



Nigeria | ICT | FinTech | 27 October 2020

PAC RESEARCH

Fareedah Adeyemi Fareedah.adeyemi@panafricancapitalholdings.com

Table of Contents

Executive Summary	2
Overview of the Global FinTech Sector	
FinTech in Africa	
Nigeria's FinTech Ecosystem	
Value Proposition	
Financial Inclusion in Nigeria	
National Financial Inclusion Strategy (NFIS) 2012	11
Key Players	12
SWOT Analysis of the FinTech Sector	14
Participants in the Ecosystem	15
Regulators of the Nigerian FinTech Sector	10
FinTech Regulatory Framework in Nigeria	10
Challenges in the Nigerian FinTech Sector	2

Effects of Technology in Nigeria's Financial Ecosystem

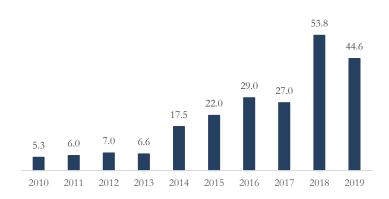
Executive Summary

This report gives a global overview of the FinTech sector, particularly in Africa and focuses on Nigeria's ecosystem. It addresses the effects of technology, challenges, key players and regulators in Nigeria's FinTech sector. Innovation and technology have brought about a revolutionary change in traditional financial services. The world has witnessed the emergence of more than 12,000 start-ups and massive global investments in the Financial Technology (FinTech) space. According to a recent report by Financial Technology Partners, 2019 was the most active year globally for FinTech Financing, Mergers and Acquisitions (M&A) and Initial Public Offerings (IPOs). Global FinTech financing recorded a total of \$44.6 billion raised from 1,813 financing transactions. The banking/Lending sector was the most active within the FinTech space in 2019 with \$17 billion in volume and over 600 financing deals. There are vast opportunities in Africa, Asia and the Middle East as FinTech is advancing rapidly in the remote regions in each of these continents. African countries like Kenya, Nigeria, Ghana, Uganda are under watch, according to the Global FinTech Index 2020 report, as they are all fast-growing FinTech destinations with much higher FinTech Index rankings and picked for their combination of local entrepreneurial success, regulatory foresight and the early signs of a growing local FinTech ecosystem. The rapid growth rate in the population is creating many opportunities for the FinTech industry as companies tap into these opportunities to offer solutions to the rising population. Nigeria has not been left out of the disruption affecting the global financial services industry due to technological advancement. Despite being a cash-based economy, the financial services industry in Nigeria has been receptive to the new transformations in the ecosystem. FinTech is booming globally with success factors that can be applied to the Nigerian FinTech space, which comprises of about 250 FinTech firms, three stakeholders (government agencies, banks and telecommunication), three enablers (technology, incubators and research) and funding partners who have invested over \$250m in Nigeria over the last five years. FinTech is the major cause of all the recent disruptions we are experiencing in the Nigeria banking sector in recent years. Financial institutions are currently looking inwards and engaging in innovations, driven by competition from FinTech firms. The rate of investments highlights the potential of FinTech to transform the Nigerian financial services ecosystem. However, there are still many untapped opportunities in the ecosystem in order to attain the level of growth required to have a global impact.

1.0 Overview of the Global FinTech Sector:

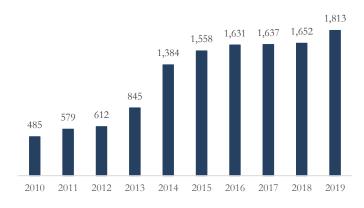
Innovation and technology have brought about a revolutionary change in traditional financial services. The world has witnessed the emergence of more than 12,000 start-ups and massive global investments in the Financial Technology (FinTech) space. According to a recent report by Financial Technology Partners, 2019 was the most active year globally for FinTech Financing, Mergers and Acquisitions (M&A) and Initial Public Offerings (IPOs). Global FinTech financing recorded a total of \$44.6 billion raised from 1,813 financing transactions. This represents a 10% increase from 2018 with 1,652 financing transactions, and the second highest ever in terms of volume as against \$53.8 billion raised in 2018. There were over 100 financing rounds of circa \$100 million, which is the highest annual record with over 20 deals, representing the significant scale of financing activities in 2019. North America accounted for 46% of the total financing transactions and 49% of the total dollar volume globally. While four of the top five largest financing rounds occurred outside North America, according to Financial Technology Partners report. Activities in the Emerging Market continues to rise significantly as Financing Volumes in South America, Africa and the Middle East all reached record levels in addition to the top records in North America and Europe. Venture Capital appetite for the FinTech sector remained powerful, with 13 Venture Capital firms making over 15 new and follow-on investments during the year.

Fig. 1: Annual Global FinTech Financing Volume (\$'billion)



Source: Financial Technology Partners (2019 Almanac), PAC Research

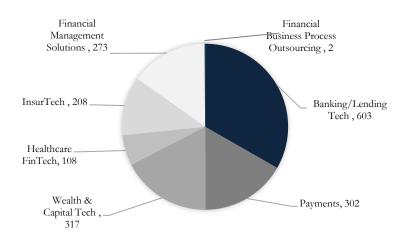
Fig. 2: Annual Global FinTech Financing Transactions



Source: Financial Technology Partners (2019 Almanac), PAC Research

The world has witnessed the emergence of more than 12,000 start-ups and massive global investments in the Financial Technology...

Fig. 3: Number of FinTech Financing Deals by Sector



Source: Financial Technology Partners (2019 Almanac), PAC Research

The banking/Lending sector was the most active within the FinTech space in 2019 with \$17 billion in volume and over 600 financing deals. The report also noted that there were 30 FinTech IPOs globally, which represents a new high record. The FinTech M&A space also recorded significantly high records; 2019 recorded five out of the six largest FinTech M&A transactions ever, which represents an 84% surge in the total volume to \$233.8 billion from 2018 with \$127.3 billion (the previous all-time high). The total M&A transactions in 2019 was reported at 23 transactions and valued at circa \$1 billion, which represents a 28% decrease from 2018 with 32 transactions. 63% of FinTech M&A deals in 2018 involved acquisitions of North American firms, accounting for 74% of the total dollar volume, while in 2019, 30% of the total M&A transactions were cross-border, which implies that the buyer and the target firms were based in different countries.

2.0 FinTech in Africa:

There are vast opportunities in Africa, Asia and the Middle East as FinTech is advancing rapidly in the remote regions in each of these continents. African countries like Kenya, Nigeria, Ghana, Uganda are under watch, according to the Global FinTech Index 2020 report, as they are all fast-growing FinTech destinations with much higher FinTech Index rankings and picked for their combination of local entrepreneurial success, regulatory foresight and the early signs of a growing local FinTech ecosystem. The rapid growth rate in the population is creating many opportunities for the FinTech industry as companies tap into these opportunities to offer solutions to the rising population.

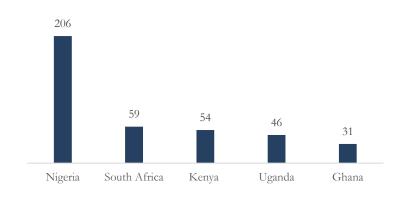
Africa is a wide and attractive marketplace for FinTech companies due to the rapid population growth in the underdeveloped ecosystem. FinTech is expanding to Africa with the introduction of mobile payments and online banking, replacing conventional banking with a large number of banked populations. Creating an effective FinTech ecosystem can open doors to new job opportunities at the same time, help to cut the numbers of unbanked population.

The banking/Lending sector was the most active within the FinTech space in 2019 with \$17 billion in volume and over 600...

Africa is a wide and attractive marketplace for FinTech companies due to the rapid population growth...

27 October 2020 4

Fig. 4: Population of Selected African countries (million)



Source: Worldometer, PAC Research

Leveraging on population, with over 206 million people as at mid-year 2020, Nigeria appears to be a more promising marketplace for FinTech investments as against other African countries such as South Africa, Kenya, Uganda and Ghana with their population recorded at 59 million, 54 million, 46 million and 31 million, respectively, as at mid-year 2020 according to Worldometer. Disrupt Africa's Funding Report stated that a total investment of \$491.6 million in 2019 was received by 311 companies, which represents a 47% increase in total investment and over 50% increase in companies from 2018. The report stated 2019 as a record year for investment in Africa, highlighting Kenya and Nigeria as the continent's top investment locations with funding of US\$149 million and US\$122 million, respectively. Egypt has continued to develop into a major technology hub, with more start-ups securing investment in North African countries, while South Africa has experienced slow growth. The number of investors in African tech startups jumped by 61 per cent to reach 261. Sector-specific research shows the FinTech sector remained the most popular among investors, although its share of total funding fell to 21.8% as other sectors, notably logistics, transport, e-commerce, agri-tech and e-health, enjoyed bumper years. FinTech is a crucial factor influencing the development of the financial sector in Sub-Saharan Africa. New technologies are being developed and implemented in Sub-Saharan Africa with the potential to change the financial sector's competitive climate. The sector is evolving rapidly with changes in its ecosystem, propelled by technological developments and consumer behavior worldwide.

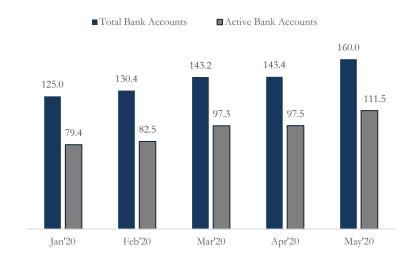
The banked population in Africa indicates that much gap remains to be filled in providing for the underbanked and unbanked population, particularly in Nigeria. However, the growing middle class, increased mobile penetration and communication infrastructure allow FinTech organizations to thrive in the financial ecosystem of Africa. A number of FinTech and multinational financial services companies are targeting the African financial environment for long-term investment, owing to demographic dynamics, fragmentation and the newly enacted African Continental Free Trade Area (AfCFTA).

3.0 Nigeria's FinTech Ecosystem

Nigeria has not been left out of the disruption affecting the global financial services industry due to technological advancement. Despite being a cash-based economy, the financial services industry in Nigeria has been receptive to the new transformations in the ecosystem. FinTech is booming globally with success factors that can be applied to the Nigerian FinTech space, which comprises of about 250 FinTech firms, three stakeholders (government agencies, banks and telecoms operators), three enablers (technology, incubators and research) and funding partners who have invested over \$250m in Nigeria over the last five years. Following the 2008 global financial crisis, the sector evolved and began to disrupt the ecosystem by revamping e-commerce, payments, investment, asset management, insurance, cryptocurrencies, clearance and settlement of securities. FinTech companies fall into either a Business-to-Consumer sales model (B2C), where a company sells directly to the consumers (such as payment integration on social media platforms) or Business-to-Business model (B2B), where a company sells to another business, thereby promoting e-commerce in Nigeria.

FinTech is the major cause of all the disruptions we are experiencing in the Nigeria banking sector in recent years. Year 2019 marked a turning point for the industry, as there were defined boundaries between the Financial Services and FinTech firms in Nigeria in previous years. Financial institutions are currently looking inwards and engaging in innovations, driven by competition from FinTech firms. This has led to acquisitions, investments and collaborations with various FinTech companies in recent years. The rate of investments highlights the potential of FinTech to transform the Nigerian financial services ecosystem. However, there are still many untapped opportunities in the ecosystem in order to attain the level of growth required to have a global impact.

Fig. 5: Total Monthly Bank Accounts vs Active Bank Accounts in 2020 (Million)



Source: NIBSS, PAC Research

Despite being a cashbased economy, the financial services industry in Nigeria has been receptive to the new transformations... According to NIBSS, the total number of Bank accounts in Nigeria is recorded at 160 million people as at May 2020. This represents a 12% increase from the amount recorded in April 2020. The 0.1% growth rate from March to April 2020 can be attributed to the effect of COVID-19 pandemic and the global lockdown which affected economic activities. However, the growth rate shows a positive effect as there has been a steady increase monthly both in the total number of bank accounts, especially the active accounts. FinTech has a huge potential in Nigeria and similar economies, as it uses modern technology and distribution channels to boost infrastructure shortfalls and take financial services to unbanked populations quicker and more cost-effectively than traditional financial services methods. According to McKinsey, FinTech accounted for about 1.25% of retail banking revenues in 2019. Despite recording a total investment of approximately \$460 million in 2019, the majority of which was from external investors, Nigeria contributed \$36 billion to the global FinTech ecosystem.

More Nigerians are depending on FinTech firms for their daily financial needs which include mobile payments, transfer of cash, payment of bills, airtime and internet top-ups, as well as accessing various loan facilities.

The FinTech industry is divided into key segments:

- Payment Services: Mobile payments, fund transfer, insurance, wealth management, personal finance and loans.
- End-User: Banking (retail, investment, corporate), e-commerce, stock exchange, trading firms, insurance and taxation.
- Technology: Robotic Process Automation (RPA), Artificial Intelligence (AI), Cryptography, Cyber-security, Data Analytics, Biometrics and Identity Management (BIM), Blockchain, Public Cloud Infrastructure (PCI), among others.

4.0 Value proposition:

According to McKinsey & Company, the following are the identified value proposition of the FinTech ecosystem.

1. PAYMENTS:

- a. Wallets Easy to sign up, easy to use stored value wallets using mobile phones and incorporating key use cases for customers across transportation, food and digital services.
- b. Processors Simplified channels to allow SMEs and corporates to receive online payments from customers.
- c. Remittances Easy, instant cross-border transfers at a fraction of the cost and time of conventional players—often leveraging cryptocurrency.
- **d. Merchant service providers** Merchant terminal providers allowing merchants to receive offline payments.

...the total number of Bank accounts in Nigeria is recorded at 160 million people as at May 2020.

2. SAVINGS:

- a. Savings Automated, disciplined and high-return savings for middle class customers and millennials.
- b. Wealth Management Offer customers investment options in diverse industries on online platforms at attractive rates (significantly higher than banks' savings accounts).

3. LENDING:

- a. Retail Lending Instant, unsecured, short-term loans to retail customers leveraging alternative credit scoring algorithms and data
- MSME Lending Quick, unsecure working capital loans to MSMEs with minimal documentation
- Lending Infrastructure Lending platform for banks and other lending players to simplify lending process and provide risk assessment

4. SERVICES:

- a. Personal Finance Automated expense tracking, budgeting, and investments leveraging machine learning.
- b. Merchant Solutions Value added services for MSMEs and merchants, such as inventory management, loyalty and accounting.
- c. Financial Institutions Platforms and services for financial services providers to leverage the provision of digital services to their customers e.g., software, automation.

5. ACCOUNTS:

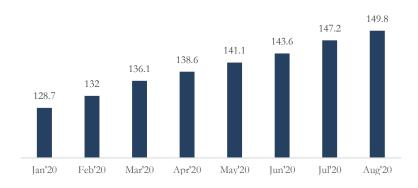
- a. Savings Fully digital banking services leveraging smartphones
- b. Wealth Management Insurance marketplaces

5.0 Financial Inclusion in Nigeria:

Bringing more people into formal financial services has been the focus of developing countries for the past two decades. In Nigeria, financial inclusion is a priority for the federal government, with a goal of reaching 80% inclusion by 2020. The National Financial Inclusion Strategy (NFIS) of 2012 set targets of 80% (formal and informal) financial inclusion and 70% formal financial inclusion by 2020. As at 2018, only 63.2% of Nigeria's 99.6 million adult population had access to financial services according to the NFIS strategy document. According to Mordor Intelligence, a large number of global banks, insurers, and investment managers are planning to partner with financial technology companies over the next 3-5 years on their innovation projects, which is expected to lead to a significant growth in Nigeria's under-tapped digital payments industry. The anticipated increase in growth is based on a multitude of variables across industry fundamentals, optimistic country demographics and regulatory support of the FinTech industry in Nigeria.

In Nigeria, financial inclusion is a priority for the federal government, with a goal of reaching 80% inclusion...

Fig. 6: Monthly Internet Penetration in Nigeria by Subscribers in 2020 (Million)

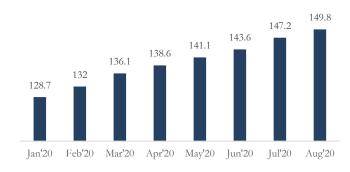


Source: NCC, PAC Research

Mobile and internet penetration has continued to rise, presenting more opportunities to support online payments in Nigeria. Data from the Nigerian Communications Commission (NCC) puts the number of internet users in Nigeria as at August 2020 at 149.8 million subscribers, which is about 2% growth from the previous month, July 2020, with 147.2 subscribers. However, the growth rate in internet penetration in August relative to July recorded a 3% decline compared with 143.6 in June. The broadband penetration in Nigeria is recorded at 43.30% as at August 2020 (vs 42.02% in the previous month of July 2020). This is forecasted to climb to 55% by 2025 according to Jumia's mobile market report for 2019. Digitized unsecured loans and Nigeria's low credit penetration also presents significant opportunities in the rapidly growing FinTech industry. Nigeria's domestic credit to the private sector as a percentage of GDP was 10.5% as at 2019, compared to SSA peers like South Africa at 138.8% while World average stands at 129.7% according to data from World Bank.

The latest data from NIBSS on the number of people in Nigeria with their accounts linked to a Bank Verification Number is recorded at 40.4 million. This shows that about 60 million of Nigeria's total population have inactive bank accounts. Entrepreneurs and the younger population are adopting FinTech to develop financial innovations and disrupt traditional financial services. There will be an increase in the financial inclusion level as more unbanked customers will have access to financial services. Also, customers with bank accounts would achieve higher levels of customer satisfaction.

Fig. 7: Monthly Volume of Mobile Inter-scheme Transactions (Million)



Source: NIBSS, PAC Research

Mobile and internet penetration has continued to rise, presenting more opportunities to support online payments...

The latest data from NIBSS on mobile payments in Nigeria shows that the FinTech sector is growing at a rapid rate. The volume of mobile transactions has increased by about 180% in September 2020 with total transactions recorded at 12.5 million (vs 4.7 million in September 2019). The 20% decline in April from March can be attribute to the reduced activities in the economy due to the COVID-19 lockdown in Nigeria. However, the volume has continued to boom in subsequent months from April 2020, higher than the volume recorded in the beginning of the year – 7.4 million in January 2020.

Fig. 8: Monthly Value of Mobile Inter-scheme Transactions (*Billion)



Source: NIBSS, PAC Research

The mobile payments value also recorded consistent increase and is recently recorded at N268.9 billion as at September 2020 (vs N133.2 million in January 2020). However, the value of mobile transactions in Nigeria is not at the same increasing rate compared to the transaction volume, as the value increased slightly by 1% to N172.1 million in April 2020 (vs N169.8 million in March 2020), amidst the national lockdown due to the COVID-19 pandemic. Focused on digitizing banking for the unbanked population, mobile money operators use Agents to provide these services in different locations in Nigeria, especially the rural areas. This was the singular most important approach to driving mobile money penetration between 2017-2019. Different services have used digital alternatives to drive adoption of mobile money services. The growth in mobile money customers in recent years reflects the interest Nigerians are showing in the services, according to NIBSS.

According to the Global Legal Group (GLG) on The International Comparative Legal Guide to FinTech 2019, the mobile payments and remittances subsector remain the most active and developed area of the FinTech sector in Nigeria. Despite the increasing payment channels available to Nigerian consumers, the digital payments industry remains significantly under-tapped. Payment for goods & services is mainly done with cash, which accounted for 95.3% of transaction volumes at the end of 2018, according to the Enterprise Development Centre (EDC) of the Pan African University. This compares less significantly with the SSA estimates for 88.5% of cash payments. However, the volume of non-cash transactions in Nigeria showed a significant improvement from the value recorded in 2013 where EDC puts Nigeria's cash payment at 99.6% of total transaction volume.

Focused on digitizing banking for the unbanked population, mobile money operators use Agents to provide...

Following the publication of the Central Bank of Nigeria's Payments Systems Vision 2020 (PSV 2020) in 2007, Nigeria has seen a rise in the number of solutions for mobile and electronic payments. A significant recommendation of the PSV 2020 was to encourage electronic payment methods. The innovations in this subsector include the adoption of blockchain, Unstructured Supplementary Service Data (USSD) services for payments by operators and the use of Artificial Intelligence (AI) via Chat-box. Licensed banks have also adopted the use of a USSD service for payments and transfer services. Competition between the different participants resulted in new and simpler solutions for transfer of funds and payment services.

The mobile lending subsector has also witnessed significant increase as the application and review process has been made seamless. The process can be initiated and completed online or on mobile phones. Lenders mostly provide loans without collateral and target retail and small SMEs with the use of data science and machine learning, especially for credit analysis. These lenders are gaining market share from micro finance banks and other retail banking divisions of traditional banks. Several banks and FinTech firms offer personal savings solutions which are available on mobile phones. Banking license is needed to accept deposits in Nigeria, hence, FinTech firms now partner with traditional banks and other financial institutions to provide Personal savings services. There are various organizations using blockchain technology for payments and other operations in Nigeria. Reward and donation crowdfunding are also prevalent in Nigeria and there are a few digital insurance providers, Bitcoin exchanges and other Bitcoin wallet providers in Nigeria.

6.0 National Financial Inclusion Strategy (NFIS) of 2012

The Central Bank of Nigeria (CBN) adopted the National Financial Inclusion Strategy (NFIS) in 2012. The Strategy articulated the demand-side, supply-side and regulatory barriers to financial inclusion, identified areas of focus, set targets, determined key performance indicators (KPIs) and established the implementation structure. The NFIS was built on four strategic areas of Agency Banking, Mobile banking/payments, linkage models and client empowerment. Four priority areas were identified for guideline and framework development namely, Tiered Know-your Customer (T-KYC) regulations, Agent Banking regulations, National Financial Literacy Strategy and Consumer Protection. The Strategy defined a set of targets for products, channels and enablers of financial inclusion. The KPIs were defined, based on the various dimensions of financial inclusion, including access, usage, affordability, appropriateness, financial literacy, consumer protection and gender. The NFIS proposed strategies for each of these elements, which included a comprehensive set of policy and regulatory changes as well as suggested business models. In the implementation of the Strategy, the targets were further tailored to reflect the needs and challenges of individual financial service providers (FSPs).

The innovations in this subsector include the adoption of blockchain, Unstructured Supplementary Service Data (USSD) services for payments by operators...

The apex bank's regulatory framework for sandbox operations was sent to all Deposit Money Banks and FinTech firms, especially those offering mobile money and payment services, with the intention of making it possible to adequately track current innovations by the banks and FinTech firms while protecting the payment system in the country. The breakdown of the regulatory sandbox is as follows:

- To increase the potential for innovative business models that advance financial inclusion.
- To reduce time-to-market for innovative products, services and business models
- To increase competition, widen consumers' choice and lower costs.
- To ensure appropriate consumer protection safeguards in innovative products.
- To clearly define the roles and responsibilities of stakeholders and the operations of the Sandbox for the Nigerian Payments System industry.
- To ensure adequate provisions in regulations to create an enabling environment for innovation without compromising on safety for consumers and the overall payments system.
- To provide an avenue for regulatory engagement with FinTech firms in the payment space, while contributing to economic growth.

With the intention to deepen financial inclusion in Nigeria, the CBN fixed the minimum capital deposit for Telcos through mobile money services at ₹5 billion in 2018. The apex bank granted the Telcos a provisional approval to apply for a Payment Service Bank (PSB) license through a subsidiary company, while mandating an evidence of payment of ₹5 billion when applying for Approval in Principle.

7.0 Key Players:

Major players in the FinTech industry categorized by their subsectors:

- 1. Payment and Transfer sector:
- a. Paystack Paystack is a technology company powering growth for businesses in Africa through our collection of secure payment tools. It was recently acquired by Stripe, a technology company that builds economic infrastructure for the internet, in a \$200 million deal.
- b. Flutterwave Flutterwave has raised a total of \$64.5M in funding over 11 rounds. Their latest funding was raised on Jan 21, 2020 from a Series B round. It is funded by 32 investors. FIS and 9Yards Capital are the most recent investors.
- c. Interswitch Interswitch has raised a total of \$10.5M in funding over 3 rounds. Their latest funding was raised on Nov 11, 2019 from a Corporate round. It is funded by 4 investors. Visa and TA Associates are the most recent investors.
- d. E-Tranzact E-Tranzact has raised 1 round. This was a Private Equity round raised on Mar 1, 2008. It is funded by African Capital Alliance.
- e. Remita In 2016 Remita processed ₹1.36 trillion (\$3.8 billion) worth of transaction for the Nigerian Federal Government when it consolidated all federal ministry and agency accounts under the Treasury Single Account (TSA) scheme.

...with the intention of making it possible to adequately track current innovations by the banks and FinTech firms while protecting the payment system in the country.

- f. Wallet.ng Wallet.ng has raised 4 rounds. Their latest funding was raised on Jul 2, 2020 from a Venture Series Unknown round. It is funded by 15 investors. Michael Seibel and 9Yards Capital are the most recent investors.
- g. OPay OPay has raised a total of \$170M in funding over 2 rounds. Their latest funding was raised on Nov 18, 2019 from a Series B round. It is funded by 10 investors. Source Code Capital and Redpoint Ventures China are the most recent investors.
- h. Paga Paga has raised a total of \$34.7M in funding over 4 rounds. Their latest funding was raised on Sep 6, 2018 from a Series B round. It is funded by 8 investors. Unreasonable Capital and Adlevo Capital are the most recent investors. Paga recently acquired Apposit on Jan 22, 2020.
- i. TeamApt recently raised \$5.5m in a Series A investment round on Feb 28, 2020 and is working with 26 African banks, and 100% of all commercial banks in Nigeria, including Zenith, ALAT and UBA. It is funded by Quantum Capital Partners.

2. Savings/Investments sector:

- a. PiggyBank.ng Piggyvest has raised a total of \$1.2M in funding over 2 rounds. Their latest funding was raised on May 31, 2018 from a Seed round. It is funded by 4 investors. Village Capital and Leadpath Nigeria are the most recent investors.
- b. CowryWise recently raised \$10 million in funding let by the Global Innovation Fund.
- c. Kuda Bank Kuda Bank has raised a total of \$1.6M in funding over 1 round. This was a Pre-Seed round raised on Sep 10, 2019. It is funded by 3 investors. Ragnar Meitern and Chris Adelsbach are the most recent investors.

3. Insurance:

- a. Compare insurance Compare.com has raised a total of \$185M in funding over 3 rounds. Their latest funding was raised on Nov 1, 2018 from a Undisclosed round. It is funded by Admiral Group.
- b. Cassava InsurTech allows individuals make small weekly and monthly insurance subscription payments via debit card or USSD or through their mobile airtime.
- c. AutoGenius an online insurance comparison platform in Nigeria. It allows users buy auto insurance online. They currently work with traditional insurance companies including AIICO Insurance, Leadway Insurance, Custodian & Allied Insurance and Ensure.
- d. Compare Guru a comparison website which allows users get quotes for healthcare, life, travel and fire insurance. CompareGuru has raised 1 round. This was a Venture Series Unknown round raised on Mar 3, 2015. It is funded by Silvertree Internet Holdings.

4. Lending:

- a. Carbon (Paylater) Carbon has raised a total of \$15.8M in funding over 4 rounds.
 Their latest funding was raised on Mar 11, 2019 from a Debt Financing round.
- b. Lidya Lidya has raised a total of \$8.2M in funding over 2 rounds. Their latest funding was raised on May 23, 2018 from a Series A round. It is funded by 8 investors. Alitheia Capital and Tekton Ventures are the most recent investors. Mines

- c. SoFi SoFi has raised a total of \$2.5B in funding over 14 rounds. Their latest funding was raised on Sep 1, 2019 from a Secondary Market round. It is funded by 36 investors. Bracket Capital and Jihan Bowes-Little are the most recent investors. SoFi has a post-money valuation in the range of \$1B to \$10B as at May 14, 2020, according to PrivCo.
- d. Branch International Branch International has raised a total of \$264.7M in funding over 8 rounds. Their latest funding was raised on Jul 29, 2019 from a Debt Financing round. It is funded by 13 investors. Barium Capital and Andreessen Horowitz are the most recent investors.

8.0 SWOT Analysis of the FinTech Sector:

Using the SWOT analysis, the following are the Strengths, Weaknesses, Opportunities and Threats of the FinTech industry:

8.1 STRENGTHS:

- FinTech provides financial support to businesses, both large and SMEs, without having to experience the strenuous processes in the traditional banking system.
- FinTech organizations are highly recognized for the seamless and quality services compared to the traditional methods of banking. Their virtual applications and processes make it possible to significantly reduce the large recurrent costs associated with traditional banking.
- There is more transparency and easy documentation in FinTech organizations, which
 makes it easy to track transactions. It also enables accuracy in forecasting as
 organizations can get to predict their performance based on the documented historic
 data with the use of software and applications.

8.2 WEAKNESSES:

- FinTech industry in Nigeria lacks standard regulatory framework.
- Lack of Data privacy and protection The lack of authentic consumer information on digital media and poor technology / digital infrastructure.
- Difficulty in accessing investments and funding.

8.3 OPPORTUNITIES:

Funding opportunities: Equity, debt and mezzanine funding are available to new and growing businesses in Nigeria. Except where the articles of association of the company provide otherwise, companies are permitted to raise debt from individuals, banks and financial institutions subject to regulatory requirements, from the capital market. FinTech firms do not have special funding requirements. Venture Capitalists and Private Equity Firms have been the major contributors to equity investments. The Government has made Funding available to SMEs at friendly rate through Bank of Industry. Collaborations, mergers and acquisitions by the banks, telecommunication firms, government & Non-government organizations and FinTech firms to provide various product developments, integrating innovative features and services in the ecosystem for the underserved population are also encouraged.

- Deduction for Research & Development: Section 26 of the Companies Income Tax Act, Chapter C21 LFN 2004 (CITA) provides that companies and other organisations that engage in research and development activities for commercialisation are to enjoy 20% investment tax credit on their qualifying expenditure for that purpose. The CITA also provides that the profits reserved by a company for purposes of research and development are tax-deductible, provided such reserves do not exceed 10% of the total assessable profits for that company.
- Pioneer Status: Companies classified as operating in a pioneer industry or engaged in the production of pioneer products are entitled to apply for pioneer status; and, when granted, such companies enjoy corporate tax relief/holidays for an initial term of three years starting from the date that the pioneer company commences business. This may be extended for a further period of one year, and a further one year term subject to factors such as the relative importance of national development of the industry at the relevant time.
- Incentives for Venture Capital Companies: Under the Venture Capital (Incentives)
 Act, Chapter V2 LFN 2004 (VCA), companies that invest in Venture Projects may be eligible for the following:
- accelerated capital allowance for equity investment by a Venture Company in a Venture Project for the first five years of their investment.
- reduction of withholding of tax on dividends declared by Venture Projects to Venture Companies for the first five years from 10% to 5%.
- iii. export incentives such as export expansion grants if the Venture Project exports its products.
- iv. exemption from payment of capital gains tax on gains realised by Venture Companies from a disposal of equity interest in the Venture Project.
- v. exemption from company income tax for a period of three years, which may be extended for an additional final period of two years.

8.4 THREATS:

- Cybercrime.
- Excessive borrowing and accumulation of debt.
- Threat of new entrants offering similar services, thereby causing saturation in the industry.

9.0 Stakeholders in the FinTech Ecosystem.

The FinTech sector is a collaborative ecosystem that consists of the following stakeholders:

- Government & Regulators: They protect consumers through appropriate rules and provide supportive incentives to help FinTech grow.
- 2) Investors: Angels, Venture Capitals and Private Equity regard FinTech as a viable investment.
- Start-ups: Nimble and innovative, start-ups are enabling many elements of traditional financial services.

- **4) Technology Vendors:** Tech Vendors are exploring ways to embed FinTech solutions in their solution stack.
- 5) Financial Institutions: Banks and other financial institutions are currently determining a suitable approach to engage with FinTech companies and leverage their innovation.
- 6) Users: From corporates to retail customers, many are considering how they could leverage FinTech to improve their services or experience, respectively.
- 7) Universities and Research Institutions: Institutes support the FinTech community by mentoring and assisting early stage companies and producing a more talented workforce.
- 8) Incubators, Accelerators and Innovation Labs: Incubators are offering a means for big businesses to engage and assist young companies to meet their potential.

10.0 Regulators of the Nigerian FinTech Sector:

The Central Bank of Nigeria (CBN): The activities of the FinTech industry is monitored by the CBN. The CBN issues guidelines which regulates various aspects of the FinTech sector, especially the digital payments sub-sector which has been the most active in recent times. These regulations seek to improve financial inclusion while allowing for continuous innovation.

Other supporting institutions include:

- National Information Technology Development Agency (NITDA)
- Ministry of Information and Communication (MIC)
- Federal Ministry of Science and Technology (FMST)
- Nigerian Communications Commission (NCC)
- National Information Technology Development Fund (NITDF)

11.0 FinTech Regulatory Framework in Nigeria

Lending: An entity that wishes to provide marketplace lending may do so by registering as a bank or Other Financial Institution (OFI) pursuant to the Banks and Other Financial Institutions Act, Chapter B3 LFN 2004. Banks and OFIs are licensed and supervised by the CBN. In addition to this, a marketplace lender may be registered as a money lender in accordance with the Money Lenders Law of the state in Nigeria which it wishes to operate from. There are geographical limits on money lenders and restrictions on the interest rate they can charge.

Payments: The CBN regulates mobile payments pursuant to the CBN Guidelines on Mobile Money Services in Nigeria 2015 (Mobile Money Guidelines), the CBN Guidelines on Operations of Electronic Payment Channels in Nigeria, the CBN Regulatory Framework for the use of Unstructured Supplementary Service Data in Nigeria, CBN Guidelines on International Money Transfer Services in Nigeria and other regulations. The Mobile Money Guidelines define a mobile money operator as an entity that provides "the infrastructure for the mobile payment systems for the use of participants that are signed-on to their scheme".

The CBN issues
guidelines which
regulates various aspects
of the FinTech sector,
especially the digital
payments...

Mobile money operators must be licensed by the CBN on such terms and conditions as contained in "Appendix I" to the Guidelines. The activities of other participants in the payment space such as Switch Companies, Payments Terminal Service Providers and Card Scheme Providers are also regulated by the CBN.

Banking Services: In 2018, the CBN introduced the payment service bank category (PSB). A PSB is a bank that is authorised to accept deposits, provide payment and remittance services and also issue electronic wallets. A PSB should operate in rural and underbanked locations. PSBs are regulated under the CBN Guidelines for Licensing and Regulation of PSBs in Nigeria (2018). In addition, the Nigerian Communications Commission (NCC) also regulates FinTech businesses where the service offered involves mobile phones pursuant to the Licence Framework for Value Added Services (VAS) issued by the NCC. A VAS Provider is any person or organisation that engages in the provision of value added mobile/fixed services, including premium rated services, and such provider is required to obtain a licence from the NCC. The use of airtime for the repayment of loans to a mobile lender could constitute a premium rated service, the provision of which requires the approval of the NCC.

The Central Bank of Nigeria has issued the following guidelines which impact FinTech companies in Nigeria:

• Guidelines on Mobile Money Services in Nigeria:

The CBN issued the guidelines on mobile money services (financial services offered over mobile devices, which includes mobile payment, credit card payment, and QR code payment) in Nigeria with the aim of ensuring a structured and orderly development of mobile money services in Nigeria in 2019. The guidelines identify two models for the implementation of mobile money services: Bank Led (where either a bank or a consortium of banks may act as a Lead Initiator in providing mobile money services as part of its banking services) and Non-Bank Led. A corporate organization (other than a deposit money bank or telecommunication company) specifically licensed by CBN to provide mobile money services in Nigeria may also act as a Lead Initiator of mobile money services under the Non-Bank Led model. The guideline also identifies the various participants and their roles in the mobile money industry which includes Banks, licensed corporate organizations, infrastructure providers, consumers and Mobile Network Operators (MNOs) who are required to:

- a. Be licensed by the CBN.
- b. Be issued a unique Scheme Code by the Nigerian Inter-Bank Settlement System.
- c. Be issued unique short codes by the Nigerian Communications Commission (NCC).
- **d.** Ensure that all telecommunications equipments are of a type approved by the NCC.
- **e.** Register users of its scheme based on the technology standards and requirements of the guidelines.
- **f.** Ensure that the registration process fulfills the Know Your Customer (KYC) requirements specified in the guidelines.

A PSB is a bank that is authorised to accept deposits, provide payment and remittance services and also issue electronic...

• Guidelines on Operations of Electronic Payment Channels in Nigeria

The CBN issued guidelines on electronic payment provide specific regulations on the use and operations of the following e-payment channels: The internet, Automated Teller Machine (ATM), Mobile Point of Sale (MPOS) devices and Point of Sale (POS) machines. The e-payment guidelines identify and define the roles of the stakeholders in electronic payment. The stakeholders include Acquirers, Issuers, Merchants, and Cardholders. It specifies the standards and specifications for ATM technology, guidelines for ATM deployment, minimum standards and specifications for POS terminals, minimum standards and technical specifications for MPOS devices, and minimum standards for gateway provider of web payment services. The settlement mechanism for POS and MPOS transactions with the Nigeria Interbank Settlement Systems (NIBSS) is also established in the guidelines, acting as the Payment Terminal Service Aggregator for the financial industry.

Regulatory Framework for the Use of Unstructured Supplementary Service Data (USSD) for Financial Services in Nigeria.

The guidelines aims to reduce the risks associated with the implementation and use of USSD technology for offering financial services in Nigeria. The guidelines state that only Mobile Network Operators (MNOs) and CBN licensed entities with a letter of no objection or letter of introduction from the CBN are eligible for the issuance of USSD short codes by the Nigerian Communications Commission (NCC). The guidelines also require financial institutions providing use of the USSD channel to encrypt all USSD information and offer customers the option to opt in/out of the USSD channel. Also, no USSD channel shall be deployed for financial services unless a deactivation mechanism, which allows users to block their account from operating USSD services, is put in place.

• Guidelines on International Money Transfer Services:

The guidelines are necessary for International Money Transfer Service Operators (IMTSOs) that offer digital international money transfer services. Any person or institution that wishes to provide international money transfer services must be licensed by the CBN. Although deposit money banks are prohibited from operating as international money transfer service operators, they may act as agents. The guideline makes provisions for four categories of international money transfer providers for the purpose of licensing requirement, to wit: Foreign International Money Transfer Operators, Indigenous International Money Transfer Operators, Foreign Technical Partners and Local Agents. A foreign IMTO wishing to operate in Nigeria must have a minimum share capital of US\$1 million in their home country and a list of Licensed Agents, who are Authorized Forex Dealers, to act as local agents. The foreign IMTO must also pay a non-refundable application fee of N500, 000 (Five Hundred Thousand Naira), or such amount as the CBN may specify from time to time. While a local IMTO is required to have a minimum paidup share capital of N2,000,000,000 (Two Billion Naira), and the primary object clause of the company's Memorandum of Association must indicate provision of money transfer services.

Any person or institution that wishes to provide international money transfer services must be licensed by the CBN.

• Guidelines on International Mobile Money Remittance Service

These guidelines were issued to facilitate foreign exchange transactions over mobile applications. It states the minimum standards and requirements for the operation of international funds remittance over mobile devices in Nigeria. The institution must be in partnership with at least an Authorised Dealer bank licensed in Nigeria. The guideline identifies the participants in international money remittance as: banks, infrastructure providers, Mobile Network Operators and consumers, and states their roles and responsibilities. It also provides transaction security standards and risk management measures for operators. An institution must be approved by the CBN to carry out inbound or outbound international funds remittance service in Nigeria.

The requirements for obtaining such approval include:

- a. A licence in its home country to carry on money transfer services
- **b.** A net worth of US\$1 billion
- c. A valid Mobile Money Operator's licence
- **d.** A presence in at least twenty countries with at least 10 years experience in the money transfer business.

• Exposure Draft of New CBN Licensing Regime for Payment Service Providers

The CBN recently proposed a new licensing regime for all categories of payment service providers and financial technology companies to recognize the growing level of acceptability of FinTech and the attendant emerging risks within the financial system. The regime proposes 3 licence categories of payment service providers: Super Licence, Standard Licence, and Basic Licence, which have a tenor of 3 years, 3 years and 2 years, respectively. The three licence categories are also required to have a minimum shareholder fund of N5, 000,000,000 (five billion naira), N3, 000,000,000 (three billion naira) and N100, 000,000 (one hundred million naira), respectively. Companies shall be expected to notify the CBN before starting any new activity under their licence category.

Regulation for Direct Debit Scheme in Nigeria

A direct debit is a cashless form of financial settlement which facilitates a recurring payment. It permits the originator of the instruction, known as 'Biller' to collect amounts due from a 'Payer' through the Payer's bank by leveraging on instruction or mandate provided by the Payer. The regulation recognizes the existing and emerging multi-channel options applied for direct debiting and attempts to define the operational standards expected in the direct debiting process. It identifies 5 participants: The Biller, the Biller's bank, the Payer, the Payer's bank and the Payment Service Provider, and states their roles in the debiting process. A Biller is required to be an entity incorporated or registered to carry on business in Nigeria. Both a Biller and Payer's Bank shall be members of the Nigeria Clearing System or integrated with Payment Service Providers that accept Direct Debit for processing. Payer's Banks, Billers, and Payment Service Providers shall keep records of all direct debit transactions for a period of not less than six years from the date of cessation of the Direct Debit Mandate.

The CBN recently proposed a new licensing regime for all categories of payment service providers and financial technology companies...

The National Information Technology Development Agency (NITDA) also issued the Nigerian Data Protection Regulation which impacts the use, transfer, and processing of data of Nigerian citizens. The Central Bank of Nigeria has also issued a Risk-Based Cyber-Security Framework and Guidelines for Deposit Money Banks and Payment Service Providers, which will be of importance to FinTech companies operating in Nigeria.

12.0 Challenges in the Nigerian FinTech Sector:

Some of the challenges of the FinTech sector are highlighted as follows:

- Corporate governance limitations The CBN restricts banks and other regulated financial institutions from trading or dealing in virtual currencies. Virtual currencies are not legal tender in Nigeria and that dealers or investors in virtual currencies have no legal protection in Nigeria. Also, under Nigerian law, private companies are restricted from offering their securities to the public.
- The Securities and Exchange Commission (SEC), based on its interpretation of the current regulations, does not permit crowdfunding as it is deemed to be an invitation to the public. The SEC has undertaken to consider regulatory amendments to permit equity crowdfunding in Nigeria.
- Establishing strategic partnerships.
- Inadequate Funding frequent capital flight and low investor confidence.
- Lack of adequate information The lack of access to data or its non-availability in most cases.
- Intellectual property theft / consumer protection.
- Rate of unbanked and underbanked population who do not have access to mobile phones and other technology devices.
- The lack of a national Identification program to prevent fraud by customers
- Limited range of Service operators/weak digital infrastructure according to NCC, total Operators comprise about 33,000 km of fiber-optic cable and 24,000 cellular towers, where 3G and LTE coverage only reaches 54% and 51% of the population, respectively.
- Institutional knowledge gap FinTech awareness needs to be amplified to educate the
 population, government agencies, financial institutions and others about the benefits
 of adopting FinTech services.

IMPORTANT DISCLOSURES

This research report has been prepared by the analyst(s), whose name(s) appear on the front page of this document, to provide background information about the issues which are the subject matter of this report. It is given for information purposes only.

Each analyst hereby certifies that with respect to the issues discussed herein, all the views expressed in this document are his or her own and reflect his or her personal views about any and all of such matters. These views are not necessarily held or shared by PanAfrican Capital Research or any of its affiliate companies. The analyst(s) views herein are expressed in good faith and every effort has been made to base our opinion on reliable comprehensive information, but no representation is made as to its accuracy or completeness. The opinions and information contained in this report are subject to change and neither the analysts nor PanAfrican Capital Research is under any obligation to notify you or make public any announcement with respect to such change.

This report is produced independently of PanAfrican Capital Research and the recommendations (if any), forecasts, opinions, estimates, expectations and views contained herein are entirely those of the analysts. While all reasonable care has been taken to ensure that the facts stated herein are accurate and that the recommendations, forecasts, opinions, estimates, expectations and views contained herein are fair and reasonable, none of the analysts, PanAfrican Capital Research nor any of its directors, officers or employees has verified the contents hereof and accordingly, none of the analysts, PanAfrican Capital Research nor any of its respective directors, officers or employees, shall be in any way responsible for the contents hereof.

With the exception of information regarding PanAfrican Capital Research, reports prepared by PanAfrican Capital Research analysts are based on public information. Facts and views presented in this report have not been reviewed and may not reflect information known to professionals on other PanAfrican Capital Research business areas including investment banking. This report does not provide individually tailored investment advice. Reports are prepared without regard to individual financial circumstances and objectives of persons who receive it. The securities discussed in this report may not be suitable for all investors. It is recommended that investors independently evaluate particular investments and strategies. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances or objectives. Neither the analyst(s), PanAfrican Capital Research, any of its respective directors, officers nor employees accepts any liability whatsoever for any loss so ever arising from any use of this report or its contents or otherwise arising in connection therewith. Each analyst and/or any person connected with any analyst may have acted upon or used the information herein contained, or the research or analysis on which it is based prior to its publication date. This document may not be relied upon by any of its recipients or any other person in making investment decisions.

Each research analyst certifies that no part of his or her compensation was or will be directly or indirectly related to the specific recommendations (if any), opinions, forecasts, estimates or views in this report. Analysts" compensation is based upon activities and services intended to benefit clients of PanAfrican Capital Research. As with other employees of PanAfrican Capital Research, analysts' compensation is impacted by the overall profitability of PanAfrican Capital Research, which includes revenues from all business areas of PanAfrican Capital Research.