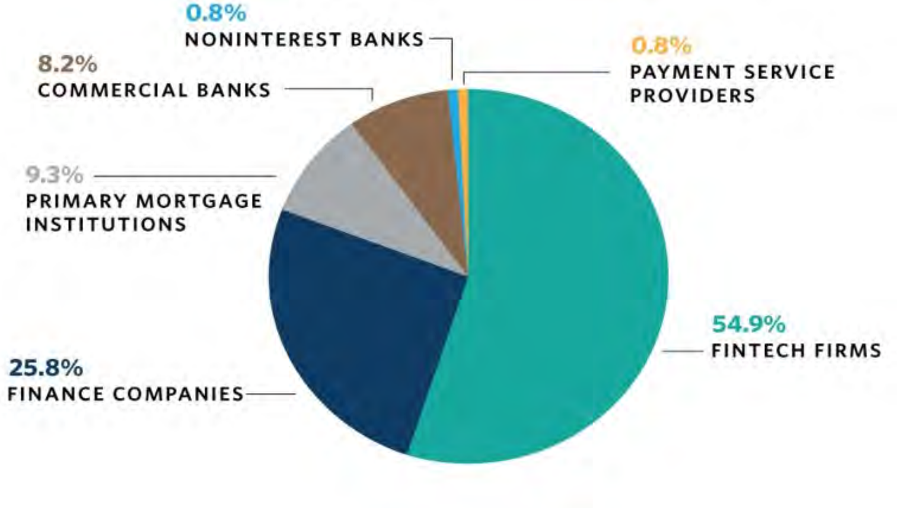
JEL Classifiacation: G20, G53

I. Introduction

Digital financial services (DFS) have evolved in the last decade to provide easier access to financial services that were previously offered to a specific group of individuals and businesses. By leveraging on technology and data, digital finance ensures that a much larger proportion of Nigerians have easier access to several products and services including credit options, investment opportunities, insurance, savings, and retirement plans, amongst many others. These are rendered through a variety of channels including, mobile phones, point-of-sale devices and networks of agents, thus improving business transactions and practices in the country and leading towards a truly cashless economy. The rapid growth of the digital financial ecosystem is enormous as Figure 1 shows that FinTch firms constitute over 50.0 per cent of the number of financial services providers in the Nigerian banking industry.

* Chioma G. Nkechika is the MD/CEO CoralPlay, Lagos, Nigeria. *The usual disclaimer applies.*

Figure 1: An Overview of Nigeria's Financial Space



Source: Central Bank of Nigeria.

There has been considerable success in the use and adoption of digital financial services in Nigeria, although the adoption rate is yet to reach a critical mass of the population. The presence of an overwhelming number of operators notwithstanding, most digital financial services are inaccessible to the most vulnerable groups in the society, especially the unbanked poor who are underequipped for the solutions and services that exist.

Variety of studies have demonstrated that the use of digital financial services has consequences for long-term economic growth through promoting equitable growth strategies and lowering poverty. (Sassi & Goaied, 2013; Hermes & Lensink, 2013; Di Castri & Gidvani, 2014; Muthiora, 2015; Karlan et al., 2016; Zulfiqar et al., 2016).

There has been increased efforts towards using digital financial services to close the gap between the unbanked/underbanked, and the financially included segments of the population. As a result, the demand for financial services by financially excluded Nigerians who constitute about 40.0 per cent of the adult population, remains high. In their 2016 State of the Market Report on Digital Financial Services in Nigeria, David-West et al. (2016) reported that "the under-banked and unbanked citizens of Nigeria are predominantly women and youths between the ages of 18 and 35 with minimal education and either unemployed or in the low-income earning jobs". This observation points to gender, class and age disparities. Given that access to mobile phones and internet penetration currently exceeds bank penetration, it is assumed that the use of the mobile phones and other devices will be technological triggers to enhancing financial inclusion (Nartey & David-West, 2015). This realisation is reflected by recent developments in Nigeria's digital financial services ecosystem as well as the provision of banking services, payments and service delivery solutions by telecommunication companies.

Consumers of digital financial services face several challenges including lack of access to services, especially in rural areas, issues of affordability, and poor user experience. The development has enabled Fintech companies to quickly step-in and take advantage of the opportunities, with many developing enhanced propositions across the value chain to address pain points in affordable payments, quick loans, and flexible savings and investments, among others. Unfortunately, these efforts are hardly enough. While the market has targeted, built for, and marketed to the tech-inclined, educated and internet connected members of the market, reports show that more than 61.0 per cent of financially excluded Nigerians use a mobile phone, mostly feature phones.

Two of the initiatives adopted by the Central Bank of Nigeria (CBN) in its financial inclusion drive, the licensing of Mobile Money Operators (MMOs) and Payment Services Banks (PSB), have been of particular interest to telecom companies (Telcos) as they both rely extensively on the infrastructure, technology and reach the Telcos provide. Under the mobile money scheme, Telcos provide infrastructure to drive the exchange of messages for mobile payment and PSB licensees are expected to leverage on mobile and digital channels for the provision of their services, thereby enhancing financial inclusion and stimulating economic activity at the grassroots through the provision of financial services. Telcos should, therefore, be considered as critical stakeholders in the digital financial ecosystem and in achieving the CBN's financial inclusion objectives.

II. Digital Financial Services

II.1 Mobile Money Services

Mobile money services involve the use of mobile phones for the initiation, authorisation and confirmation of the transfer of value out of a current/checking, savings, or stored value account. Some analysts believe that mobile money will become a large force in Nigeria with the introduction of Telcos into the space. This position is based on the success stories of the adoption of mobile money services in African countries where Telcos have taken the lead in the provision of the services.

There are many examples of Telcos taking the lead in providing mobile money services such as Kenya, Tanzania, Uganda and Ghana. Nigeria's mobile money landscape is, however, dominated by banks, technology and financial services companies.

The arguments in favor of a Telco-led mobile money framework are further supported by their subscriber base, available infrastructure and agent network which is far greater than that of the banks in terms of numbers and geographical spread. Ghana is often cited as an example of how a review of the system to support Telcos to apply directly for mobile money licenses has had a positive impact on the adoption of mobile money services, resulting in an increase of about 72.0 per cent in the number of mobile money users.

Although the CBN recognises the importance of Telcos in operating the mobile money scheme given the necessity of the infrastructure they provide, the Bank needs to ensure retention of full control over monetary policy operations, minimise risks and ensure that organisations offering financial services are licensed by it.

II.2 Payment Service Banks (PSBs)

In October 2018, the Central Bank of Nigeria (CBN) issued the Guidelines for Licensing and Regulation of Payment Service Banks (PSBs) in Nigeria. The Guidelines require licensees to leverage on mobile and digital channels to enhance financial inclusion and stimulate economic activities at the grassroots level through the provision of financial services. The PSBs are to facilitate high-volume and low-value transactions in remittance services, micro-savings and withdrawal services in a secured technology-driven environment to further deepen financial inclusion and help in attaining the policy objective of reducing the exclusion rate to 20.0 per cent by 2020. Thus, the primary targets of PSBs are individuals and small businesses without bank accounts, the underserved and the financially excluded.

Two of the largest Telcos in Nigeria, MTN Nigeria and Airtel, are expected to leverage on their existing customer base, distribution and agent networks, infrastructure and geographical footprint across Nigeria to participate in the digital payments space. As such, these Telcos have set up channels for distribution as required by the Guidelines.

The Mobile Money scheme and the PSB model run concurrently and will hopefully drive the CBN's financial inclusion objective while, at the same time, providing additional revenue stream for Telcos. The adoption of the PSB model by India has demonstrated the potential of the model in supporting government's goal of realising financial inclusion. Under India's model, licenses were issued to Bharti Airtel, Vodacom India as well as other companies. Reports have shown that modest gains have already been achieved even though the scheme appears to be weathering some challenges.

The ban on the granting of loans by PSBs is an opportunity missed to promote financial inclusion further, as access to loans from banks and financial institutions continues to be a major issue for the informal sector, micro, small and medium enterprises which only require minimal capital for their businesses. These businesses should be able to benefit from any financial inclusion drive.

The Telcos are expected to continue to be important stakeholders in achieving the government's financial inclusion targets by playing a significant role in providing access to financial services, economic growth and the alleviation of poverty.

III. Discussion of the Paper

Digital financial services have a key role to play in addressing financial inclusion and supporting greater economic growth, especially in countries like Nigeria where the pace of financial inclusion is slow due to significant demand-side and supply-side challenges. At the end of 2020, over half of Nigerians were using formal financial services notably products and services provided by financial institutions that included electronic payments, savings, credit, insurance, pension schemes and investment solutions.

Out of the 38 million financially excluded Nigerians, 81.0 per cent live in rural areas, and 61.0 per cent use mobile phones. This represents a huge opportunity to advance financial inclusion through mobile phones; and looking beyond smart phones to include feature phone users who are the majority of the unbanked that have access to USSD, the opportunities are even greater.

Table 1: PESTLE Analysis of Financial Industry

Factors	Assessment
Political	Government stability – Nigeria is facing a sustained period of high insecurity with the Boko Haram dominantly in the north, threats of violence from the Indigenous People of Biafra in the east, kidnappings and banditry on inter-state roads in the South-West creating unrest within the country (Nigeria Country Monitor, 2021, p. 1). Tax policy – Constant changes in company taxes and tax policies as the government struggles to generate internal revenue are affecting the ease of doing business within the country. (Nigeria Country Monitor, 2021, p. 1).
Economical	Inflation – Nigeria has been beset by inflationary pressures with its recent triggers coming from the pandemic, drop in oil price and Russia-Ukraine war. As an oil-producing nation, Nigeria's economy relies heavily on the price of oil. A decline in the price of oil precipitates increased foreign exchange market pressures leading to a weakening of the naira. Consumer Spending Trends – With reduced value of the naira, prices of imported goods and services increased. Nigerians have reduced spending power and are more conservative with their spending than ever. Consumers actively go out of their way to find cheaper deals and will seek out payment methods that do not charge them for use.
Social	Brain drain – Due to ever-increasing cost of living, high unemployment, low wages and high insecurity in the country, many Nigerians, especially the youth have begun seeking opportunities outside the country, leading to a large loss in human capital. The tech companies have been hit especially hard with developers being in high demand worldwide and the promise of wages in foreign currency and potential citizenship being especially alluring. (Alake, 2019) Demographics – A lot of Nigerians remain unbanked, with the lower socioeconomic classes having less access to education, internet and the latest technology. Therefore, when developing products, it is important to factor in the technology and literacy level of the general public, to avoid developing a brilliant product the public is unable to use.

	Trust factor – Due to a high rate of payments/transactions fraud, Nigerians are not quick to trust their finances to institutions they do not know and depend more on word-of-mouth than what they see with respect to brand optics. Literacy rate – These remain very low relative to the large population. So, communications and product design need to be considerate in terms of how accessible the products are to the general public when aiming to achieve mass appeal.
Technological	Technological infrastructure – The spread of technology is very lopsided in Nigeria. While developed nations are pursuing 5G telecommunication networks, Nigeria has yet to fully incorporate 4G. While most of the south has access to 4G speeds, the north has seen much less development due to the insecurity in the region and the network providers' fear of losing their capital.
Legal	Regulation – The Payment and financial space is highly regulated with traditional banks being the main target of these regulations. With the central bank allowing banks to set fees for services that FinTechs provide through them, as with the USSD service, these banks have an incentive to undercut other's products in a bid to push theirs. (Onu, 2021) Competition is taking advantage of loopholes such as partnering with a specific bank to bypass regulation to bring products to the market. The implication of such partnerships is the increased cost of services being passed on to the users in order to satisfy both partners.
Environmental	Lacking Infrastructure - Nigeria is notorious for its fuel and electricity disruptions while port congestion leaves transport cost among the highest in the world. Without steady power, most digital products do not meet their full potential with the masses (Nigeria Country Monitor, 2021, p. 30). Rampant fraud and distrust of testing new products from unknown/unpopular brands due to fear of losing hard earned money means Nigerians are slow to trust new innovations in payments. Due to the high rate of fraud committed on financial platforms, there are risks tied to releasing financial products in Nigeria. Fraudsters are always finding loopholes and misusing services especially in attempts to launder money or take loans with no plans to repay (Tade & Adeniyi, 2017).

Source: Authors' compilation.

An analysis of the market environment shows that due to the economic, technological and environmental factors highlighted in Table 1, Nigerian FinTechs and traditional banks are naturally averse to investing in undeveloped markets. Interest into these demographics will require intense capital investment or cultural shifts to overcome the factors highlighted in

Table 1. As such, few are willing to innovate and develop projects outside of the tried and trusted consumer base that ensures a return on investment.

Factors that determine the consumer's adoption of financial products and services go beyond the need to meet their functional, emotional or social needs. There is a need for extensive and iterative customer-centred research to provide deep understanding of what each customer segment requires. Product features and functionality, as well as marketing and communication must show how they address the customer's needs and pain points. However, customer value propositions must also integrate financial systems stability and integrity. There are significant marketing opportunities among underbanked and unbanked rural dwellers, women and youth such that with product-market fit, financial access, inclusion and profit can be achieved.

The market size for underbanked and unbanked women is 28.8 million in Nigeria (David-West et al., 2020). Women have access to and prefer physical channels such as storefronts, explaining why digital exclusion rates are higher for them than men.

Products and services that would readily deliver inclusion and profitable returns are:

1. Tailored savings products and solutions (simple, targeted, fixed and group) and long-term savings;
2. Individual and group loans (with insurance options);
3. Last mile financial access points - Agent CICO payments;
4. Community health insurance schemes;
5. Other general insurance - crop, assets and business;
6. Micro-pension products with health insurance options;
7. Agriculture-based investments;
8. Collective investment schemes (mutual funds);
9. Micro loans; and
10. Merchant acceptance.

The market size for unbanked youth is 27.4 million (David-West et al, 2020). The higher education levels, higher income opportunities and unemployment rates among this segment offer unique and nuanced opportunities. Products and services that would readily deliver inclusion and profitable returns are:

1. Digital savings products and solutions (simple, targeted, fixed and group);
2. Long term savings;

3. Digital credit;
4. Micro loans;
5. Digital (instant) payments;
6. Collective investment schemes (mutual funds); and
7. Digital financial services.

The value propositions associated with money differ based on the type and individual or entity. Individual money value propositions include to:

1. keep/hold money with a trusted source;
2. move money between different parties and sources;
3. grow money and increase its value over time; and
4. access money and return at a later date.

These value propositions comprise the features of financial products and services providers offer.

IV. Financial Access Segments

The banked access and use financial services offered by formal financial institutions including deposit money banks, mobile money operators, microfinance banks, insurance firms, pension funds administrators and investment firms (licensed by the Securities and Exchange Commission). According to EFInA, 48.6 per cent or 48.5 million adults are banked. With most of them completing secondary or post-secondary education, they are middle-aged, middle- to high-income earners that are more educated than their under-banked and unbanked peers.

The under-banked use informal financial products and services provided by cooperative societies and savings groups. These include rotating savings called "Adashe" in Hausa, "Ajo" in Yoruba and "Esusu" in Igbo. According to the EFInA (2018), the under-banked are mostly found in the South-West, South-South and the North-Central geo-political zones of Nigeria; and are about 14.6 per cent of the adult population (14.6 million). They are mostly middle-aged, low to middle-income women working to support their families. They are mostly educated up to secondary school level, have mobile phones and voter's cards as identification documents, they are still excluded from the formal financial system.

The unbanked are financially excluded without access to financial services offered by formal and informal financial service providers. They rely on family and friends for their financial services and make all their payments with cash. Using the EFInA (2018) data, we realised that the unbanked are rural dwellers, predominantly in North-West and North-East geo-political zones. They are young, unemployed or low-income earning adults, especially married women with primary education or less. They are about 36.8 per cent of the adult population (36.8 million) most of them having identity documents (voter's cards) and mobile phones that financial service providers can leverage to deliver digital financial services to them. However, inadequate telecommunication and financial infrastructure, illiteracy and high poverty rates inhibit their access to formal financial services.

Table 2: Distribution of Rural Dwellers across Financial Access Segments

	Banked	Underbanked	Unbanked
Total population (%) estimated number of adult Nigerians)	48.6% 48.5 million	14.6% 14.6 million	36.8% 36.6 million
Proportion of rural dwellers within population	49.9%	69.6%	78.5%
Addressable market size of rural dwellers	24.2 million	10.1 million	28.8 million

Source: EFInA, 2019.

Table 3: Socio-economic Profile - Rural Dwellers vs. National Average

Socio-economic Characteristic	Rural Dwellers	Urban Dwellers	National Average
Region (% in the North East & North West)	44.2%	19.1%	35.0%
Gender (% Women)	46.4%	56.5%	50.1%
Age (% 18 – 34 years)	51.1%	53.1%	68.7%
Marital Status (% Married)	72.5%	62.2%	68.7%
Education (% Secondary and Post-Secondary	39.2%	68.6%	50.0%
Household (HH) Size (% Six and higher)	43.6%	29.5%	38.4%
HH Head (% Household Head)	53.9%	48.4%	51.9%
Number of Income-earning HH members (% one)	55.6%	50.7%	53.8%
Personal Monthly Income (% below N35,000)	59.8%	53.4%	57.4%
Employment Status (% Employed)	77.9%	72.9%	76.0%

Source: EFInA, 2019.

While digital financial services can extend the access, reach and use of financial services, low access to and ownership of the entry level digital device (mobile phone) remains a limiting factor. However, physical merchants are accessible and preferred.

Table 4: DFS Behaviors and Attitudes - Rural Dwellers vs. National Average

Behaviour and Attitudes Towards Investment	Rural Dwellers	Urban Dwellers	National Average
Phone Ownership (% personally own mobile phones)	59.5%	84.9%	68.8%
Phone Access (% have access to mobile phones)	80.1%	94.2%	85.3%
Mobile Money Awareness (% Aware)	14.3%	30.2%	20.1%
Mobile Money Usage (% registered and/or use)	1.8%	4.5%	2.8%
Bank Agent Usage (% that use bank agents)	3.2%	3.5%	3.3%
Mobile money Agent Usage (% that use MM agents)	1.0%	1.5%	1.1%
Rather deal face to face than an electronic machine (% that agree)	71.2%	66.4%	69.4%

Source: EFInA, 2019.

V. Access for Women

Women constitute 50.1 per cent of the adult population, and 56.0 per cent (21 million) of the unbanked (EFInA, 2018). Women are more financially excluded than men, and a large number of them utilise mostly informal financial services. The table below shows the distribution of women across financial access segments. Prioritising women's financial inclusion would greatly enhance inclusive growth because women tend to invest more income in the development and advancement of their families and communities. Hence, female empowerment and financial inclusion schemes support society at the grassroots. Empowering women also contributes to the Sustainable Development Goals (SDGs), particularly, SDG 5 — Gender Equality. Insights into women's financial behavior and attitudes will help FSPs develop products and services that meet women's unique financial needs.

Table 5: Distribution of Women across Financial Access Segments

	Banked	Under-banked	Un-banked
Total population (%) (estimated # of adult Nigerians)	48.6% 48.5 million	14.6% 14.6 million	36.8% 36.6 million
Proportion of women within population	43.7%	57.2%	55.9%
Addressable market size of women	21.2 million	8.3 million	20.5 million

Source: EFInA, 2019.

Data from EFInA (2018) shows that even though the value of women's monetary savings is lower and more infrequent than men, they are more comfortable with informal or home savings solutions. Also while men receive more remittances than women, the direction of flows shows that women receive more remittance inflows than outflows. In addition, even though women make fewer utility payments, cash is their dominant payment instrument. As demonstrated with rural dwellers, data further highlights the financial vulnerabilities experienced by women. Even though women have lower household responsibilities, their financial contributions to the household are evident in their support and management of emergencies. Financial health emergencies are also burdensome to women's finances. Women's adoption of pension products is lower than the national average, further expanding their vulnerabilities. This is worsened when women are widowed. Data also shows that women invest less than their male counterparts, probably because of lower income levels and lack of financial authority in the household. While women have access to and prefer physical channels like storefronts, digital exclusion rates are higher than men.

VI. Access for Youths

This paper, classified Nigerians between 18 to 34 years as 'youths', and they represent 51.8 per cent of the country's adult population and 55.4 per cent (20.3 million) of the unbanked (EFInA, 2018). Notwithstanding, the youth represent 48.8 per cent of adult Nigerians utilising only informal financial services, creating a market opportunity for formal financial institutions. Like other underserved groups, Nigerian youths have personal aspirations that require specialised financial products and services.

Table 6: Distribution of Youths across Financial Access Segments

	Banked	Under-banked	Un-banked
Total population (%) (estimated # of adult Nigerians)	48.6% 48.5 million	14.6% 14.6 million	36.8% 36.6 million
Proportion of youths within population	50.1%	48.8%	55.4%
Addressable market size of Youth	24.3 million	7.1 million	20.3 million

Source: EFInA, 2019.

The higher education levels of the youth are evident in their higher income opportunities and employment rates. The data shows lower saving levels and frequency among the youth and a higher preference for home savings. Youths' borrowing is at par with national average, but higher preference for digital and service-based products like airtime, youth remittance patterns are similar to the national average, with cash still the dominant payment instrument.

In addition, youths' adoption of mobile channels and USSD services show preference for digital financial services solutions. Like rural dwellers and women, data further highlights the financial vulnerabilities of Nigerian youths, who receive emergency support from friends and family. Financial health emergencies are also a burden to their meagre finances. A slightly lower proportion of youths run out of money when compared with the national average and about 10.0 per cent of youths use their savings to cover these emergency expenses. Also, a slightly higher proportion of youths borrow or receive support from family and friends during emergencies when compared with older adults. Data also shows that the awareness and usage rates of both micro-insurance and regular insurance products are less common among youths compared with older Nigerian adults. A sizeable proportion, about 15.1 per cent of youths report serious illness of a household member as their most expensive emergency of the year. Youths either invest purposefully as a future source of income or for unexpected expenses when compared with older adults, demonstrating the need to save using convertible assets.

With access to digital channels like mobile phones, higher literacy level and awareness of mobile money, youth adoption of digital financial services is higher, confirming the anecdotal evidence, which shows that digital channels are a cost-effective and sustainable way to serve the youth segment.

The growth of financial systems goes beyond the bank branch. This transformation includes new paradigms - customers, products and services, payments systems, stores of value, payment instruments, channels, providers, and so on. Putting all these with new digital technologies creates endless possibilities. The analyses show that financial products and services opportunities abound among the three customer segments presented, and despite the obvious opportunity, financial access and utilisation levels signify misalignments, with product-market fit being one of the key dimensions. Customer-centric product design is pivotal to achieving product-market fit. This calls for design thinking approaches to building products and services centred on the needs of the customer.

A youthful population, increasing smartphone penetration, and a focused regulatory drive to increase financial inclusion and enable cashless payments, are combining to create the perfect recipe for a thriving Fintech sector. Fintechs can create impact in three broad dimensions: through stimulating economic activity, by creating a multiplier effect, and by driving progress towards development goals. Customer adoption of Fintech is primarily driven by access and convenience, and trust is critical. Despite the dissatisfaction among consumers with traditional banking services and the rise in Fintech products to address these pain points, the switch to fintech is not an automatic step for many. The majority of the banked (67.0 per cent), still trust their banks more than Fintech. However, trust in Fintechs is growing, particularly among lower-income segments, with 51.0 per cent of youth and mass market customers saying that they trust fintech about the same as they trust banks. Small and Medium Enterprise (SME) owners also increasingly trust fintech because of its speed in settlements. A number of factors are contributing to the growing trust in fintech, including the growing use of agents (individuals or small businesses contracted to financial institutions or mobile network operators that are able to offer basic financial services in local communities) which provide a sentimental human feel, customer education, transparent pricing, and ease of money withdrawal.

Generally, the uptake of Fintech varies from one market to another, depending on the extent to which traditional banking is deeply rooted and regulation is supportive of the sector. The full potential of Fintech in Nigeria remains untapped despite the increased activity in the Fintech sector and the positive multiplier effect in the economy. Fintech accounted for only around 1.3 per cent of retail banking revenues in 2019. And while Fintech investments in Nigeria grew to approximately US$460.00 million in 2019, the majority of which was from external investors, this was only a small fraction of the US$36.00 billion invested in Fintech globally. Economic impact will primarily come from expanding revenue pools and attracting foreign direct investment to the country. The sector can unlock economic benefits by driving increased productivity, capital, and labor hours through digitisation of financial services. Increased Fintech activity could also indirectly grow the digital economy by, for example, providing business-to-consumer (B2C) marketplace tools such as payment integration on social media platforms, and further enabling the Nigerian e-commerce industry.

Finally, Fintech can support Nigeria's human capital development by driving financial inclusion and literacy through the provision of accessible and affordable financial products that are innovative and cater to the needs of unbanked and underserved segments of the population across culture, gender, and geography. Significant opportunities also exist for fintech to enable solutions within education, health, transportation and more to address societal challenges such as student financing, digital learning, and affordable health insurance. One of the key factors preventing the sector from achieving its full potential has been that, to date, Fintechs have had limited appetite to develop commercially viable use cases to serve the mass-market segment owing to the significant investment required. But this is changing, in part as a result of the impact of the COVID-19 crisis. With consumers turning to digital options during lockdown and government using digital channels to roll out aid packages, it has become clear that there is an untapped opportunity to convert the underbanked and unbanked to Fintech solutions and unlock the economic and social benefits that they promise.

VII. Conclusion

Digital financial services and financial inclusion have been largely private sector driven, with the Nigerian government playing the role of introducing initiatives to promote it. In a bid to achieve a digital economy, the government re-designated the Federal Ministry of Communications as the Federal Ministry of Communications and Digital Economy with a mandate to develop and implement a well-coordinated digital economy policy and strategy. In addition, the data registration exercise for the National Identification Number (NIN) is promising and could very well transform the financial services industry as it will provide a digital database for identification, easier onboarding, access to micro loans and other financial services for the unbanked. Nigeria has also introduced a number of policies to promote digital transformation within the economy, notably:

- The National ICT Policy which is aimed at increasing broadband penetration, empowering Nigerians to participate in software and IT development and building a mass pool of IT literate manpower;
- The Nigerian National Broadband Plan 2013-2018 through which a relatively low 30.0 per cent broadband penetration was achieved;
- The Nigerian National Broadband Plan (2020-2025) which has led to increased broadband penetration from 35.1 per cent in mid-2019 to 40.1 per cent mid-2020 and to 45.4 per cent as at November, 2020;
- Harmonisation of Right of Way (RoW) charges across States leading to a 97.0 per cent reduction or in some cases complete waiver, resulting in increased broadband penetration; and
- The Digital Economy Policy and Strategy (2020-2030) which aims at providing a plan for using digital technology as a platform for enabling growth in all sectors of the economy through the development of a digital economy for the country.

The introduction of these policies conveys a message that the government is forward-looking and it is evident that there has been a considerable level of growth in technology. To deliver financial services at the last mile, however, there are still critical areas that need attention, such as adequate infrastructure and internet penetration in rural areas. An effective implementation of these policies in the coming years will not only help the country arrive at a truly digital economy, but also drive financial inclusion, by facilitating access to financial services for the unbanked.

The CBN has implemented regulations to promote digital transformation and ultimately financial inclusion in Nigeria. Some of these interventions include:

- the establishment of a regulatory sandbox, which allows live tests of new, innovative products, services, delivery channels, or business models in a controlled environment to ensure an enabling environment for innovation without compromising on consumer safety and that of the overall payments system;
- the downward review of the Merchant Service Charge from 0.8 per cent to 0.5 per cent to increase accessibility to electronic payment solutions; and
- the introduction of agent banking and payment service banks which leverage technological solutions to provide easier and quicker access to banking solutions, and accelerate financial inclusion in rural areas.

Financial inclusion is a huge task and digital transformation is only one of the drivers for achieving this. There is also need for an extensive and continuous customer-centric approach to product development and a constantly enabling regulatory landscape.

VIII. Policy Recommendations

- Centralised Database Management: There is a need to centralise information databases common across the Federal Government. These include the NIN, Bank Verification Number (BVN), Nigerian Immigration Service (NIS) and even the Federal Road Safety Corps (FRSC). A unified federal database simplifies the identification verification process at each of these institutions and allows the government get a more accurate representation of the population and where they are situated, allowing for better planning and policy implementation.
- Enforcement of existing policy: Existing affordable means of financial inclusion are being charged as a premium by some banks in the market. The CBN recently declared the official fee of USSD transactions but some banks take it upon themselves to charge a convenience fee far greater.

- Incentives for serving the financially excluded: There is an oversaturation of products aimed at the middle and upper socioeconomic class by the private sector. This is understandable as these demographics hold the highest spending power. Therefore, it may be imperative for the federal government to develop or incentivise the development of infrastructure and products that ease access to financial tools and products for those under-served.

References

Adelaja, O., Adetunji, O., Ajai, O., Aluko, T., David-West, O., Iheanachor, N., Muritala, O., Njideaka, T., Nwagwu, I., Taiwo, I., Umoh, S., & Umukoro, I. (2020). *Digital Financial Services in Nigeria: State of the Market Report*. Lagos Business School. https://www.findevgateway.org/paper/2020/12/digital-financial-services-nigeria-state-market-report-2020.

Alake, T. (2019, May 30). *New wave of middle-class flight deepens Nigeria's skill shortage*. Bloomberg. https://www.bloomberg.com/news/articles/2019-05-30/new-wave-of-middle-class-flight-deepens-nigeria-s-skill-shortage.

David-West, O., Adetunji, O., Ajai, O., Aluko, T., Isheyemi O., Iheanachor, N., Kelikume, I., Muritala, O., Nwagwu, I., Offodile, C., Salami, A., & Umukoro, I. (2016). *Digital Financial Services in Nigeria: State of the Market Report*. Lagos Business School. https://www.researchgate.net/profile/Olayinka-David-West/publication/311615447_Digital_Financial_Services_in_Nigeria_State_of_the_Market_Report_2016/links/5851188e08aecb6bd8d21d37/Digital-Financial-Services-in-Nigeria-State-of-the-Market-Report-2016.pdf.

Di Castri, S., & Gidvani, L. (2014). Enabling mobile money policies in Tanzania: A'Test and learn'approach to enabling market-led digital financial services. SSRN 2425340.

Enhancing Financial Innovation and Access. (2018). EFInA access to financial services in Nigeria 2018 survey. https://efina.org.ng/reports/.

Enhancing Financial Innovation and Access. (2019). Access to Financial Services in Nigeria survey 2018. EFInA: https://efina.org.ng/publication/access-to-financial-services-in-nigeria-survey-2018/.

Hermes, N., & Lensink, R. (Eds.). (2013). *Financial development and economic growth: Theory and experiences from developing countries*. Routledge.

Karlan, D., Kendall, J., Mann, R., Pande, R., Suri, T., & Zinman, J. (2016). Research and impacts of digital financial services (No. w22633). National Bureau of Economic Research.

Muthiora, B. (2015). Enabling mobile money policies in Kenya: Fostering a digital financial revolution. GSMA Mobile Money for the Unbanked, 1-28.

Nartey, L. J. & David-West, O. (2015). Mobile money utility and financial inclusion: Insights from unbanked poor end-users.

http://www.imtfi.uci.edu/files/docs/2016/IMTFI%20Report_Nartey_David-West.pdf.

Nigeria Country Monitor. (2021, August). Country/territory report - Nigeria (2021). https://search.ebscohost.com/login.aspx?direct=true&db=plh&AN=151750486&site=ehost-live

Onu, E. (2021, April 20). Late to fintech boom, Nigerian Banks Turn to Regulators for Help. Bloomberg. https://www.bloomberg.com/news/articles/2021-04-20/late-to-fintech-boom-nigerian-banks-turn-to-regulators-for-help#:~:text=Nigerian%20banks%20are%20only%20now,the%20moat%20around%20their%20franchises.

Sassi, S., & Goaied, M. (2013). Financial development, ICT diffusion and economic growth: Lessons from MENA region. *Telecommunications Policy, 37*(4-5), 252-261.

Tade, O., & Adeniyi, O. (2017). Automated teller machine fraud in south-west Nigeria: Victim typologies, victimisation strategies and fraud prevention. *Journal of Payments Strategy & Systems, 11*(1), 86-92.

Zulfiqar, K., Chaudhary, M. A., & Aslam, A. (2016). Financial inclusion and its implications for inclusive growth in Pakistan. *Pakistan Economic and Social Review, 54*(2), 297-325.