Nigeria FinTech Survey
2017

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Contents

Key messages

Retail banking and Payments are the sectors most likely to be disrupted by FinTechs

FS Players see changing customer needs as the top impact FinTechs have on their businesses

60% of respondents believe that up to 40% of FS business is at risk to standalone FinTechs

Additional revenues and cost reduction are the top opportunities related to the rise of FinTechs

Information security, loss of market share and increased pressure on margins are the key threats FinTechs pose to the industry

70% respondents predict that more than 60% of their customers will use mobile applications to access financial services within the next five years

Banks are the most active players in partnering with FinTechs and rebranding purchased FinTech services

The key challenges with integrating FinTechs and FS companies are differences in operational processes and regulatory uncertainty

Executive Summary

FinTech is revolutionising Nigeria's Financial Services industry

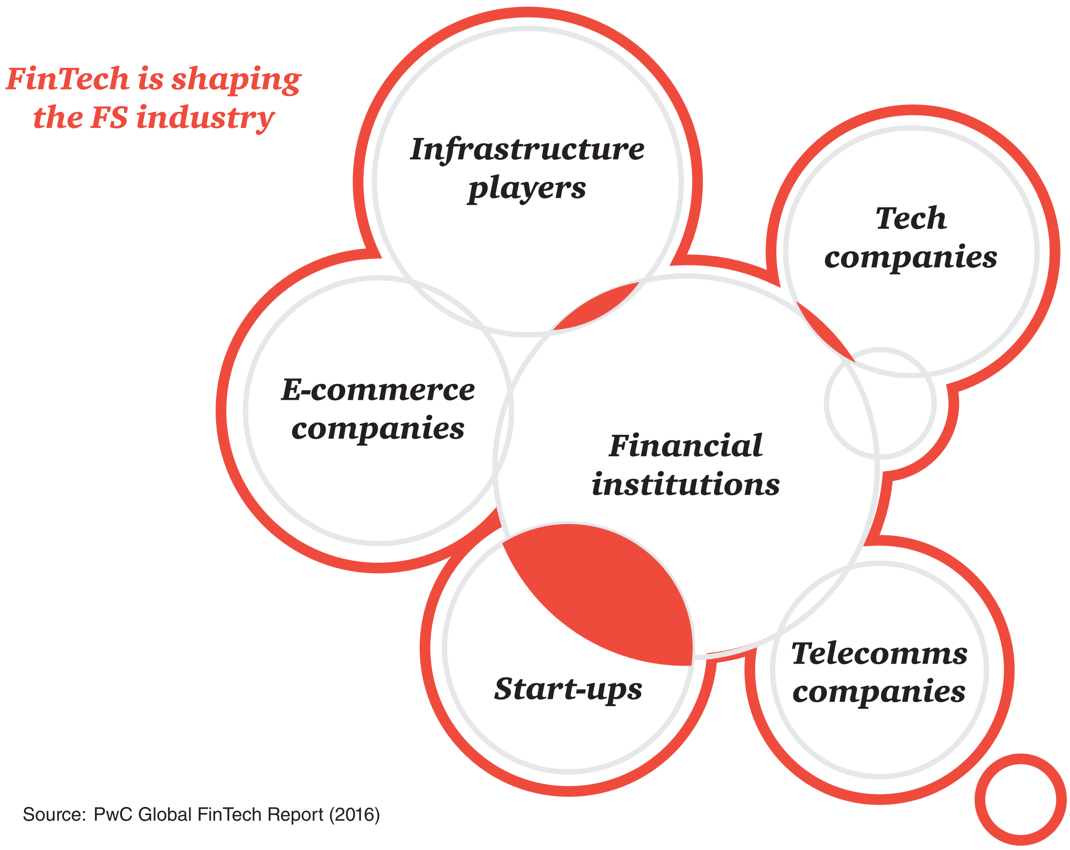
The Financial Services industry is undergoing a transformation, driven by trends in technology, consumer behaviour and changes in the financial landscape itself. Financial technology i.e. FinTech describes the evolving intersection of financial services and technology. The term can refer to start-ups, technology companies, or even traditional financial services providers.

FinTechs are redrawing the competitive FS landscape and blurring the lines that define players in the FS sector. As such, it is getting harder to know where technology ends and where financial services begins.

The Study

PwC conducted a survey of Nigerian FS Industry leaders to gain first-hand opinions and insights on the following:

- impact of FinTech on Nigeria's FS industry
- opportunities offered by FinTechs
- threats to existing businesses
- perspectives on the way forward for FinTechs and FS players



Source: PwC Global FinTech Report (2016)

The Financial Services (FS) industry is merging with the Technology sector. Players that can develop or leverage disruptive technologies and innovative practices will thrive. The rest will play catch-up…

Nigeria Survey findings at a glance

Respondent demographics

51% — ***Banking***

29% — ***Insurance***

10% — ***Asset and Investment Management***

10% — ***Funds Transfer and Payments***

PwC estimates that in the next 3 to 5 years, cumulative investment in FinTech globally could well exceed

$150bn[1]

77%

of respondents believe that part of their business is at risk of being lost to standalone FinTechs

76%

of respondents indicated that the most important impact FinTech will have on their business is an increased focus on the customer

84%

of respondents identify additional revenues as the key opportunity provided by FinTechs

86%

agree that information security is a key threat related to the rise of FinTech

55%

of FS incumbents have put FinTech at the heart of their strategy

68%

of respondents believe that over 60% of their clients will be using mobile applications (at least once a month) to access financial services

35%

of FS incumbents currently engage in joint partnerships with FinTechs

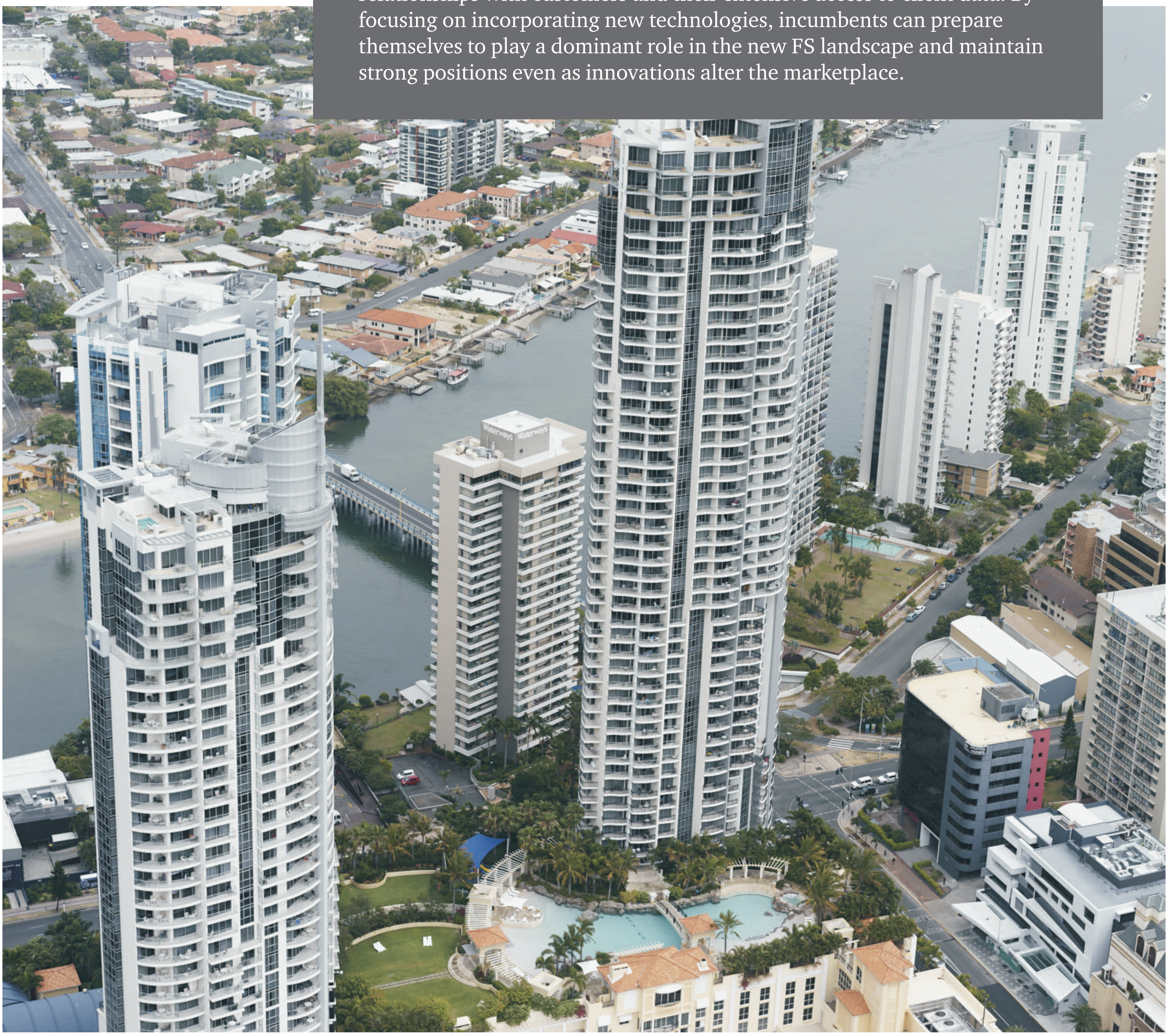
1. The FinTech challenge: How FinTech is shaping banking in Africa

The way forward...

Results of the survey reveal that Nigeria's FS Industry Leaders acknowledge the emergence of FinTech and recognise its impact on the Industry. The main impact of FinTech will be the development of new FS business models, which will create challenges for both regulators and market players.

This will require incumbents to implement a customer-centric model focused on offering products and services that truly addresses customers' needs and supports the completion of transactions through multiple, accessible and connected channels. In addition, incumbents have to proactively approach the FinTech challenge with a clearly articulated strategy rather than the current approach of adopting reactionary measures.

Incumbents need to identify the threats and opportunities that are most relevant to their business, and build, acquire or enter into partnerships for the capabilities they lack. This would require incumbents to acknowledge areas where FinTechs are stronger, and use the emerging skills and approaches to plug the gaps they have, while leveraging their trusted relationships with customers and their extensive access to client data. By focusing on incorporating new technologies, incumbents can prepare themselves to play a dominant role in the new FS landscape and maintain strong positions even as innovations alter the marketplace.



Introduction

What is FinTech?

FinTech is shaping FS from the outside in

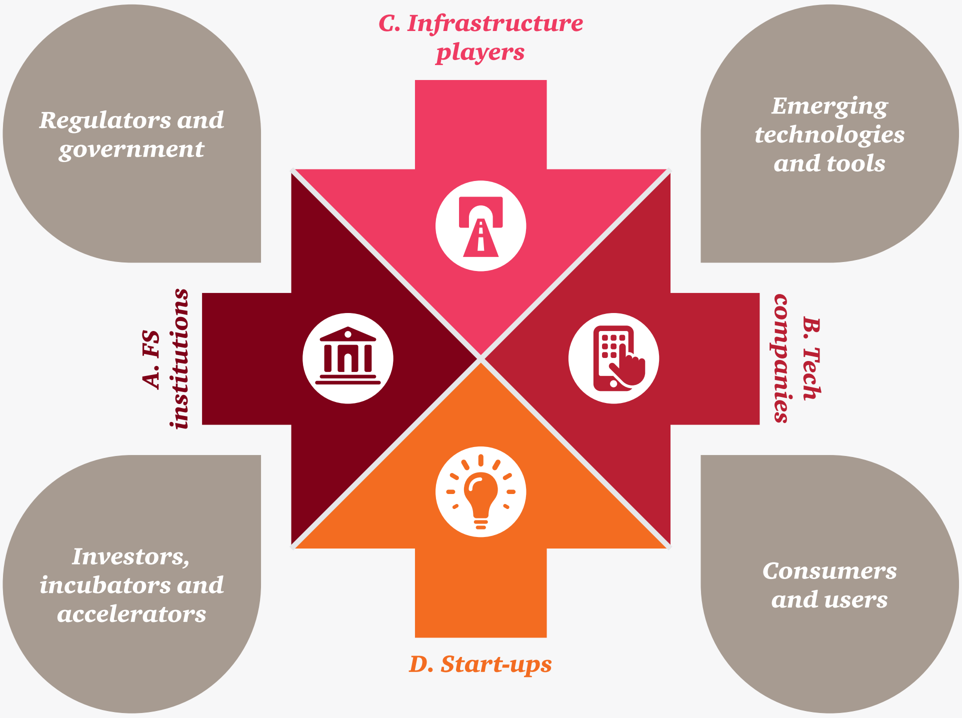
FinTech is a rapidly evolving segment of the financial services (FS) industry where technology focused start-ups and other new market entrants are disrupting how the industry operates.[2]

FinTechs function by innovating the traditional products and services provided by the FS industry. This innovation is achieved by introducing technology-driven applications which transform customer expectations and create opportunities in underserved markets. As such, FinTech is gaining significant momentum and causing disruption to the traditional FS value chain.

Funding of FinTech start-ups more than doubled in 2015 reaching $12.2bn, up from $5.6bn in 2014 based on the companies included on PwC's DeNovo platform.[3]

In Africa, FinTech investments is estimated to have increased by a CAGR of over 58% between 2014 and 2016 to $800mn (from $200mn), and could possibly be valued at $3bn by 2020; with Nigeria, and South Africa receiving a significant portion of these investments.[4] With this significant backing, the FinTech ecosystem is redefining the competitive landscape and blurring the lines that define players in the FS industry (see Figure 1).

Figure 1: FinTech is a complex ecosystem



Source: PwC

2 & 3. PwC Global FinTech Report (2016)
4. Five Banking Innovations from Five Continents (February 2015)

Our objectives and approach

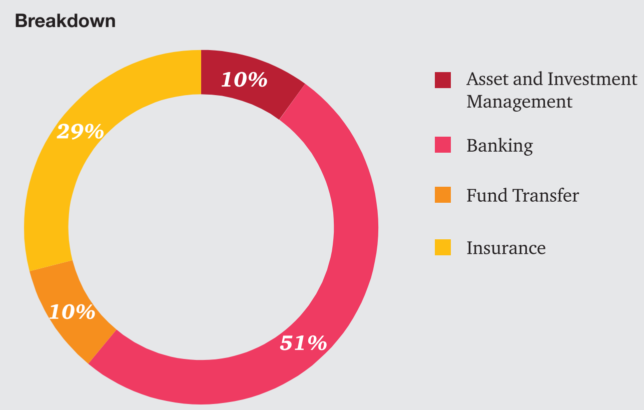
This report assesses the rise of FinTech in Nigeria's FS Industry, the potential impact of FinTech on market players and their attitudes to the latest technological developments. It also offers strategic responses to these FinTech disruptions.
Our analysis is based on the following:

- Primary data derived from the results of a survey that includes feedback from a broad range of players from Nigeria's top financial institutions. For this study, we surveyed 49 respondents, principally Chief Executive Officers (CEOs), Heads of Innovation, Chief Information Officers (CIOs) and top-tier managers involved in digital and technological transformation. Our survey was distributed to leaders in various segments of the FS industry in Nigeria (see Figure 2).

- Insights and proprietary data from DeNovo, PwC's Strategy& platform comprising a 50-member team of FinTech subject matter specialists, strategists, equity analysts, engineers and technology experts with access to over 40,000 public and proprietary data sources.

In the first section of the report, we explore FS Industry respondents' perspectives on disruption. Next, we highlight the key emerging FinTech trends in the various FS sub-sectors and the readiness of the market to respond to these trends. Finally, we offer suggestions about how market players should strategically approach FinTech.

Figure 2. FS Industry Survey Respondents



Source: PwC Nigeria FinTech Survey 2017

The Disruptor

FinTech: The Disruptor

New digital technologies are reshaping the value proposition of current financial products and services. While we should not underestimate the capacity of incumbents to assimilate innovative ideas, the disruption of the FS Industry is clearly underway, and retail banking, funds transfer and payment sectors will be the most impacted in the short term; followed by the insurance and asset management sectors.

> *"We are restructuring our old processes and bringing up the new tech platforms, in other words, pushing for change."*
>
> *- CEO, Asset & Resource Management Company Limited*

Banking and Payments

Up to

40%

of business at risk by 2020

Insurance, Asset and Investment Management

Up to

36%

of business at risk by 2020

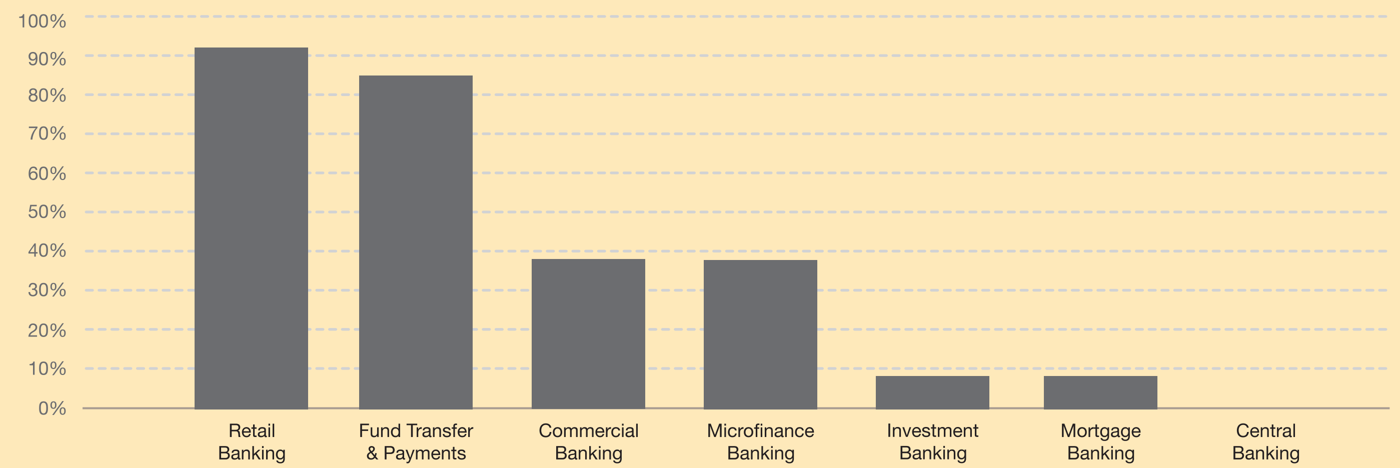
Disruption targets mostly retail banking and payments sectors

In keeping with global trends and changes already underway[5], 92% and 85% of survey respondents see banking and fund transfer/ payments as the sectors most likely to be disrupted over the next five years (see Figure 3).

In recent years, the banking and payments sub-sectors have also experienced a high level of disruption with the surge of new technology-driven payments applications and processes, new digital applications that facilitate easier payments, alternative processing networks and the increased use of electronic devices to transfer money.

Figure 3: Areas of disruption (Banking and Payments & Fund transfer)

Which part of the sector is likely to be the most disrupted by FinTech over the next 5 years?



Source: PwC Nigeria FinTech Survey 2017

5. PwC Global FinTech Report (2016): 80% (Retail banking) and 60% (Fund transfers & payments) of global survey participants agree that these are likely to be the most disrupted sectors by 2020

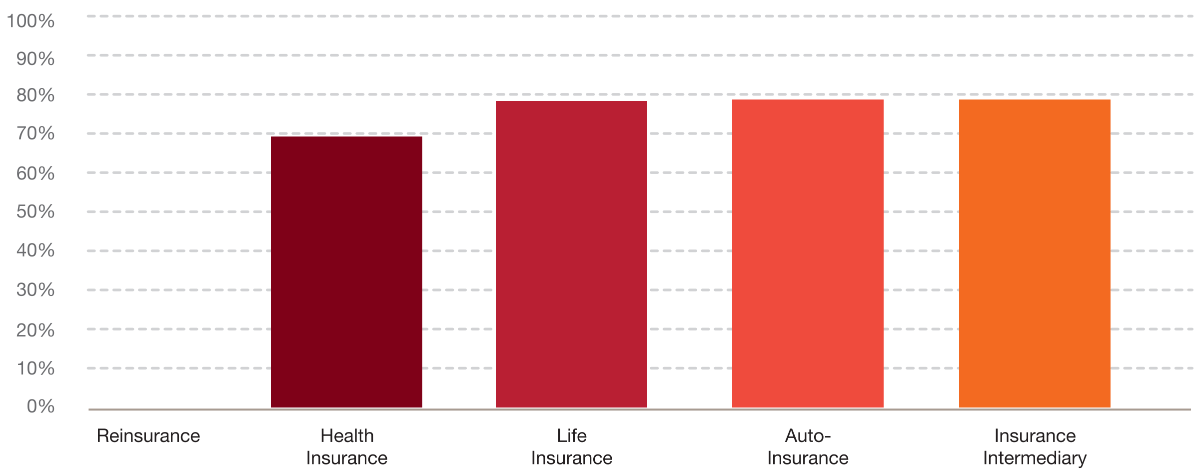
Insurance and Asset management sectors are also on the disruption radar

Banking and Payments sectors offer profound examples of FinTechs changing the FS industry by offering new solutions that are visibly disturbing traditional players. The Insurance and Asset & Investment Management sectors are next in line to experience the game-changing impact that FinTechs have on the FS industry.

The pace of change in the Insurance sector is accelerating more quickly than could have been envisaged with the emergence of mobile applications designed for easy access to transactions, insurance quotes, claims support or even roadside assistance. Respondents in Nigeria seem to be aware of this revolution with 78% of respondents indicating some part of their business is at risk of being lost to standalone FinTechs.

When asked which part of the Insurance sector is the most likely to be disrupted by FinTech over the next 5 years, survey respondents see Life insurance, Auto insurance and Intermediaries (Brokers/ Agents) as the areas to be most disrupted.

Figure 4: Areas of Disruption (Insurance Sector)
Which part of the sector is likely to be the most disrupted by FinTech over the next 5 years?



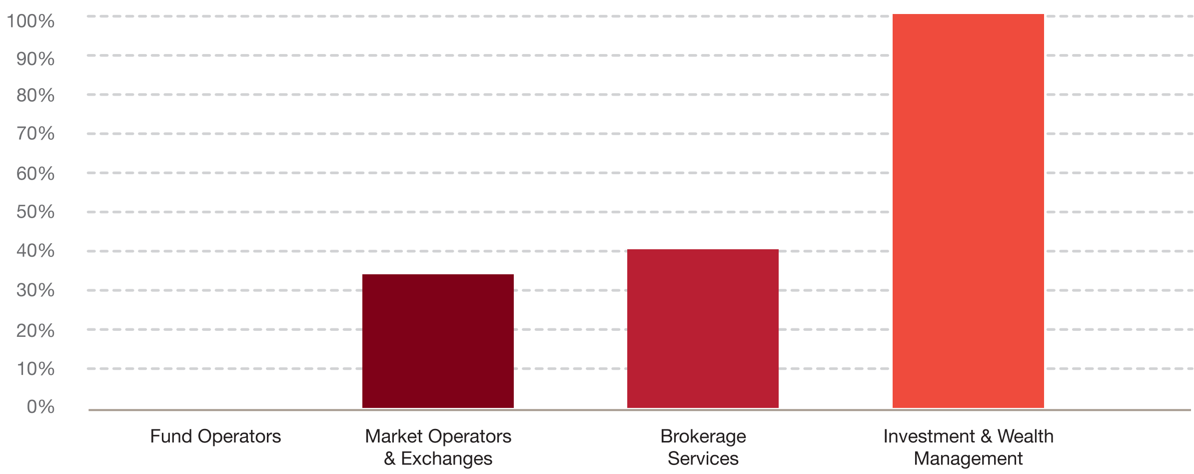
Source: PwC Nigeria FinTech Survey 2017

In the Asset and Investment Management sector globally, FinTechs are creating new solutions across the customer investment journey, from financial planning to investment management. For instance, the emergence of Robo-Advisors to automate the asset allocation process and provide a personalised user experience at a much lower cost compared to services provided by traditional firms poses a significant threat to local players.

Survey respondents from the Asset & Investment Management Sector believe that over the next 5 years, Investment & Wealth Management services will be the most disrupted by FinTechs, followed by Brokerage services; while 60% of respondents think that at least part of their business is at risk to FinTech (the lowest compared to other financial sectors).

Survey findings reveal that disruption caused by FinTechs is at its early stages and industry players have the opportunity to proactively tackle changing customer behaviour, new technologies and new business models.

Figure 5: Areas of Disruption (Asset & Investment Management Sector)
Which part of the sector is likely to be the most disrupted by FinTech over the next 5 years?



Source: PwC Nigeria FinTech Survey 2017

Customer is King

Understand your customers

Break down the silos

Enhance the customer experience

Customer centricity is fuelling disruption…

Figure 6: Adoption of Digital Technologies

Number in Billions

	2012	2015	2020 Estimate
Smart phones	1.9	5.4	7.8
Mobile phones	5.9	8.0	11.0
World Population	7.0	7.2	7.6
Online devices (including sensors e.t.c	9.6	15.0	50.0

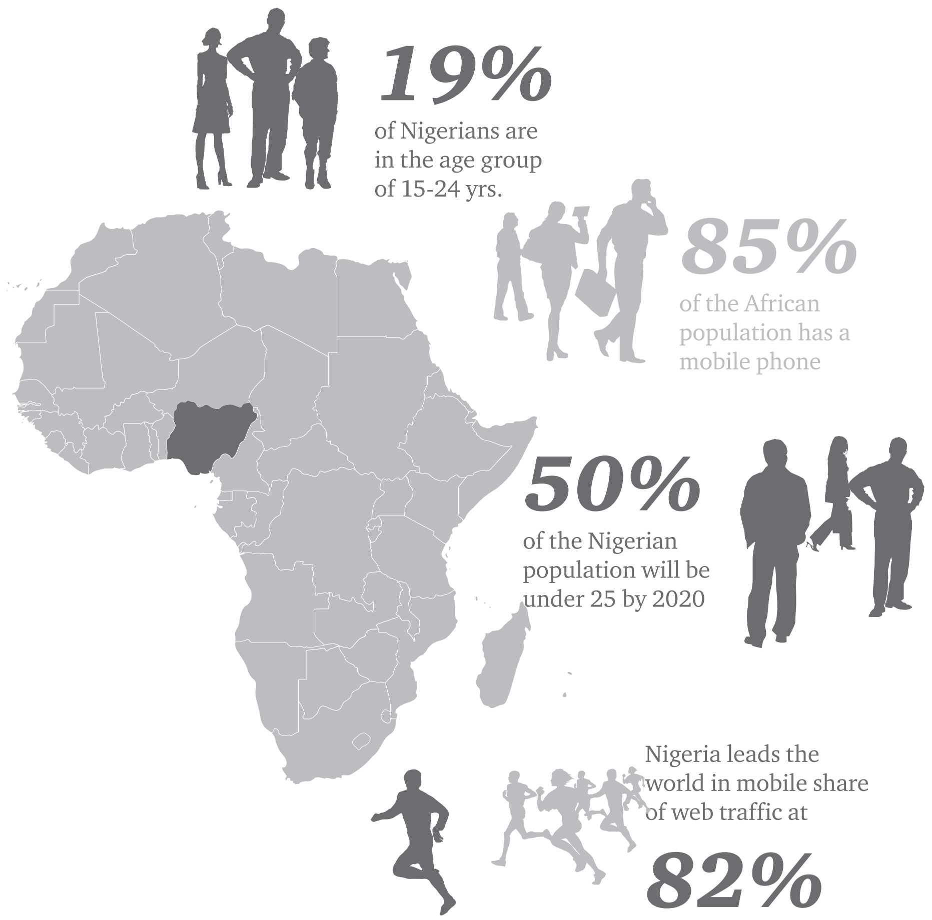
The world is becoming a global digital community characterised by a rapid growth in the adoption of digital technologies.

Nigeria, like the rest of the world is also rapidly evolving into a digital community, creating tremendous growth opportunity for discerning businesses.

Smart phones Mobile phones World Population Online devices (including sensors etc.)

Over the next decade, the average FS consumer profile will change dramatically as the Baby Boomer generation ages (people born approximately between the years 1946 and 1964) and Generations X and Y assume more significant roles in the global economy. Generation Y, also known as "Millennials" (those born between 1980 and 2000), is bringing a radical shift to client demography, behaviour and expectations.

Millennials represent the next generation of investors, and their affinity for technology and preference for a state-of-the-art customer experience, speed and convenience will further accelerate the adoption of FinTech solutions.



Source: CIA World Fact book, Dynamic Spectrum Access Network, BMI (December, 2016)

… and is transforming customers' expectations of FS Industry players

As customers are becoming accustomed to the digital experience offered by companies such as Google, Amazon, Facebook and Apple, they would expect the same level of customer experience from their financial services providers.

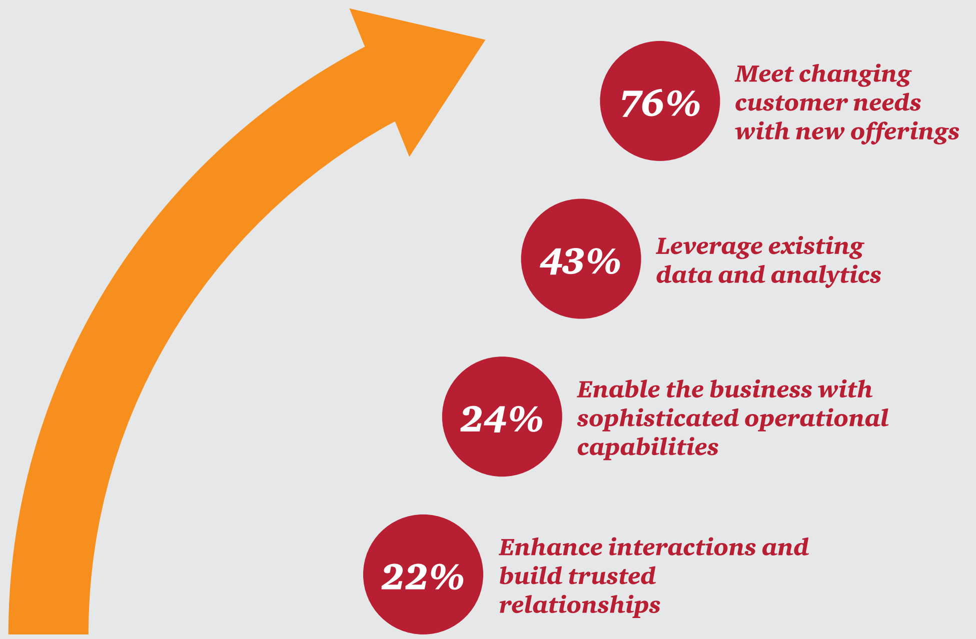
FinTech is leveraging the wave of disruption with solutions that can better address customer needs by offering enhanced accessibility, convenience and tailored products. In this context, the pursuit of customer centricity has become a key priority that will help meet the needs of Millennials.

FS Industry players must embrace the "always on" culture adopted by Millennials i.e. Industry Players must adopt new business models, allow customer-based insights to drive their strategic response to disruption caused by FinTechs and create channels and technologies which focus on customer-centred experiences.

While only 59% of survey respondents believe their financial institutions are very customer-centric, 76% of respondents confirmed that the most important impact FinTech will have on their businesses is an increased focus on the customer (see Figure 7).

Figure 7: Business challenges

In which areas do you see the most important impact to your business from FinTech?



Source: PwC Nigeria FinTech Survey 2017

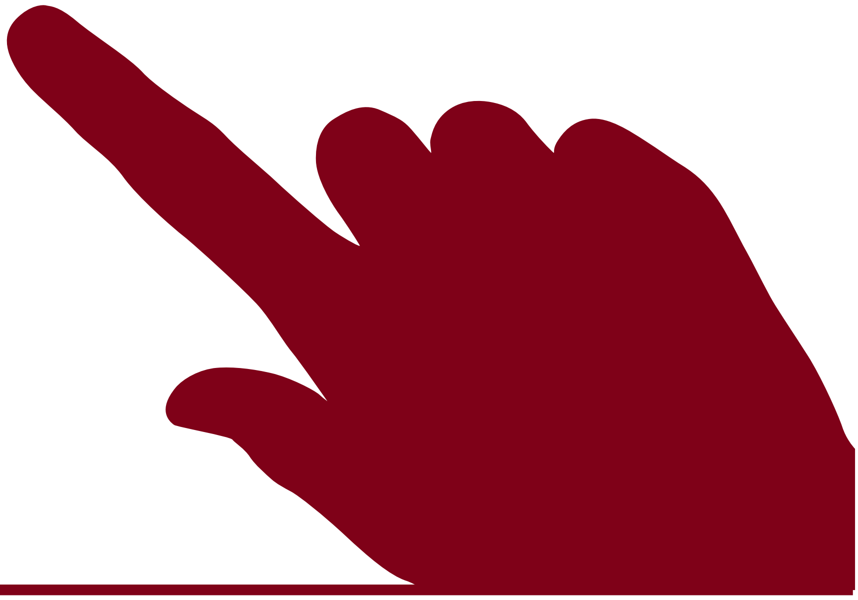
Trend Analysis

Emerging FinTech trends on the radar

This section highlights the trends in FS industry sectors i.e. Asset and Investment Management, Banking, Funds Transfer & Payments and Insurance.

PwC identified the emerging FinTech trends[6] that will be most impactful in the next five years in the key sectors of the FS industry. Overall, the key trends cover enhanced customer experience, self-directed services, sophisticated data analytics and cybersecurity. However, the focus will differ from one FS sector to another.

Survey respondents identified the relevant FinTech trends to their sector and indicated the likelihood to respond to each trend (e.g. allocate resources, invest).

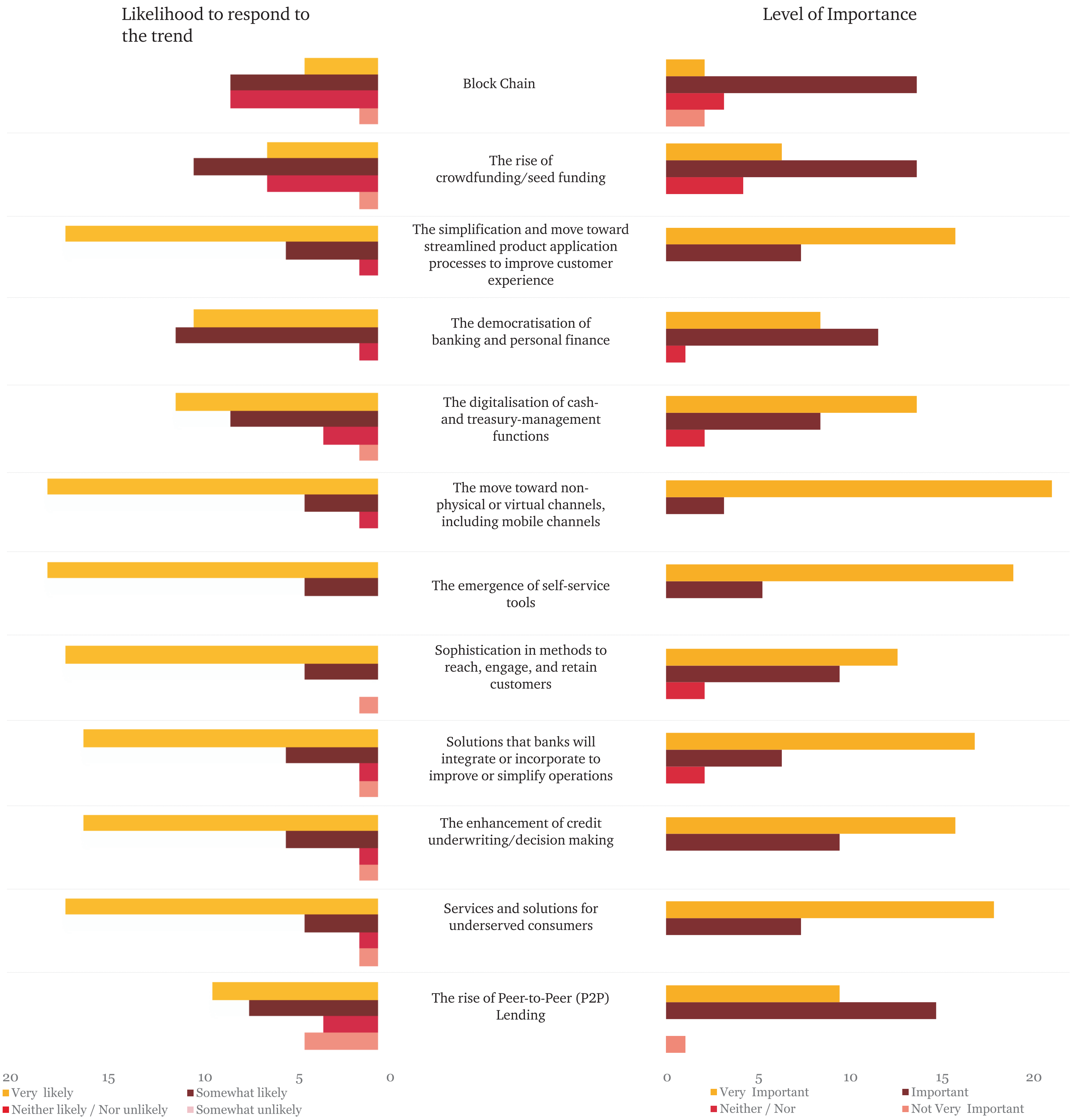


6. Emerging FinTech trends were obtained from PwC's Denovo Platform. See summaries of trends in Appendix 1

Banking

Figure 8: Trends in the banking sector ranked by importance and likelihood of response

How important are these trends to your sector and what is the likelihood of your responding to them (e.g. allocate resources, Invest)?



Banks are adopting new solutions to improve and simplify operations

Banks are going for a renewed digital customer experience

Banks are moving towards non-physical channels by implementing operational solutions and developing new methods to reach, engage and retain customers.

The rise in the adoption of technology has largely impacted Nigerian Banks with most traditional Banks leveraging technology and big data to provide products and services to the ever evolving customer demography.

Banks are simplifying operations to improve customer experience

Results from the survey indicate that Industry leaders rank the move towards non-physical or virtual channels, the emergence of self-service tools, and the provision of services and solutions for underserved customers as the most important FinTech trends worthy of investment. Similarly, the implementation of sophisticated methods (e.g. on-line marketing techniques) to reach, engage, and retain customers; the enhancement of credit underwriting/decision making by utilising more granular data to accurately assess and price risk; and the streamlining of the loan application process to improve customer experience are also key FinTech trends that Banks are likely to respond to.

Generally, Nigerian Banks are adopting new solutions to improve and simplify operations, which fosters a move away from physical channels and towards digital/mobile delivery. The availability of solutions such as open development and software-as-a-service (SaaS) are central to providing Banks with the ability to streamline operations. Also, the incorporation of Application Program Interfaces (APIs) enables the development of value-added solutions and features by third parties that can easily be integrated with banking platforms.

The move towards virtual banking solutions is being driven largely by consumer expectations. While some customers may still prefer human interactions in certain parts of the banking process, customers more often than not, seek an Omni channel experience i.e. an integrated customer experience which enables interaction across different channels while also providing the ability to transition between channels regardless of the transaction type. In addition, customers seek 24/7 customer service, which can be provided through non-traditional methods such as social media.

Our Perspective...

Put the customer at the centre of operations

While traditional banks may already have many of the streamlined and digital/mobile-first capabilities, they should look to ***integrate multiple digital channels into an omni-channel customer experience*** and leverage existing customer relationships and scale.

In addition, underserved customers represent a huge potential for Banks and FinTechs alike as ~40% of Nigeria's adult population is financially excluded.[7] Banks should ***leverage Technology to develop low cost products and services*** taking into account the specific needs of the financially excluded population (such as unemployed youths, rural women and farmers).

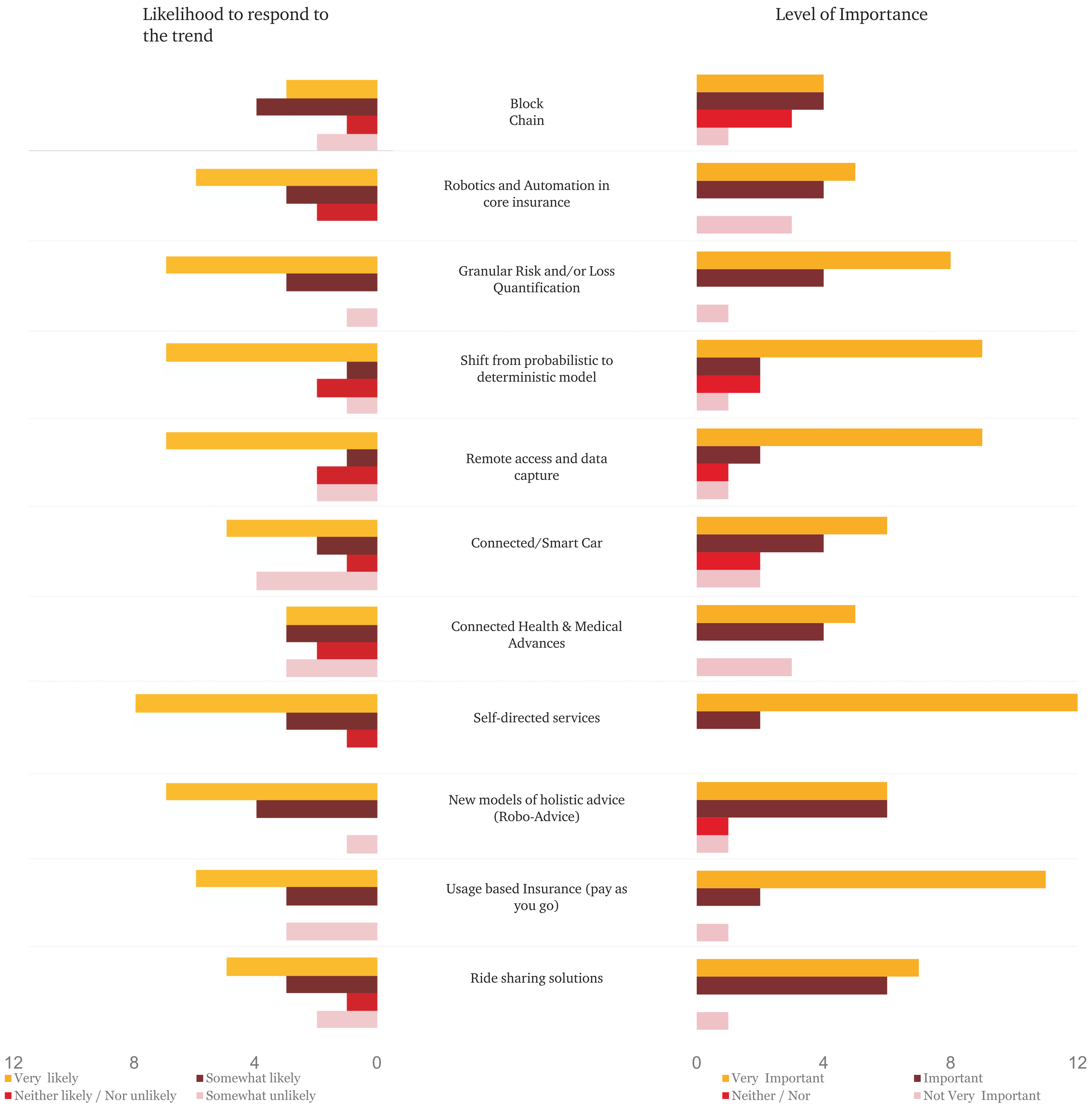
Banks can also prioritise customer preferences, rather than a single product or channel; and refine their approach to provide holistic solutions by tailoring offerings to customer expectations. These efforts can also be supported by using newfound digital channels to ***collect data from customers*** to help Banks ***better predict customer needs, offer compelling value propositions***, and ***generate new revenue streams.***

7. Source: EFInA Access to Financial Services in Nigeria Survey (2014)

Insurance

Figure 9: Trends in the insurance sector ranked by importance and likelihood of response

How important are these trends to your sector and what is the likelihood of your responding to them (e.g. allocate resources, Invest)?



Insurance companies are most likely to respond to self-directed services as this is the most important to the sector

Insurers leverage data and analytics to deliver personalised value propositions while proactively managing risk

According to survey respondents, the shift to more self-directed services remains a top priority in order to efficiently meet existing customer expectations. In addition, the adoption of usage-based insurance models and new methods for capturing insurance-related data are key FinTech trends Insurance companies are likely to respond to.

Increasing self-directed services for insurance clients

Survey respondents indicated that self-directed services as the most important FinTech trend in their sector and the trend they are most likely to respond to. Globally, insurance companies are investing in the design and implementation of more self-directed services for both customer acquisition and customer relationship management. This allows insurance companies to improve their operational efficiency while enabling online/ mobile channels demanded by emerging segments such as Millennials.

In addition, there have been interesting cases from other climes where customer-centric designs create a compelling user experience (e.g. quotes obtained by sending a quick picture of the driving license and the car vehicle identification number), and where new solutions bring the opportunity to mobilise core processes in a matter of hours (e.g. provide access to services by using "robots" to create a mobile layer on top of legacy systems) or augment current key processes.

Usage-based insurance is becoming more relevant

Current trends also show an increasing interest in finding new underwriting approaches based on the generation of deep risk insights. In this respect, usage-based models – rated the second most important trend by survey respondents (see Figure 9) – are becoming more relevant even as initial challenges such as data privacy are being overcome.

Pay-as-you-drive auto insurance is now the most popular usage-based insurance (UBI). Initially, incumbents viewed UBI as an opportunity to underwrite risk in a more granular way by using new driving/ behavioural variables, but new players see UBI as an opportunity to meet new customers' needs (e.g. low mileage or sporadic drivers).

Data capture and analytics as an emerging trend

Remote access and data capture is another trend considered important by survey respondents. Deep risk (and loss) insights can be generated from new data sources that can be accessed remotely and in real-time, if needed. This ability to obtain diverse amounts of data must be coupled with the ability to accurately analyse the data and generate the required insights.

This trend also includes the impact of the Internet of Things (IoT). For example, drones offer the ability to access remote areas and assess loss by running advanced imagery analytics.

Our Perspective...

Differentiate, personalise and leverage data sources

Customers have new expectations and the need to build trusted relationships may compel Insurance Companies in Nigeria to seek value propositions where experience, transaction efficiency and transparency are key elements. As self-directed solutions emerge globally and locally, Nigerian Insurance companies must begin to implement mechanisms that will set them apart.

Usage-based models are also emerging in response to customer demands for personalised insurance solutions. The ability to access and capture remote risk data will help to ***develop a more granular view of the risk, thus enabling personalisation.***

Leveraging data sources to obtain a more granular view of the risk will not only offer a key competitive advantage in a market where risk selection and pricing strategies can be augmented, but will also allow incumbents to ***explore unpenetrated segments.*** In this line, new players that have generated deep risk insights are also expected to penetrate these segments of the market; for example, life insurance for individuals with specific diseases.

Finally, we believe that, in addition to social changes, the driving force behind innovation in insurance can largely be ***attributed to technological advances outside the insurance sector*** that will bring new opportunities to understand and manage the risk (e.g. Advanced Driver Assistance Systems - ADAS and autonomous cars).

"There is the possibility that we could be blind-sided by the emergence of FinTech that addresses customer segments that we either haven't developed the capacity to serve them well or for whatever reason, aren't receiving adequate attention from us"

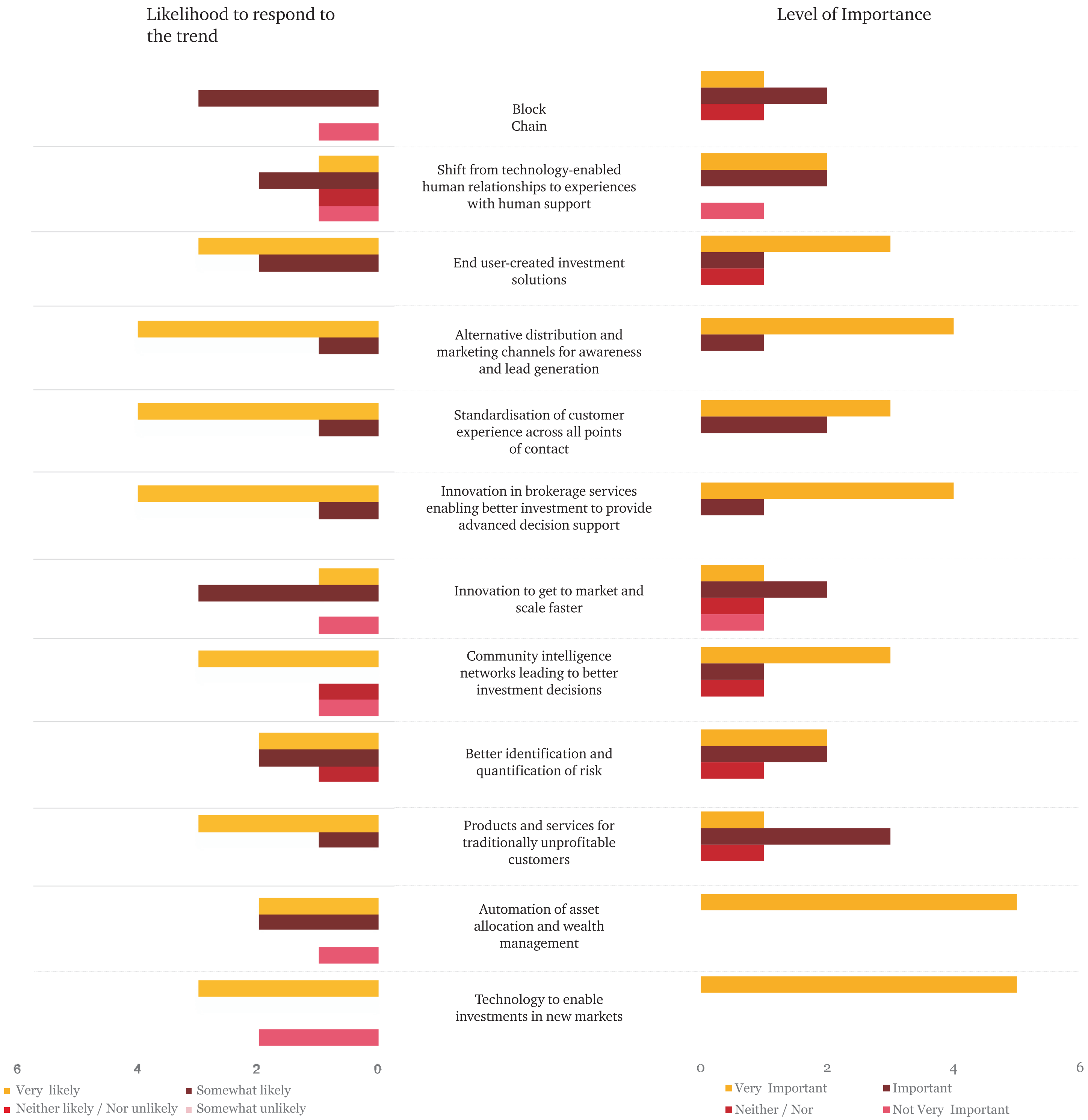
- ED, Leadway Assurance Company Limited

The telematics-based solution that enables pay-as-you-drive is one of the first models to emerge and is gaining momentum.

Asset and Investment Management

Figure 10: Trends in the Asset and Investment Management sector ranked by importance and likelihood of response

How important are these trends to your sector and what is the likelihood of your responding to them (e.g. allocate resources, Invest)?



Automation is a key imperative for Asset and Investment management

Asset and investment management respondents consider technology to enable investments in new markets and the automation of asset allocation and wealth management as the most important FinTech trends to the sector.

The emergence of new methods of capturing data and the resulting reduction in cost is also reshaping the investment sector. The increased sophistication of data analytics is reducing the imbalance of information between small- and large-scale financial institutions and investors, with the latter taking advantage of automated FS solutions. Sophisticated analytics also uses advanced trading and risk management approaches such as behavioural and predictive algorithms, enabling the analysis of transactions in real time. Globally, asset managers are increasingly using analytics solutions at every stage of the customer relationship to increase client retention and reduce operational costs. By incorporating broader and multi-source data sets, they are forming a more holistic view of customers to better anticipate and satisfy their needs.

Given that asset managers have an upcoming multi-trillion-dollar opportunity in the transfer of wealth from Baby Boomers to Millennials, the incorporation of automated advisory capabilities – either in whole or in part – will be a prerequisite. This fundamental change in the financial advisor's role empowers customers and can directly inform their financial decision-making process.

Our Perspective…

Withstand the pressure of automation

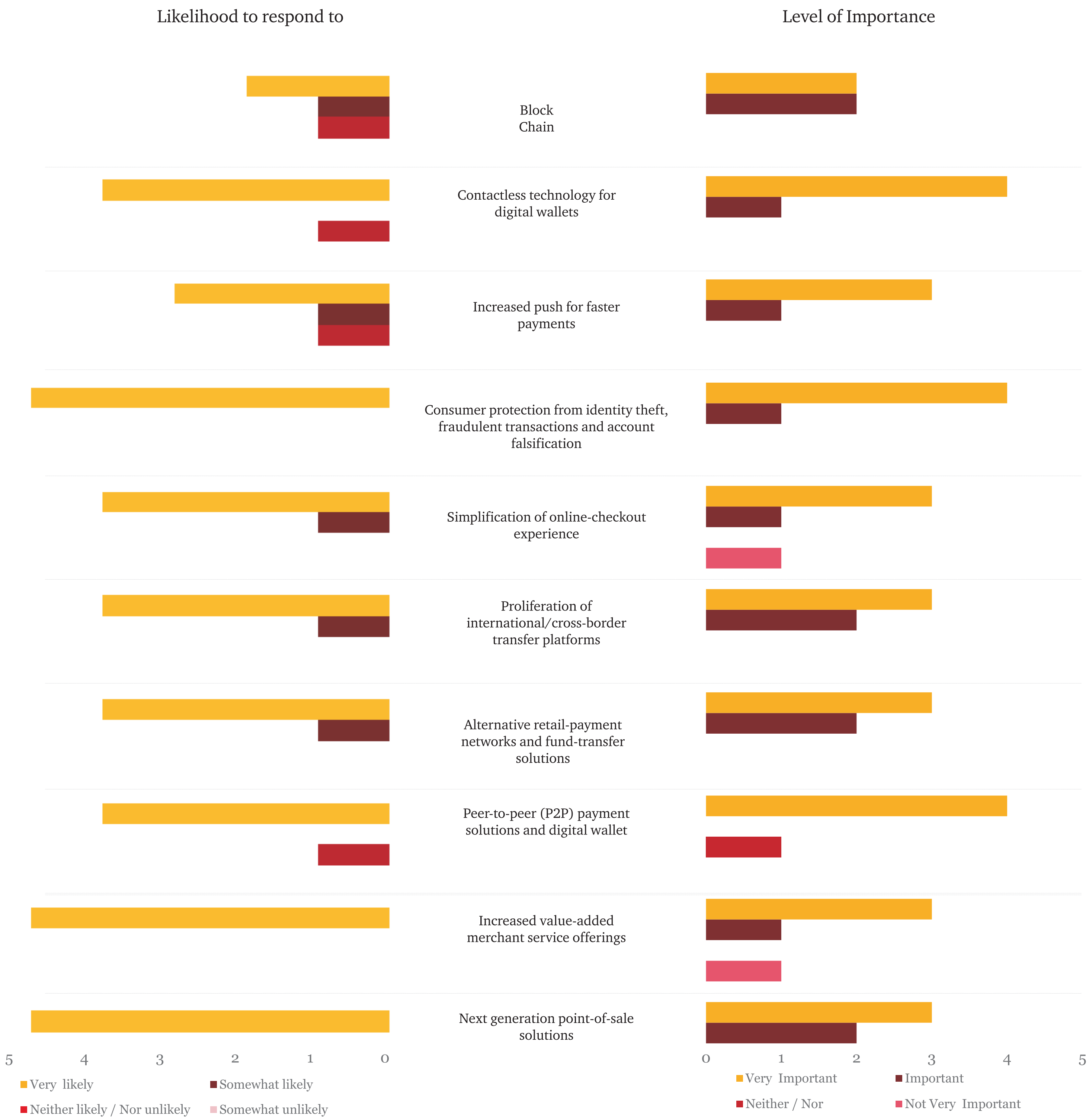
Automated investment advice (e.g. robo-advisors) poses a significant competitive threat to traditional financial advisors. ***Automated advisory mechanisms will put pressure on traditional advisory models*** and will transform the models of delivering advice to customers.

In addition, a ***secondary by-product of automated customer analysis is the lower cost of customer onboarding, conversion and funding rates.*** Although, automated advisory service is still at its infancy in Nigeria, if positioned correctly, automated advisory techniques can serve as a transition to full service advice for clients and reduce the cost of customer on-boarding and management.

Funds Transfer & Payments

Figure 11: Trends in the Funds Transfer and Payments sector ranked by importance and likelihood of response

How important are these trends to your sector and what is the likelihood of your responding to them (e.g. allocate resources, Invest)?

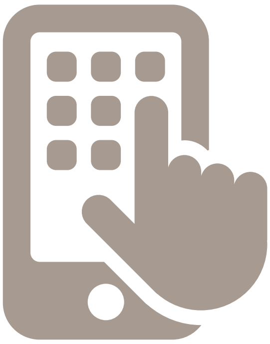


Safe and fast payments are key priorities to the Funds Transfer and Payments sector

According to survey respondents, the major trends for fund transfer and payments companies are related to both increased ease and security of payment practices such as contactless technology for digital wallets, peer-to-peer (P2P) payment solution, consumer protection from identity theft and next generation point-of-sale solutions that utilise technology (e.g. QR Codes and Near Field Communication - NFC) to improve customer engagement (see Figure 11).

Mobile smartphone adoption is one of the drivers of changing payments patterns. Today's always-connected consumers expect immediacy, convenience and security to be integral to payments. Funds Transfer and Payments companies in Nigeria are tapping into this trend and taking active steps to meet the customers needs and revolutionise traditional payment methods in Nigeria. Archaic payment solutions that take days rather than seconds for settlement are unacceptable and becoming extinct in Nigeria. Instant payments, mobile payments, soft token online transactions are the norm in Nigerian payment practices. Most Nigerian Financial Institutions have developed solutions that enable transfer of funds via secure platforms in real-time.

Customers expect a safe and consistent omni-channel experience in banking and payments, making digital wallets key to streamlining the user experience and enabling reduced friction at the checkout. Security and privacy are paramount to galvanizing support for nascent forms of digital transactions, and solutions that leverage biometrics for fast and robust authentication such as tokenisation, are critical components in creating an environment of trust for new payment paradigms.



Mobile smartphone adoption is one of the drivers of changing payments patterns. Today's mobile-first consumers expect immediate, convenient and secure payments platforms.

Our Perspective...

Be Secure, Be Agile

Speed, security and digitisation are growing trends for the payments ecosystem in Nigeria. ***Traditional loyalty to financial institutions is on the decrease and barriers to entry from third parties are lowered,*** the competitive landscape is fluid, as companies like Interswitch, Remitta, eTranzact, Paga and some Telcos have demonstrated.

Incumbents that are slow to adapt to change could ***lose market share*** to ***companies that do not have a traditional payments pedigree***, but have a critical mass of users and the network connectivity to enable payment experiences that are considered at least, equivalent to the status quo. While most of these solutions "ride the rails" of traditional banking, in doing, so they risk losing control of the customer experience and ceding ground to innovators, or "steers", who conduct transactions as they see fit.

Blockchain Technology

Blockchain: an untapped technology

Blockchain is a new technology that combines mathematical, cryptographic and economic principles in order to maintain a database between multiple participants without the need for any third party validator or reconciliation. In simple terms, it is a secure and distributed ledger.

Blockchain represents the next evolutionary jump in business process optimisation technology. Just as Enterprise Resource Planning (ERP) software allowed functions and entities within a business to optimise business processes by sharing data and logic within the enterprise, Blockchain will allow entire industries to optimise business processes further by sharing data between businesses that have different or competing economic objectives.

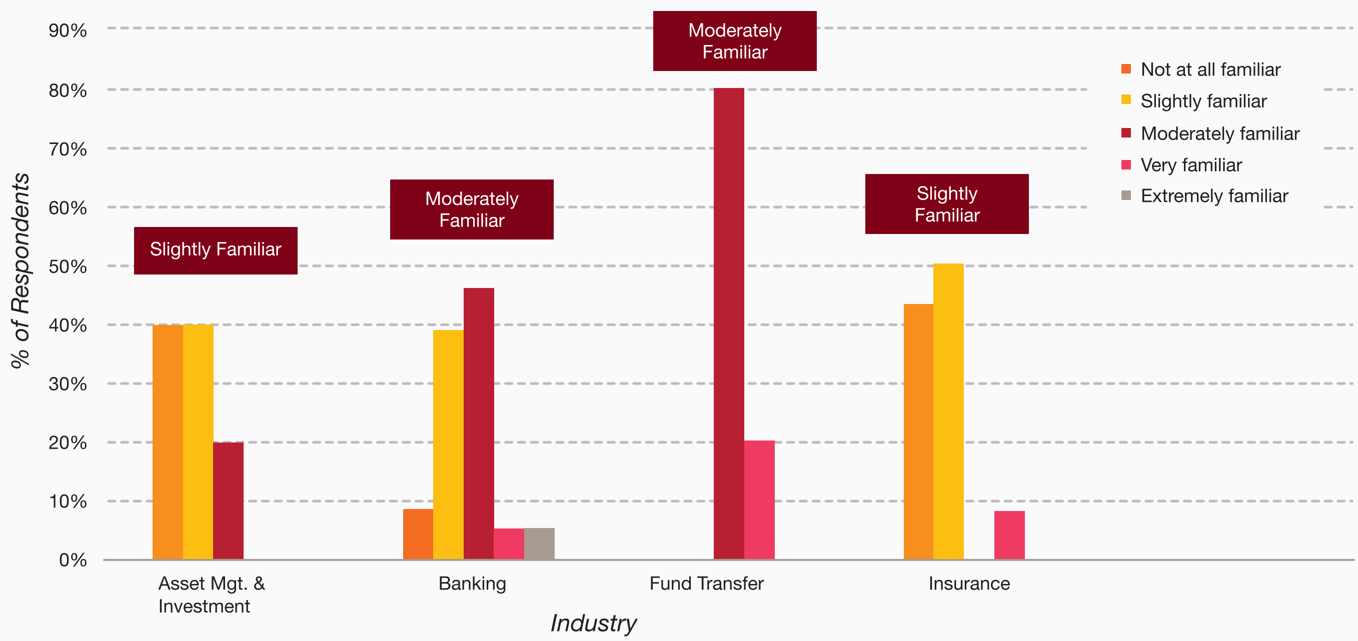
That said, although the technology shows a lot of promise, a number of challenges and barriers to adoption remain (e.g. cyber security and privacy concerns, challenges with transaction speed and volume, restricted governance over decentralised networks and ledgers etc.).

Uncertain responses to the promises of blockchain

Compared to the other trends, blockchain ranks lower on the agenda of survey participants. While respondents recognise its importance, they are unsure of how to or unlikely to respond to this trend. This may be explained by the low level of familiarity with this new technology: 45% of respondents are at best "moderately" familiar with it and only very few consider themselves to be experts (see Figure 12). This lack of understanding may lead market participants to underestimate the potential impact of blockchain on their activities.

Figure 12: Familiarity with blockchain

Please describe the extent to which you are familiar with blockchain technology



Extremely familiar: I feel as if I am expert on blockchain technology and how it works.
Very familiar: I feel as if I have fairly complete knowledge of blockchain technology and how it works.
Moderately familiar: I have read or heard about blockchain technology in the news and have researched it to some degree.
Slightly familiar: I have read or heard about blockchain technology in the news.
Not at all familiar: I do not know about blockchain technology at all.

Source: PwC Nigeria FinTech Survey 2017

The greatest level of familiarity with blockchain can be seen among the fund transfer and payments institutions, with 80% of respondents being moderately familiar with blockchain (meaning they are relatively confident about their knowledge of how the technology works).

An example of where blockchain has been leveraged within the sector is the partnership between Stellar.org (a non-profit foundation with the goal of connecting different financial systems around the world via its distributed ledger based payment network) and Oradian (a FinTech that sells cloudbased software to micro finance institutions -MFIs in developing countries) to launch a new payment-transfer network for MFIs in Nigeria. It is estimated that the network will reach over 200 branches and serve over 300,000 clients[8].

80%

of survey respondents from the Funds Transfer and Payments industry are moderately familiar with Blockchain technology…..

How the financial sector can benefit from blockchain

In our view, blockchain technology may result in a radically different competitive future in the FS industry, where current profit pools are disrupted and redistributed toward the owners of new, highly efficient blockchain platforms.[9] Not only could there be huge cost savings through its use in back-office operations but also large gains in transparency that could be very positive from an audit and regulatory point of view. One particular hot topic is that of 'smart contracts' – contracts that are translated into computer programs and, as such, have the ability to be self-executing and self-maintaining. This area is just starting to be explored, but its potential for automating and speeding up manual and costly processes is huge.

8. Source:www.stellar.org/blog/introducing-oradian/
9. Source: PwC, What's next for blockchain (2016)?

Blockchain and Cryptocurrencies

Cryptocurrencies are purely electronic currencies used for making payments anywhere in the world. Unlike traditional currencies, cryptocurrencies have no physical form, are not legal tender and are not currently backed by any government or legal entity. In addition, the supply of cryptocurrencies is not determined by any Central Bank and the transaction network is completely decentralised, with all transactions performed by the users of the system.[10] While there are a growing number of cryptocurrencies (e.g. LiteCoin, Ripple and Ethereum), the most well-known is Bitcoin with a market capitalisation of almost $14 Billion[11] (as at January, 2017).

In recent years, the use of cryptocurrencies has grown amongst consumers, with FS incumbents implementing varying initiatives to leverage the development. For example, the Bank of England (in partnership with researchers at the University College, London) announced its own cryptocurrency named RSCoin in 2016. The RSCoin, designed for the purpose of strengthening the country's economy and global trade, combines the benefits of blockchain's distributed ledger technology with the control of traditional, centrally managed currencies.[12] Similarly, in August 2016, four (4) of the world's biggest Banks led by UBS (including Deutsche Bank, Santander and Bank of New York Mellon) announced plans to launch a new blockchain-based digital currency (the Utility Settlement Coin) which they hope becomes the global standard for settlements.[13]

Cryptocurrencies present a new frontier for FS incumbents and have the potential to disrupt the industry in varying ways, especially the Funds Transfer and Payment sector. For example, cheaper bank-to-bank money transfers and decreased revenue from transfer services and credit card transactions are just some of the potential impacts of cryptocurrencies. This disruption would largely be driven by the dilution/ disintermediation of the 'middle-man' position of FIs in connecting those with money to those who need it largely because cryptocurrency transactions limit the need for traditional clearing and settlement services.

Although cryptocurrencies may never replace FIs, it carries great potential to transform FIs. As the use of cryptocurrencies continues to gain mainstream acceptance (e.g. Bitcoin apps are currently amongst the top Finance apps in the Apple and Google Play stores in Nigeria), FIs appear reluctant to involve themselves in the cryptocurrency ecosystem. This is expected taking into consideration several factors such as CBN's recent restriction of the use of virtual currencies by Fis[14], high costs of integrating new technology, the lack of widespread consumer demand and limited understanding of Blockchain and Cryptocurrencies. Notwithstanding, FIs should become increasingly interested in exploring the effect of this new technology on their businesses.

Blockchain Technology, if implemented correctly could remove the need for reconciliation between parties, speeding up the settlement of trades or completely revamping existing processes, including:

- Enhancing efficiency in loan origination and servicing;
- Improving clearing house functions used by Banks;
- Facilitating access to securities. For example, a bond that could automatically pay the coupons to bondholders, and any additional provisions could be executed when the conditions are met, without any need for human maintenance;
- The application of smart contracts in relation to the Internet of Things (IoT). Imagine a car insurance that is embedded in the car itself and changes the premium paid based on the driving habits of the owner. The car contract could also contact the nearest garages that have a contract with the insurance company in the event of an accident or a request for towing. All of this could happen with very limited human intervention.

Blockchain - An area worth exploring

When faced with disruptive technologies, the most effective companies thrive by incorporating these technologies into the way business is conducted. Distributed ledger technologies offer FS institutions a once-in-a-generation opportunity to transform the industry to their benefit, or not.

However, as seen in the survey responses, the knowledge of and likelihood to react to the developments in blockchain technology are relatively low. We believe that lack of understanding of the technology and its potential for disruption poses significant risks to the existing profit pools and business models of FI incumbents.

Therefore, a pro-active approach to identify and respond to the various threats (e.g. the lack of widespread adoption, high investment costs and integration challenges with existing systems) and opportunities (e.g. streamlined cross-border businesses, faster transaction processing and lower transaction costs etc.) that this transformative technology presents is recommended. The ability to collaborate on both the strategic and business levels with a few key partners, in our view, could become a key competitive advantage in the coming years.

10. Source: PwC: Money is no object: Understanding the evolving cryptocurrency market (2015)
11. www. coinmarketcap.com
12. www.businessinsider.com/bank-of-england-created-own-bitcoin-rscoin-2016-8
13. www.money.cnn.com/2016/08/24/technology/digital-cash-banks-ubs/
14. CBN: FPR/DIR/GEN/CIR/06/010 - Circular to Banks and other Financial Institutions on Virtual Currency Operations in Nigeria (2017

Opportunities and Threats

Opportunities and Threats

Time to get off the bench: Over 20% of global FS business is at risk to FinTechs[15]

Typically, disruption hits a tipping point at which just under 50% of the incumbent revenue is lost in about a five-year timeframe. Recent disruptions that provide valuable insight include the impact of video streaming on the video rental market. When broadband in the home reached ubiquity and video compression technology matured, low cost streaming devices were developed and, within four years, the video rental business was completely transformed. The same pattern can be seen in the internet direct insurance model for car insurance. At present, 50% of the revenue from global traditional agent-based distribution model has been moved to direct insurance providers.[15]

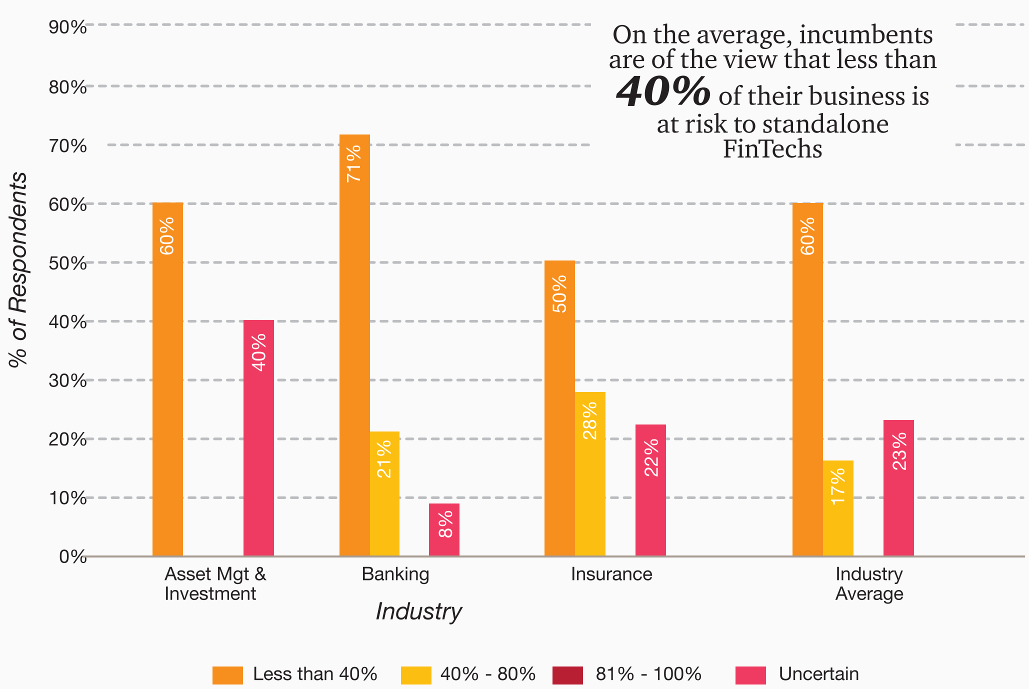
Majority of respondents from traditional FIs believe that part of their business is at risk of being lost to standalone FinTechs; 92% in the case of Banks (see Figure 13); although FinTechs anticipate that they may be able to acquire up to 40% of the incumbents' business. In this regard, retail banking and fund transfers & payments sectors are feeling more pressure from FinTechs.

"The key risk is the erosion of customer loyalty. To mitigate this, Banks have to move with the times and become as agile as the FinTechs. We have a head start as there is currently no regulation putting FinTechs at par with Banks in the area of payments, KYC and risk management. We also have a huge customer base with funds which the FinTechs would love to get a hold of."

- Head, e-Payment Solution Group, Guaranty Trust Bank Plc

Figure 13: Incumbents' views of estimated share of business at risk to standalone FinTech

What percentage of your business is at risk of being lost to standalone FinTech companies within 5 years?



Source: PwC Nigeria FinTech Survey 2017

15. Source: PwC, Global Fintech Report, (2016)

A rebalancing of power

FinTechs are empowering customers by providing services that are delivered via technology applications on customers' mobile device(s). This allows consumers to conveniently initiate and complete transactions, connect to third party entities and access information without time or location restrictions.

From the survey, banking companies ranked loss of market share as the top Fintech related threat, closely followed by increased pressure on margins. One of the key ways in which FinTechs increase margin pressure is by being able to significantly shrink operating costs. For example, the adoption of cloud-based platforms not only decreases start-up costs, but significantly reduces ongoing infrastructure costs.

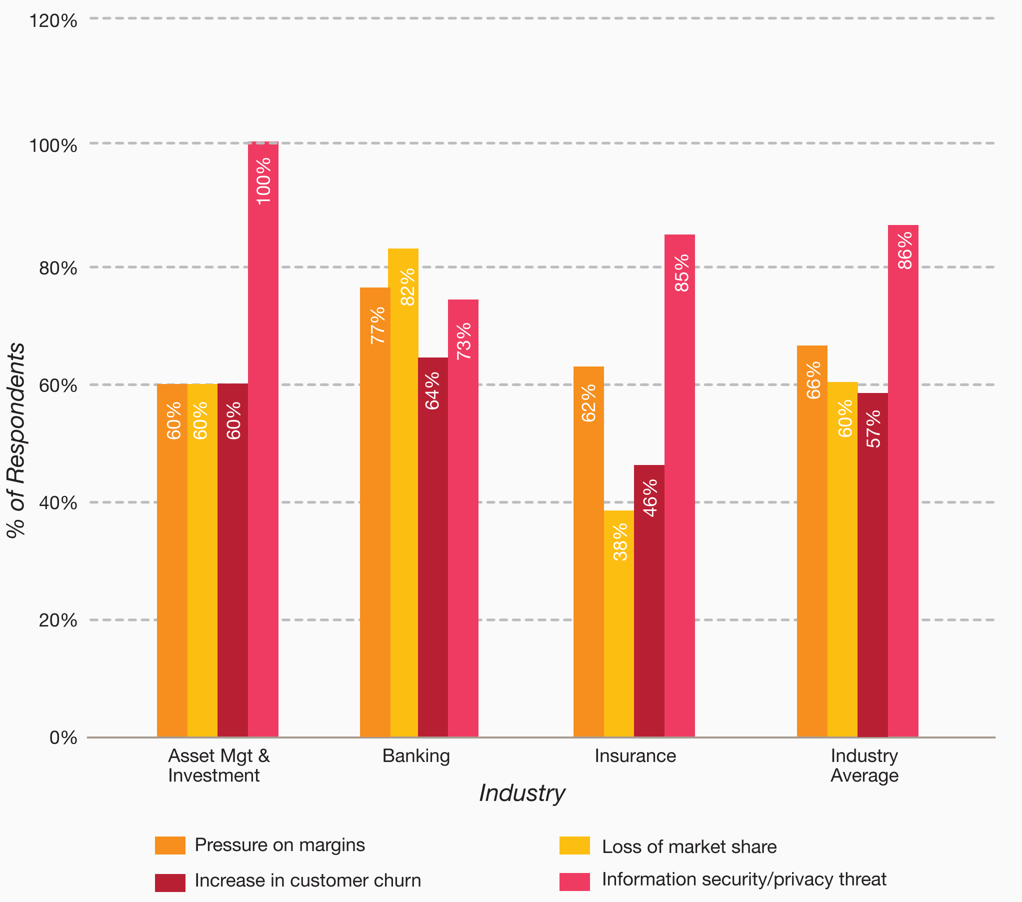
Other FS incumbents ranked information security and privacy concerns as the key FinTech threat to their business. Whether it comes in the form of introducing new technologies into existing systems or the need to revamp entire technology systems with the aim of simplifying operating models, Nigeria's FIs are concerned about the increased risk of cyber attacks. However, until FIs are able to proactively identify the areas in which they are most susceptible to cyber attack, their response strategies would always lag behind that of the perpetrators.

"You see young FinTechs in Nigeria with informal structures growing client base, being more profitable and earning good returns on investment; it is a concern for us and we see them as a significant threat. It will take an organisation like ours a lot to be as efficient as the FinTechs, and cost us more in terms of re-orientation and changing perceptions"

- CEO and Director, Asset & Resource Management Company Limited

Figure 14: Top threats related to the rise of FinTech

In your opinion, what are the threats related to the rise of FinTech within your industry?



Source: PwC Nigeria FinTech Survey 2017

FinTech, a source of opportunities

FinTech provides numerous opportunities for FS incumbents to improve their traditional service offerings. 84% of survey participants identify additional revenues as the key opportunity provided by FinTechs; while 82% indicated that FinTech solutions have helped reduce operating costs in different areas of the business (see figure 15).

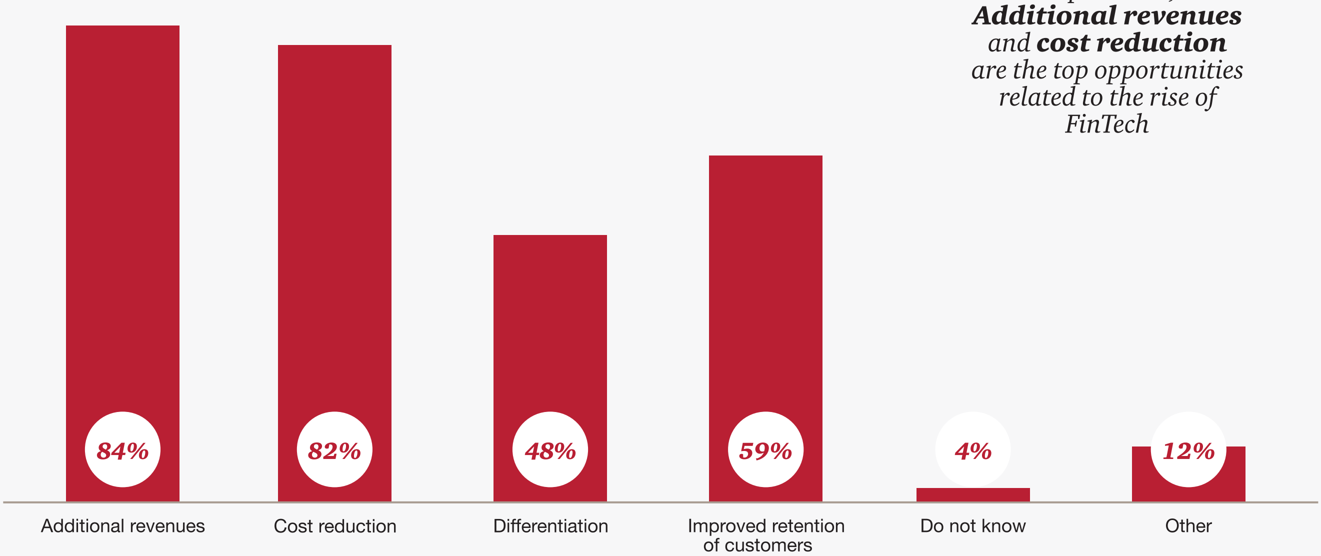
For example, the increased migration of customer transactions to electronic channels has reduced the operational costs of handling transactions. In this regard, incumbents could leverage FinTechs to simplify and optimise their core processes, services and products, and consequently reduce inefficiencies in their operations.

But the opportunities offered by FinTech is not just limited to additional revenues and cost cutting. Incumbents could leverage FinTechs to deliver a differentiated service offering, improve customer retention and provide additional sources of revenue.

Figure 15: Top opportunities related to the rise of FinTech

What are the opportunities related to the rise of FinTech within your industry?

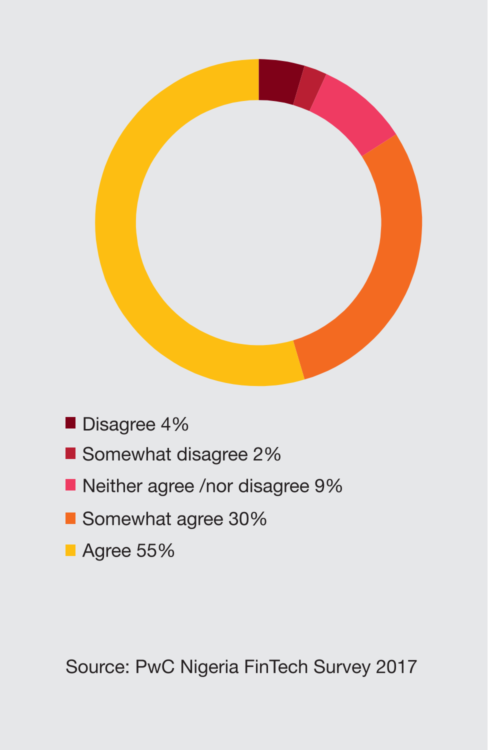
According to survey respondents, ***Additional revenues*** *and* ***cost reduction*** *are the top opportunities related to the rise of FinTech*



Source: PwC Nigeria FinTech Survey 2017

Putting FinTech at the heart of the strategy

Please indicate to what extent you agree or disagree with the following statement:
"My organisation has put FinTech at the heart of its strategy."



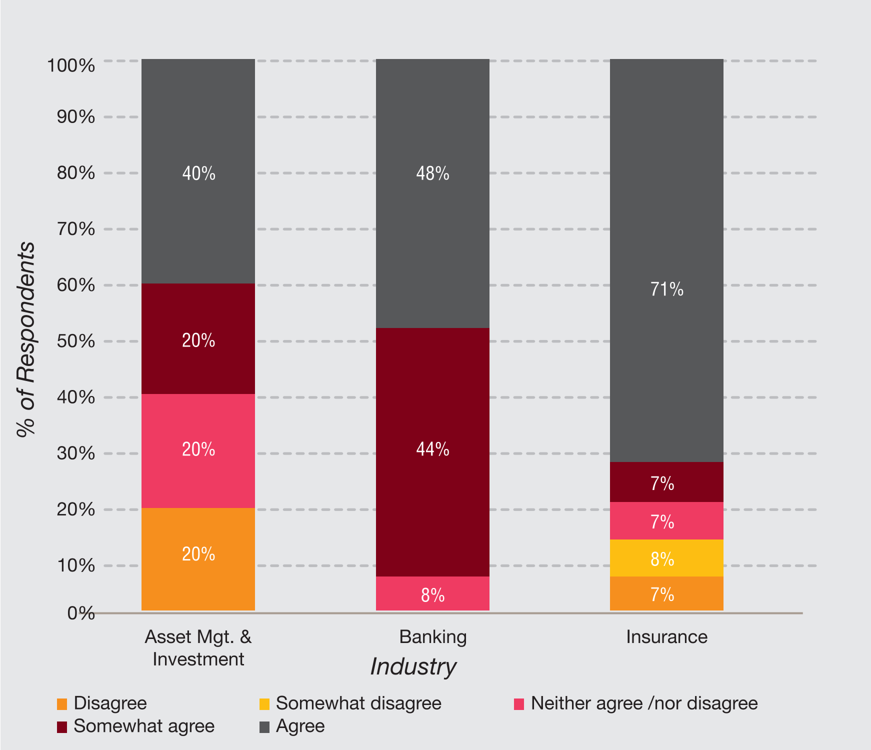


Figure 16: FinTech at heart

Figure 17: FinTech at heart – by Industry

55% of survey respondents agree that their organisation put FinTech at the heart of its strategy, while only 4% of respondents out rightly disagree with the statement (see Figure 16). Respondents from the Insurance sector that have FinTech at the heart of their strategy exceeds 70% (see Figure 17); the highest proportion compared to other sectors (Banking – 48% and Asset Management and Investment – 40%.

Over 90% of respondents from the Banking sector want to put FinTech at the heart of their strategy (see Figure 17); the highest proportion compared to other sectors (Asset Management and Investment – 60% and Insurance - 78%)

"We follow keenly what is happening in the technological space, and adopt those innovations that are required to simplify our processes and enhance customer value"

- ED, Leadway Assurance Company Limited

Offence is the best defence

FIs that do not recognise the impact of FinTech will face fierce competition from new entrants; and as rivals become more innovative, such firms might run the risk of being surpassed in their core business strengths. FIs in Nigeria seeking to thrive need to shift their thinking to better meet customer needs, constantly track technological developments, aggressively engage with external partners and integrate digitisation into their corporate DNA. To fully leverage the potential of FinTech, FIs should have a top-down approach, embracing new technologies in every aspect of their business.

"The major risk is that Banks will begin to take a back seat in the long run. To mitigate this, Banks will need to establish digital leadership in today's world of Digitalisation and Artificial Intelligence (AI). This will require continuous application of the right mix of Technology and business acumen to achieve enhanced efficiency, customer service, productivity and profitability"

ED, Nigeria Inter-Bank Settlement System (NIBSS) Plc

Traditional FIs are increasingly taking a 'mobile-first' approach to reach out to consumers by designing products and services with the aim of enhancing customer engagement via mobile devices and technology applications. More than half (69%) of survey respondents offer a mobile application to their clients, 25% are developing one and only 6% do not offer a mobile app. In addition, when asked to predict future customer behaviour, about 70% of respondents believe that more than 60% of their clients will be using mobile applications (at least once a month) to access financial services.

Companies are increasingly using digital channels to deliver compelling value propositions, generate new revenue streams and obtain data from customers. According to Bill Gates, in the year 2030, two billion new customers will use their mobile phones to save, lend and make payments.[16]

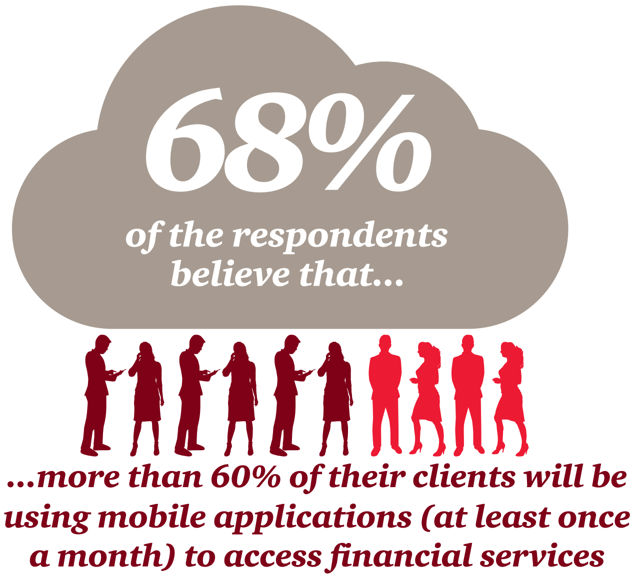
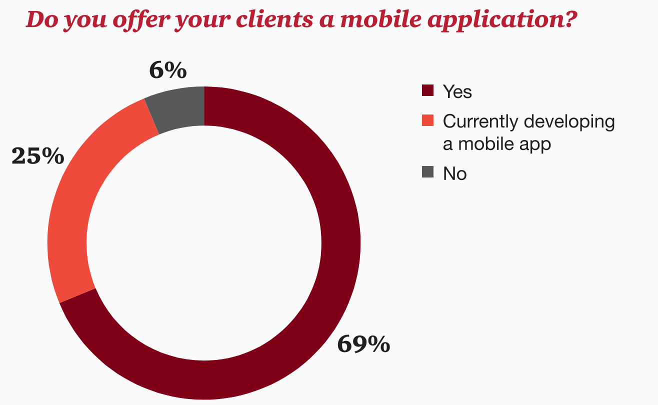
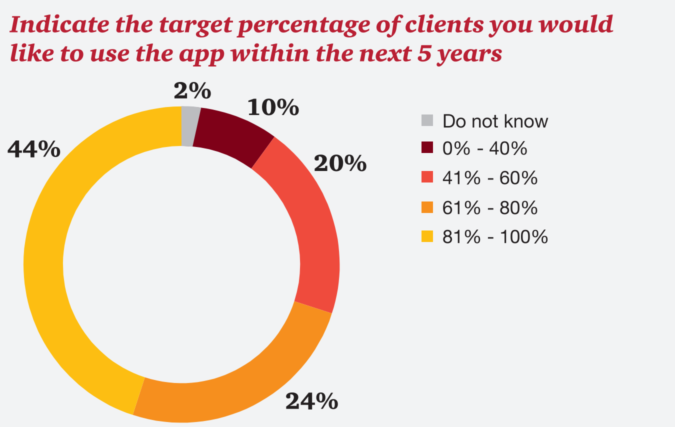


Figure 18: Offer of a mobile application



Source: PwC Nigeria FinTech Survey 2017

Figure 19: Target usage of mobile applications (next 5 years)

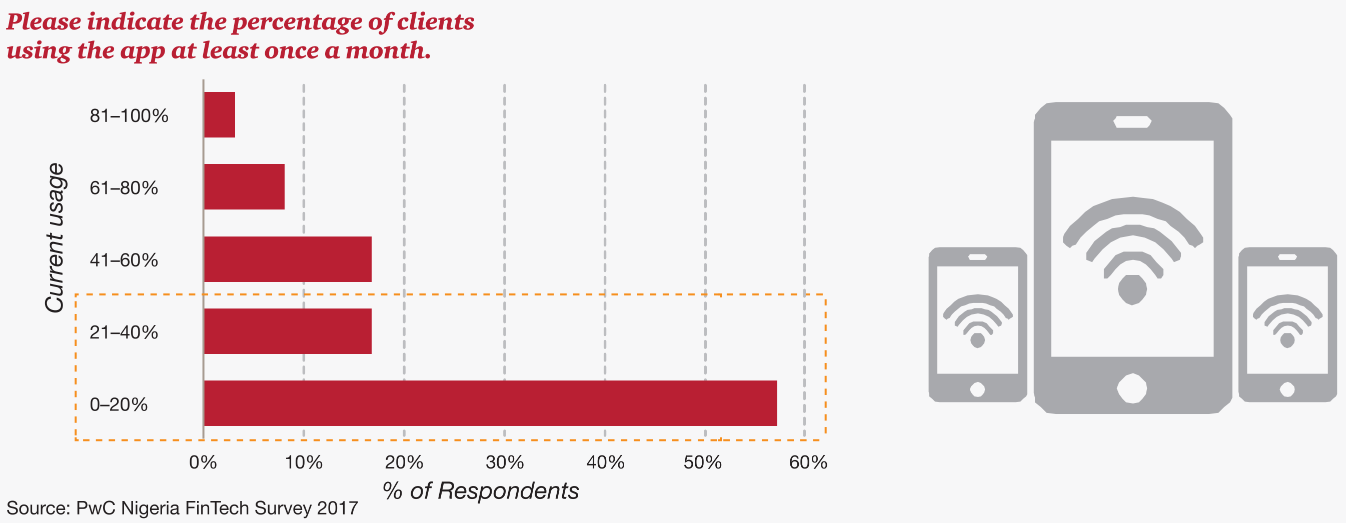


Source: PwC Nigeria FinTech Survey 2017

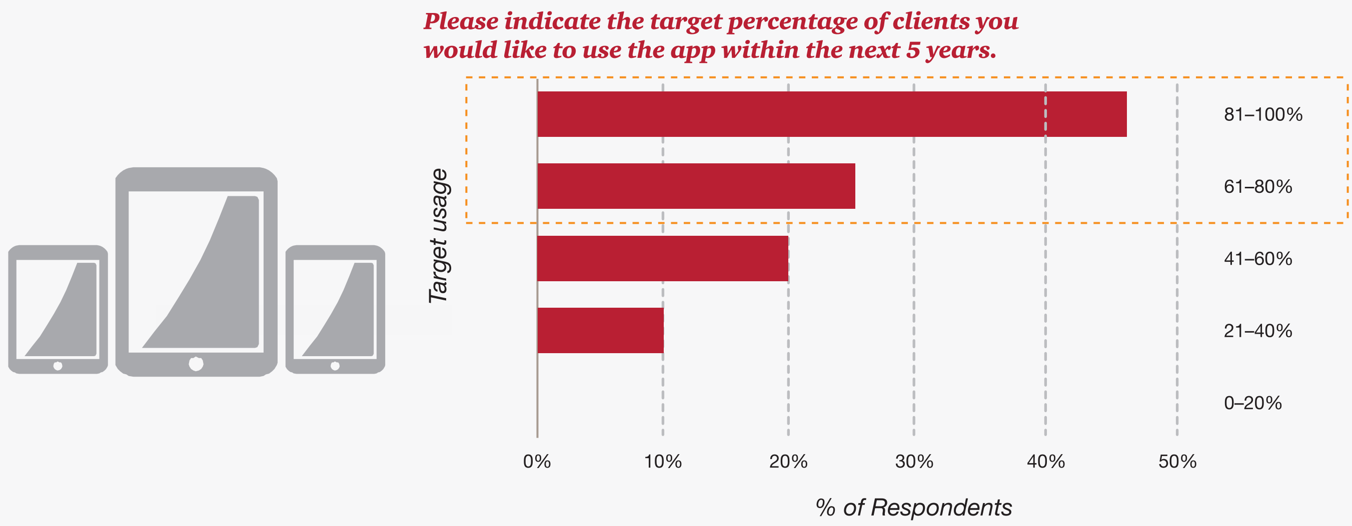
16. Source: Gates Notes, Annual Letter 2015

Incumbents expect a significant increase in the number of clients using mobile applications by 2020. Although majority of survey respondents contend that not more than 40% of their clients currently use mobile applications, they believe that over the next five years, over 60% of their clients will be using mobile applications at least once a month to access financial services (see figure 20).

Figure 20: Current and target usage of mobile applications



Source: PwC Nigeria FinTech Survey 2017



Combatting the threat: towards a more collaborative approach

Whether FS organisations adopt digital or mobile strategies, integrating FinTech is essential. According to survey respondents, the most widespread form of collaboration with FinTechs is joint partnership (35%). As Traditional FS organisations are not ready to go all in and invest fully in FinTechs, partnerships provide a flexible way to harness the capabilities of FinTechs within a safe test environment while strengthening their competitive advantage. Moreover, this is an effective way for both incumbents and FinTechs to identify challenges and opportunities as well as to gain a deeper understanding of how they can complement each other.

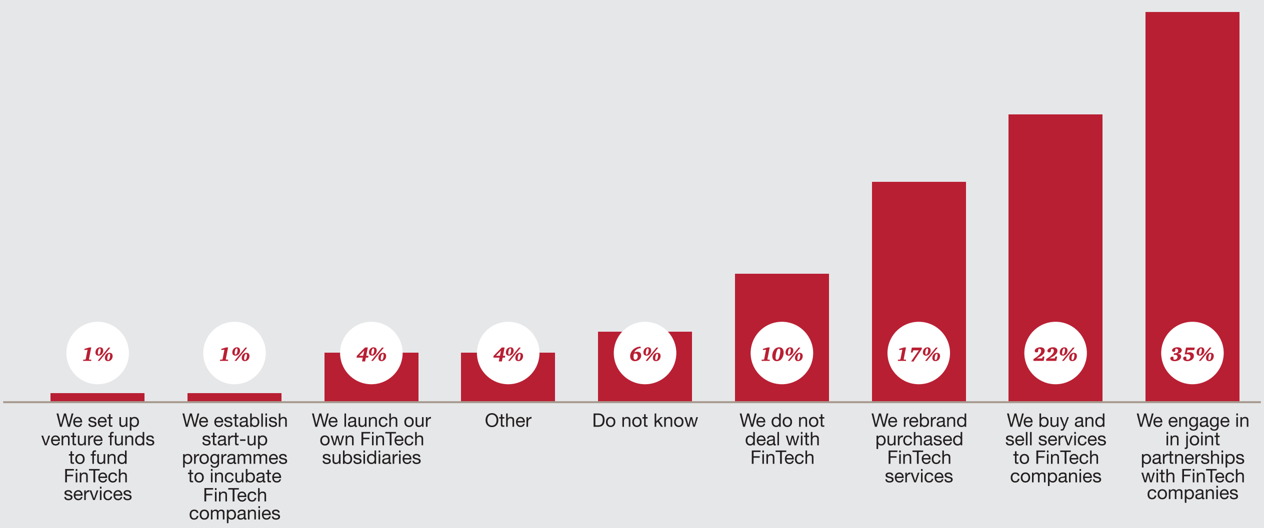
Given the speed of technology development, incumbents cannot afford to ignore FinTech. Nevertheless, 10% of survey respondents do not liaise with FinTechs at all; which could lead to an underestimation of the potential benefits and threats FinTechs bring to the operating landscape. According to The Economist, the majority of Bankers are either ignoring the challenge or talking about disruption without making any changes. FinTech executives confirm this view: 59% of FinTechs believe that Banks are not reacting to the disruption by FinTech.[17]

“We see opportunities in the form of collaborations or acquisitions with the aim of being able to leverage the efficiencies of FinTechs”

- CEO, Asset & Resource Management Company Limited

Figure 21: Dealing with FinTech

How are you dealing with FinTech companies?



Source: PwC Nigeria FinTech Survey 2017

"We intend to stay close to FinTechs, create a more open organisation that will be able to relate better and collaborate with worthy FinTechs over time”

- Head, e-Payment Solution Group, Guaranty Trust Bank Plc

10%

of firms do not liaise with FinTechs at all, which could lead to an underestimation of the potential benefits and threats they can bring.

17. Source: The Economist, the disruption of Banking (2015)

"FinTechs are more agile and are not bogged down with legacy issues from infrastructure, culture and manpower perspectives. They are therefore more open to try out new technologies and provide customers with endearing products and services in a much quicker manner"

- Head, e-Payment Solution Group, Guaranty Trust Bank Plc

Integrating FinTech comes with challenges

Common challenges FinTechs and incumbents face are process differences and regulatory uncertainty. FinTechs represent a challenge to regulators as there may be a risk of an uneven playing field between FS incumbents and FinTechs. In fact, CEOs are concerned about the impact of over-regulation on their prospects for growth, making this the biggest threat to growth that they face. However, regulatory concerns are not limited to specific regulations. Industry players are asking:

- Which regulatory agencies govern FinTechs?
- Which rules do FinTechs have to abide by?
- And specifically, which FinTechs have to adhere to the regulations?

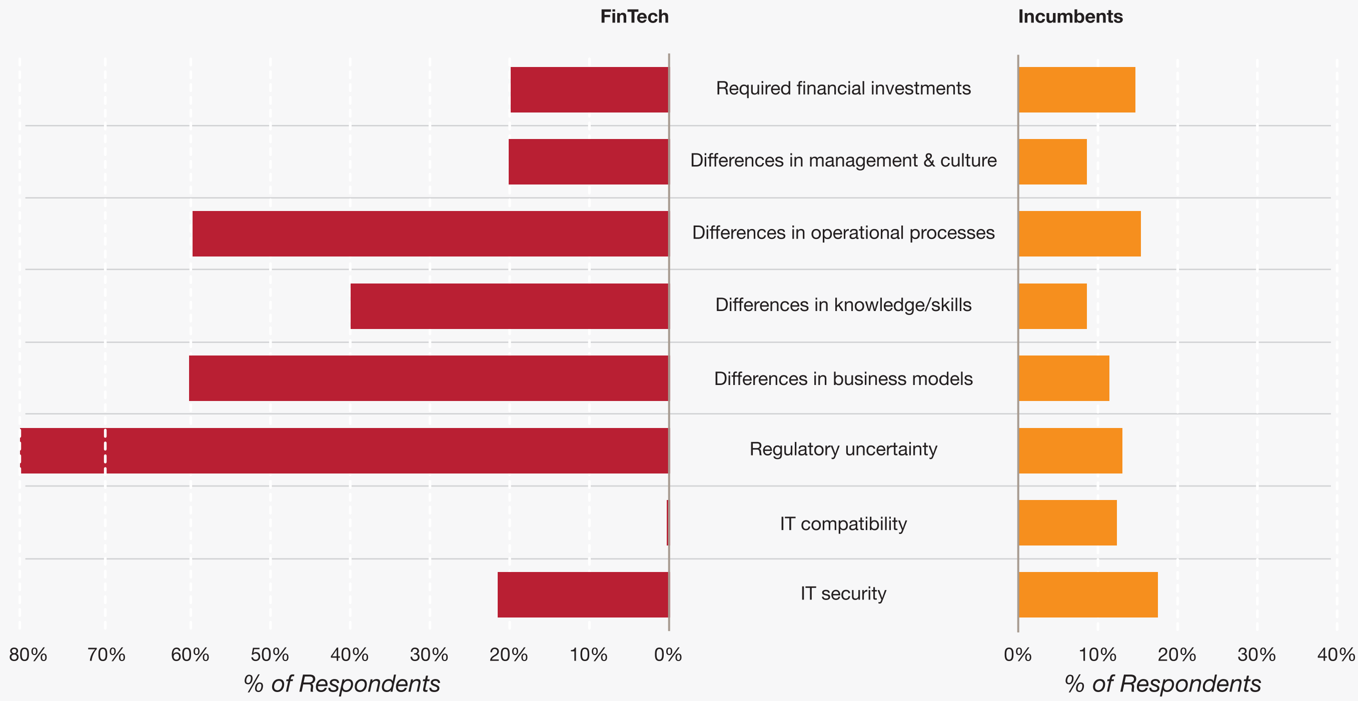
In particular, small players struggle to navigate a complex, ever-increasing regulatory compliance environment as they strive to define their compliance model. In recent years, there has been an increase in regulations within the FS industry, where even long-standing players are struggling to keep up.

"There is need for insurance regulators to be the catalysts of change and set the tone for 'future-readiness'. Existing regulatory frameworks are inadequate and this is not unique to Nigeria or our industry"

- ED, Leadway Assurance Company Limited

Figure 22: Challenges for FinTech companies and incumbents

What challenge did/do you face in dealing with FinTech/traditional financial companies?



While most FS providers and FinTechs would agree that the regulatory environment poses serious challenges, there are differences of opinion on which challenge is the most significant. For incumbents, IT security is crucial. This highlights the genuine constraints traditional FS organisations face regarding the introduction of new technologies into existing legacy systems. On the other hand, FinTechs see their biggest challenges in the differences in operational processes and business models.

20% of FinTech respondents believe management and culture act as roadblocks in their dealings with FIs. As FinTechs are smaller in size, the culture is suited to rapid change, promoting agility and speed to market. Also, because most FinTechs are in the early stages of development and are not restrained by old legacy systems, they operate informal structures and processes which allow them to adapt more easily and quickly to challenges.

Conclusion

Surfing the FinTech wave – How to ensure your organisation is ready to take advantage of the FinTech people opportunity

- **Encouraging and incubating innovation:**
  FIs need to re-learn how to innovate and attract talent with the right mix of technical and commercial skills. This involves a mind-set change from the traditional 'leadership-down' management style to a model that encourages innovation.

- **Adopting a FinTech mind-set:**
  Large corporate structures are not necessarily the best fit for success in the FinTech revolution. Established FIs will need to experiment with new business arrangements (such as partnerships and joint ventures) to gain access to the talent and the innovation needed to identify ground-breaking products. This would require incumbents to understand what their customers really value, and how their organisation's differentiating capabilities deliver that value.

- **Creating an agile enterprise:**
  FinTechs operate in a very different way than established FS businesses do. They move quickly, fail fast, are not afraid to take risks and are not restrained by legacy systems and regulatory requirements. Incumbents need to think about how this agile mind-set fits with their current business processes and operating models and how to align this new way of working to their value proposition.

Appendix 1

Summaries of the trends

DeNovo's Team is tracking emerging trends in FinTech to explain which start-ups, technologies, trends and new market entrants are relevant to you and, more importantly, why. The trends highlighted below are a snapshot in time of the most relevant ones for each FS segment. For an updated view, please subscribe to the DeNovo platform.

Summaries of trends for Banking	
The rise of Peer-to-Peer (P2P) Lending	Increased levels of technology which have enabled an increase in lending without an intermediary.
Services and solutions for underserved consumers	Lower cost of providing services to customers that are currently underbanked.
The enhancement of credit underwriting/decision making	More granular data enables FS providers to more accurately assess and price risks.
Solutions that banks will integrate or incorporate to improve or simplify operations	APIs enable third parties to develop value-added applications for company platforms, artificial intelligence is enabling companies to extract greater customer insights, employees and intelligent machines are integrating to work as a team, banks are expediting the deployment of digital delivery.
Sophistication in methods to reach, engage, and retain customers	Engaging customers through gamification techniques in a collaborative environment.
The emergence of self-service tools	Increase of customer autonomy in performing every service without human interaction.
The move toward non-physical or virtual channels, including mobile channels	Virtual banking utilises online and mobile platforms to integrate and simplify customer banking experience. Virtual banking platforms equip customers with on-demand access to manage bank accounts, pay bills, apply for loans, open new accounts, and perform other banking activities through a single portal.
The digitalisation of cash- and treasury-management functions	Cash and treasury management includes the administration of external and internal funds, cash flow management, and corporate finance policies and procedures. The digitalisation of cash and treasury management functions utilises online platforms to disrupt the traditional models, creating new revenue streams and value propositions. Cross-border payment transfers for businesses, foreign exchanges and invoice management are a few of the functions that are enabled primarily through the advent of online platforms.
The democratisation of banking and personal finance and solutions to assist in this process	The democratisation of banking and personal finance describes the shift in which customers take control over their financial health and seek new channels
The simplification and move toward streamlined product application processes to improve customer experience	The consumer product application process (i.e. loan origination) has been streamlined with the emergence of cloud-based lending solutions and electronic bank account management systems which automate the loan origination process and increase overall transparency in the lending process.
The rise of crowdfunding/seed funding	New funding options have emerged in mid-market, such as P2P lending and marketplace lending platforms.
Blockchain	Use of distributed ledgers in which transactions made in cryptocurrencies are recorded in order to improve payments, clearing and settlement or data management.

Summaries of trends for Insurance	
Ride sharing solutions	Rise of new ride and car sharing business models, or similar sharing economies, that demand new insurance solutions regarding liability and personal injury.
Usage based Insurance (pay as you go)	Personalisation of insurance through usage -and behaviour-based models in auto coverage leveraging new ways to capture driving data.
New models of holistic advice (Robo-Advice)	New models of holistic advice on insurance/investment needs assisted by automated advisors that leverage advanced analytics and artificial intelligence.
Self-directed services	Use of self -service tools to reduce cost of serving customers and improve simplicity, transparency, and speed of fulfilment.
Connected Health & Medical Advances	From wearables to genomics to enable P4 Medicine: Predictive, Preventive, Personalized and Participatory.
Connected/Smart Car	Solutions for connected cars and increasingly assisted/autonomous driving that impact auto claims frequency and severity.
Remote access and data capture	Use of non-traditional data capturing solutions including remote devices, to improve risk and loss assessments.
Shift from probabilistic to deterministic model	Real-time data capture and monitoring technology enabling insurers to shift from a probabilistic to a deterministic claims model.
Granular Risk and/or Loss Quantification	Advancement in technology helping to quantify risk and/or loss at a granular level.
Robotics and Automation in core insurance	Increased use of capabilities such as robotics and artificial intelligence to automate core insurance functions
Blockchain	Use of distributed ledgers in which transactions made in cryptocurrencies are recorded in order to improve payments, clearing and settlement or data management.

Summaries of trends for Funds Transfer and Payment	
Next generation point-of-sale solution	Novel tech-based loyalty programs improve customer engagement and enhanced technology at the physical POS, such as the use of QR codes or Near Field Communication (NFC), enhances security of mobile wallets.
Increased value-added merchant service offerings	Additional services offered by merchant acquirers and processors including enhanced data analytics, reward and loyalty programs, fraud management, chargeback protection, check processing, refund management and customer relationship management solutions.
Peer-to-peer (P2P) payment solutions and digital wallet	FinTech companies are providing an increased number of solutions to facilitate P2P payment solutions. Increasing adoption of digital wallet for the use of e-money, secure storage and cryptocurrencies.
Alternative retail-payment networks and fund-transfer solutions	These electronic payment networks are alternatives to traditional networks offered by Visa, MasterCard, Discover and American Express. This includes online payment systems, such as PayPal and Stripe, and loyalty and gift card solutions.
Proliferation of international/cross-border transfer platforms	Increased number of solutions and points of user interaction that enable faster and cheaper cross-border fund exchange or remittance.
Simplification of online-checkout experience	The checkout experience can be directly affected by ease of website navigation, delays in transaction processing, volume of security checks, and limited payment options.
Consumer protection from identity theft, fraudulent transactions and account falsification	The use of topological analytics to ensure the authenticity or identify fraudulent transactions.
Increased push for faster payments	Companies are focused on the fund transfer and payment space to limit the number of intermediaries for the purpose of faster (to immediate) transfer and/or settlement and with this, a lower fee.
Contactless technology for digital wallets	Non-cash payment methods, such as credit and debit cards, smartcards, or other devices (e.g. mobile phones), that use radiofrequency identification to secure payments at a physical POS terminal.
Blockchain	Use of distributed ledgers in which transactions made in cryptocurrencies are recorded in order to improve payments, clearing and settlement or data management.

Summaries of trends for Asset and Investment Management

Technology to enable investments in new markets	Leverage new technologies to gain competitive edge and accelerate growth in new and emerging markets.
Automation of asset allocation and wealth management	Automated advice solutions (e.g. robo-advisers) are changing the asset management landscape in many ways, including asset allocation.
Products and services for traditionally unprofitable customers	Alternative distribution models and sophisticated risk quantifying techniques are helping insure previously unexplored/uninsured customer segments.
Better identification and quantification of risk	New models and use of broader data sets are being used to more accurately analyse risk.
Community intelligence networks leading to better investment decisions	The use of technology and data from social networks in order to improve investment decisions.
Innovation to get to market and scale faster	Increased product offerings and/or synergies among existing products increases market differentiation and challenges traditional techniques, most notably in the investment banking industry.
Innovation in brokerage services enabling better investment to provide advanced decision support	Innovations enabling advanced analytics and improved interface enhance decision support. Enhanced brokerage services that provide new data sources and tools analytics, portfolio and market information to enhance investment decision support.
Standardisation of customer experience across all points of contact	Enable similar functionalities for end users across multiple devices to create streamlined user experience.
Alternative distribution and marketing channels for awareness and lead generation	An increasing number of companies are leveraging new distribution channels, such as social media and mobile phones, to reach and engage more customers, resulting in a different economic model for new customer acquisition.
End user-created investment solutions	Customer-centric investment products are enabling investors to create personalised investment strategies
Shift from technology-enabled human relationships to experiences with human support	Rather than maintaining a human relationship with the support of technology services, clients are now directly using the technology with little to no human digital interaction. Human interaction only comes into play when there is a need for customer service.
Blockchain	Use of distributed ledgers in which transactions made in cryptocurrencies are recorded in order to improve payments, clearing and settlement or data management.

Appendix 2

Excerpts from Interviews

Q & A with Tunde Hassan-Odukale
ED, Leadway Assurance Company Limited

"There is the possibility that we could be blind-sided by the emergence of FinTechs that address customer segments that we either haven't developed the capacity to serve well or for whatever reason, aren't receiving adequate attention from us"

PwC: *What threats and opportunities have you identified from the emergence of FinTech?*

Tunde Hassan-Odukale: FinTech as a global force is sweeping across the globe and Nigeria or Insurance Companies in Nigeria will not be immune from it. It would offer disruptions to old and current ways of doing business as well as create new opportunities. In its most visible form, FinTech will come at us using mobile and Internet platforms. But the good thing is, we already see those threats coming and the responses to these will be adequate in my view. There is a segment of our market that will not respond to the values that FinTech brings; but there are other segments, perhaps presently underserved, who would respond positively to FinTech; this is where we see the deployment of FinTech to access these markets.

PwC: *What is the impact of the existing regulatory framework on FinTechs' operations and the possibility of integrating/partnering with your organisation?*

Tunde Hassan-Odukale: There is need for insurance regulators to be the catalysts of change and set the tone for 'future-readiness'. Existing regulatory frameworks are inadequate and this is not unique to Nigeria or our industry. FinTech is an emerging new field in the last few decades that is throwing up interesting possibilities and sometimes complications when viewed vis-à-vis existing laws and customs. All regulators are playing catch-up and necessarily so.

PwC: *What are the key risks posed by the emergence of FinTechs to the FS sector and how can they be mitigated/minimised while leveraging the opportunities ?*

Tunde Hassan-Odukale: Obviously, the key risks are financial and market share. Primary mitigation is to continue to be exposed to technology as it evolves and adapt your business as much and as best as you can.

PwC: *What existing internal challenges may limit your organisation from remaining competitive with the rise of FinTechs ?*

Tunde Hassan-Odukale: There is the possibility that we could be blind-sided by the emergence of FinTechs that address customer segments that we either haven't developed the capacity to serve well or for whatever reason, aren't receiving adequate attention from us. This would always remain a possibility and the only antidote to it, is continual vigilance.

PwC: How is your organisation positioned to take advantage of FinTech opportunities ?

Tunde Hassan-Odukale: As earlier mentioned, the most important thing is to be abreast of innovations happening globally and in one's own backyard. It is equally important to have the awareness to understand how those innovations can be applied to customer pain points to open up new ways of enlightening one's customers. We follow keenly what is happening in the technological space, and adopt those innovations that are required to simplify our processes and enhance customer value. Any FinTech or innovation that doesn't seek to achieve these two goals will have a challenge justifying its existence.

"We follow keenly what is happening in the technological space, and adopt those innovations that are required to simplify our processes and enhance customer value"

Q & A with Jumoke Ogundare
CEO and Director, Asset & Resource Management Company Limited

"We see opportunities in the form of collaborations or acquisitions with the aim of being able to leverage their efficiencies"

PwC: *What threats and opportunities have you identified from the emergence of FinTech?*

Jumoke Ogundare: Based on Nigeria's demographics, the biggest share of the market is the younger generation ('the millennials') whose profile is different from the traditional wealth management client. Millennials have embraced the digital age; they want services to be provided in a fast and convenient manner which FinTechs are able to do. So, you see young FinTechs in Nigeria with informal structures growing client base, being more profitable and earning good returns on investment. It is a concern for us. We see them as a significant threat. It will take an organisation like ours a lot to be as efficient as the FinTechs, and cost us more in terms of re-orientation and changing perceptions.
Absence of regulatory restrictions also empowers them to play freely in this space and threaten our market share and ability to attract business.
We see opportunities in the form of collaborations or acquisitions with the aim of being able to leverage their efficiencies. We are also trying to institute a Fintech-type hub within the organisation to propel the transformation.

PwC: *What is the impact of the existing regulatory framework on FinTechs' operations and the possibility of integrating/partnering with your organisation?*

Jumoke Ogundare: Forging collaborations or integrating with FinTechs will require regulatory (SEC) approval/buy-in. Also, as the Fintech's grow and mature, it is likely that regulatory scrutiny will be enhanced. If we can combine the experience, knowledge and expertise of FinTechs with our own structure under a regulated framework, it is a win-win for the client.
However, in some instances, excessive regulatory bottlenecks may cause significant delays in time-to-market. In essence, a lot of collaboration and engagement will be required to gain the regulator's support.

PwC: *What are the key risks posed by the emergence of FinTechs to the FS sector and how can they be mitigated/minimised while leveraging the opportunities ?*

Jumoke Ogundare: Market share and talent are two major risks that the emergence of FinTechs pose to us. However, the top risk is market share. They are more profitable because they operate with a lean structure. To an extent also, they attract the talent we want.
We also need to innovate at a much faster pace than them. This involves having a strong and creative digital team that is at the frontlines, using analytics to interrogate the tons of transactional data we generate daily, and leveraging insights gained from the process to drive growth.

"Market share and talent are two major risks that the emergence of FinTechs pose to us. However, the top risk is market share"

PwC: *How is your organisation positioned to take advantage of FinTech opportunities ?*

Jumoke Ogundare: We are at the initial phase of changing the way we think about our business. The young generation is very happy and eager to run with it but the older generation who constitute some of the senior people are a bit hesitant. We are restructuring our old processes and bringing up the new tech platforms, in other words, pushing for change.
There is also a change in our business development approach. Our revised business model focuses on a solution-based approach of offering a wider range of investments solutions across our client base. We see the change happening and are positioning ourselves for it.

PwC: *What existing internal challenges may limit your organisation from remaining competitive with the rise of FinTechs ?*

Jumoke Ogundare: People will be the first challenge. That apathy or resistance to change. We see and understand it, but our change management team is working on that. More importantly, we are trying to have a structure or framework internally that allows us to innovate very quickly and to ensure that we always stay ahead. The focus is building that internal capacity and framework.

Q & A with Deji Oguntonade

Head, e-Payment Solutions Group, Guaranty Trust Bank Plc

"FinTechs are more agile and are not bogged down with legacy issues from infrastructure, culture and manpower perspectives. They are therefore more open to try out new technologies and provide customers with endearing products and services in a much quicker manner"

PwC: *What threats and opportunities have you identified from the emergence of FinTech?*

Deji Oguntonade: FinTechs are gradually eroding the transactional business of Banks from the Payment and Loans perspective. While the impact may be insignificant today, it is definitely an irritant that needs to be addressed quickly.

Also, FinTechs are more agile and are not bogged down with legacy issues from infrastructure, culture and manpower perspectives. They are therefore more open to try out new technologies and provide customers with endearing products and services in a much quicker manner. It would therefore be good for Banks to partner with FinTechs and take advantage of their agility.

PwC: *What is the impact of the existing regulatory framework on FinTechs' operations and the possibility of integrating/partnering with your organisation?*

Deji Oguntonade: The regulatory framework currently guiding FinTech operations actually protects Banks to some extent because FinTechs still need to engage Banks to record any significant measure of success or adoption of their products, but the question is for how long?

PwC: *What are the key risks posed by the emergence of FinTechs to the FS sector and how can they be mitigated/minimised while leveraging the opportunities ?*

Deji Oguntonade: The key risk is the erosion of customer loyalty. To mitigate this, Banks have to move with the times and become as agile as FinTechs. We have a head start as there is currently no regulation putting FinTechs at par with Banks in the area of payments, KYC and risk management. We also have a huge customer base with funds which the FinTechs would love to get a hold of.

PwC: *How is your organisation positioned to take advantage of FinTech opportunities ?*

Deji Oguntonade: We intend to stay close to FinTechs, create a more open organisation that will be able to relate better and collaborate with worthy FinTechs over time.

PwC: *What existing internal challenges may limit your organisation from remaining competitive with the rise of FinTechs ?*

Deji Oguntonade: Internal risk management processes, regulatory constraints and legacy technology assets which we have hitherto heavily invested in.

"We intend to stay close to FinTechs, create a more open organisation that will be able to relate better and collaborate with worthy FinTechs over time"

Q & A with Christabel Onyejekwe

ED, Technology & Operations, Nigeria Inter-Bank Settlement System (NIBSS) PLC

"The lack of response to price reduction in the ecosystem can create challenges that will limit competition and reduce the adoption of these disruptive Technologies e.g. Block chain."

PwC: *What threats and opportunities have you identified from the emergence of FinTech?*

Christabel Onyejekwe: The threats are largely the potential take-over of Banks' Customers at the front end and high investment costs due to changes arising from innovation/obsolescence.

On the other hand, opportunities exist in the form of provision of multiple options for Customers, simpler but faster payments aided by FinTechs and increased local/cross border financial options (e.g. by leveraging the NIP and BVN platforms for cross-border transactions in the West African Region).

PwC: *What is the impact of the existing regulatory framework on FinTechs' operations and the possibility of integrating/partnering with your organisation?*

Christabel Onyejekwe: While the Financial Services industry is highly regulated worldwide, it would appear that the emergence of FinTechs is increasingly reducing the level of central control. Connecting with NIBSS creates a wider web of financial networks that leverage its robust shared service Infrastructure.

PwC: *What are the key risks posed by the emergence of FinTechs to the FS sector and how can they be mitigated/minimised while leveraging the opportunities ?*

Christabel Onyejekwe: The major risk is that Banks will begin to take a back seat in the long run. To mitigate this, Banks will need to establish digital leadership in today's world of Digitalisation and Artificial Intelligence (AI). This will require continuous application of the right mix of Technology and business acumen to achieve enhanced efficiency, customer service, productivity and profitability.

PwC: *How is your organisation positioned to take advantage of FinTech opportunities ?*

Christabel Onyejekwe: NIBSS is the appointed Nigerian Central Switch(NCS), strategically positioned with endless technological and financial convergence possibilities. We are also able to offer 'Software as a shared service of value' to the Banks and other Financial Institutions.

PwC: *What existing internal challenges may limit your organisation from remaining competitive with the rise of FinTechs ?*

Christabel Onyejekwe: The lack of response to price reduction in the ecosystem can create challenges that will limit competition and reduce the adoption of these disruptive Technologies e.g. Block chain.

Appendix 3

DeNovo

More than ever, innovation impacts your business. DeNovo empowers decision makers by instantly translating data, information and knowledge into the wisdom to adopt the right business strategies.

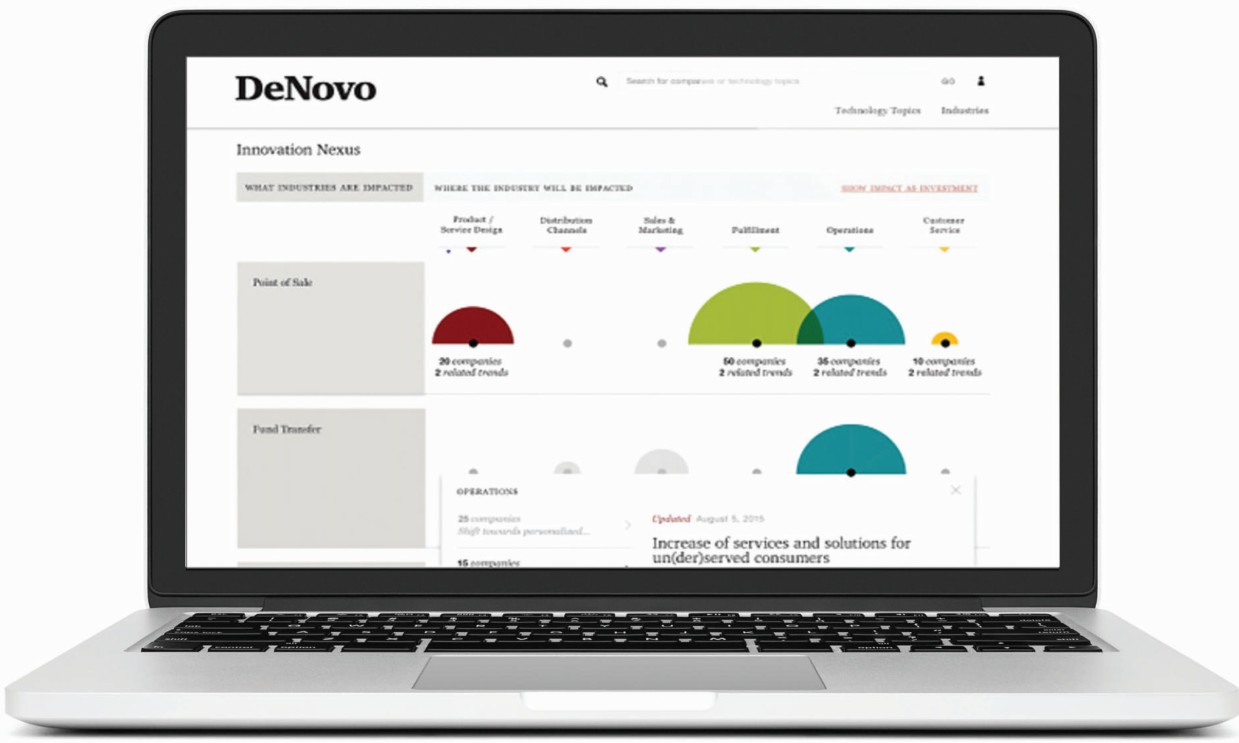
What is DeNovo?

DeNovo represents the next generation of strategy consulting – a new platform powered by Strategy& and PwC that is focused on FinTech. The rapid emergence of disruptive technologies and new business models requires a modern way of delivering strategic advice when and where you need it. Whether you are in the board room or on a phone call with your CEO, DeNovo provides you with answers in real-time. Relevant content and insights are delivered to you via web, mobile and direct interaction with our team of innovation strategists.

DeNovo's Subject Matter Specialists in FinTech lead a dedicated team of over 50 strategists, equity analysts, engineers and technologists. Using both public and proprietary data from over 40,000 sources and leveraging our global network of over 200,000 professionals, we cut through the noise to explain which start-ups, technologies, trends and new market entrants are relevant to you and, more importantly, why.

Who uses DeNovo?

DeNovo is designed for CEOs, CTOs, Business Unit Heads, Heads of Strategy, and other key decision makers in FS who need a trusted resource to understand the emerging trends that impact their business strategy and what actions to take.



http://www.strategyand.pwc.com/denovo

Contacts

Tony Oputa
Partner and West Market Area FS Industry Leader
T: +234 (1) 271 1700 ext. 39002
M:+234 (0) 702 502 9673
tony.oputa@ng.pwc.ng

Andrew S. Nevin (PhD)
Advisory Partner and Chief Economist
T: +234 (1) 271 1700 ext. 42001
M:+234 (0) 806 059 3528
andrew.x.nevin@ng.pwc.com

Adedamola Yusuf
Associate Director, Advisory Technology
T: +234 (1) 271 1700 ext. 44001
M:+234 (0) 807 097 0926
damola.yusuf@ng.pwc.com

Adedoyin Amosun
Associate Director and Co-FS Advisory Lead
T: +234 (1) 271 1700 ext. 43001
M:+234 (0) 802 301 4931
adedoyin.amosun@ng.pwc.com

Chidinma Asuni
Senior Manager, Advisory Operations
T: +234 (1) 271 1700 ext. 43002
M:+234 (0) 803 957 4117
chidinma.asuni@ng.pwc.com

Oladunni Lawal
Manager, Advisory Operations
T: +234 (1) 271 1700 ext. 43004
M:+234 (0) 817 713 6384
oladunni.lawal@ng.pwc.com

Acknowledgment

We would like to thank Sola Ogungbenro, Ijeoma Aguh and Yemi Akoyi for their contribution to the development of this report.