

# Managing Fintech's Destruction through Innovative Banking: An Empirical Investigation

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This study investigates the extent to which Nigerian banks manage fintech's destruction through innovative banking. Guided by the sensing and responding theory, data was collected via a questionnaire and analysed using Kruskal-Wallis and Post-hoc pairwise comparisons tests. The study found, among other things, that Nigerian banks are well aware of threats pose by fintech companies and are effectively managing the threats through competitive innovative banking products and services. Equally, the study found that Nigerian banks are not lagging in the provision of innovative banking services. The study concludes that fintech is destructive and Nigerian banks are proactive in managing it. Further studies are recommended to examine the effect of each of the banking products and services in managing the destruction from fintech.

**Key words:** *Fintech, innovative, banking, managing, destruction, sensing, responding.*

## Introduction

The development in technology over the past few decades has changed the way financial services are delivered. This is particularly the case with the emergence of financial technology companies commonly known as “fintech.” Fintech uses modern technology in providing all types of financial services offered in the financial industry. In the banking subsector, fintech is keenly competing in the delivery of banking services, which were hitherto the sole rights of incumbent banks, in a simplified and mind-blowing customer satisfaction (Chishti and Barberis, 2017). This involvement of fintech in the delivery of

banking services is seen as a threat to incumbent banks. Customers are now expecting very high speed, convenient and low cost services but incumbent banks lack the required

technology as good as that of the fintech to meet these changing customers' needs (Navaretti, 2017). Thus, fintech companies are now becoming more popular for providing faster and user-friendly services as well as for their ability to offer many products in one place (Dorfleitner et al, 2017; Wisniewski, 2016). More worrisome to the banks is the capacity of fintech to access banks customers' database and use it to impair the relationship banks have with their customers to their advantage (Vives, 2017).

Against the backdrop of this growing popularity of fintech and the impact it has on their performance, banks are now investing hugely in digital banking (Webster and Pizzala, 2015). As a result, many banks are now migrating from being traditional to technology-based either by having a start-up program to raise fintech companies, setting venture capital to fund fintech companies or partnering or launching their own fintech companies (Webster and Pizzala, 2015). All of these have led to the development of innovative banking products and services including internet banking, mobile banking, digital wallet, and social banking, among others towards meeting the needs of customers.

This study aims to investigate the extent to which banks are managing fintech threats through the provision of innovative banking products and services. The rest of the study is divided into six sections. The section that follows gives a review of the products and services offered by banks which serves as a basis for the development of hypotheses. Section three presents the theories that underpins the research. The study's methodology is presented in section four while section five discusses the results. Section six concludes the study.

## **Literature Review**

Literature on innovative banking has revealed many theories that can be used to explain how banks respond to the development in technology-based banking. These theories include theory of alertness and responsiveness (Zaheer and Zaheer, 1997), technological opportunism theory (Srinivasan et al, 2002), and co-opetition theory (Bradenburger and Nalebuff, 1996), among others. Of these theories, the theory of sensing and responding is arguably the most used.

Sensing entails the ability of an organisation to acquire enough knowledge about forces of environmental changes such as competitor's actions, changes in consumer's preference and technological advancements, and how this knowledge might influence decisions within the organisation (Roberts and Grover, 2012). It is a mental process that permits quicker observation and development of meaning when confronted with a rapidly changing

environment (Kiesler and Sproull, 1982). The more suitable the mental process, the more appropriate the response tool will be (Kiesler and Sproull, 1982).

On the other hand, responding entails the ability and desire of an organisation to take action towards changes in the environment (Roberts and Grover, 2012). Response to environmental changes can come in the form of either a complex move, simple move or no move (Ferrer et al, 1999). A response is termed a complex move when an organisation embarks on a new undertaking such as new product or service launch. A simple move is a type of response in which the organisation makes an amendment to an existing venture such as a change in price or change in the features of an existing product. A no move response entails doing nothing. This can only be considered a response as long as the nonresponse is deliberate and not merely a failure to sense a change.

This study employs the use of the theory of sensing and responding as a theoretical guide for two main reasons. First, technological changes bring about competition and terminate monopolistic tendencies rendering products and services outdated and creating new industries (Day and Schoemaker, 2000). This tallies with the fintech revolution in the banking industry which broke entry barriers, influenced customers' loyalties and redesigned banking products and services. As a result, banks are pressured to respond appropriately. Second, technological changes happen rapidly and in some cases unexpectedly making it difficult for go-it-alone firms, such as banks, that rely heavily on in-house technology to thrive (Pisano, 1990). Presently, technological changes are so fast that banks are finding it difficult to match the technological achievement of fintech companies (Navaretti et al, 2017). As a result, banks are responding by offering innovative banking products and services to meet their customers' needs.

### ***Innovative Banking Products and Services***

Innovative banking products and services are numerous. The following paragraphs describe some of the most common products and services offered by banks.

#### ***Internet Banking***

Internet banking, which is sometimes used interchangeably with e-banking, (Al-Weshah et al, 2011) involves services that allow customers to request information and conduct transactions through the internet. It is defined as the distribution of information and services by banks to their customers through different platforms that can be accessed via a personal computer or other intelligent devices (Daniel, 1999). On the other hand, Keivani et al (2012) refers to internet banking as an umbrella term for a process that allows a bank customer to perform banking transactions without stepping into banking halls. With internet banking, banks offer innovative customised services that suit the need of each customer at a lower cost (Tuchilla, 2000; Bardley and Stewart, 2003). Internet banking is strategic to bankers as it

offers opportunity for effective marketing at lower costs as well as opportunity for reduced transaction costs and increase customer base, among others (Nath et al, 2001).

### ***Mobile Banking***

Various terms are used by scholars to describe mobile banking, including branchless banking (Ivantury and Mas, 2008), m-payments (Donner and Tellez, 2008), and m-banking (Liu et al, 2009), among others. Notwithstanding, mobile banking is defined as an application of mobile commerce that allows customers to access their banks accounts to carryout transactions such as balance inquiry, fund transfers, money payments and sales of shares (Lee and Chung, 2009; Alafeef et al, 2012). Mobile banking, regarded as further channel to improve the customer relationship, enables banks to fortify their relationship with existing customers, expand their customer data-base and target more lucrative segments of the market (Horton, 2001).

### ***Automated Teller Machine (ATM)***

The ATM is a computerised machine that allows bank customers access to their bank accounts in a public space without the need for human assistance or bank cashier. The machine identifies the customer as the customer inserts his card into the machine. The card has magnetic stripe (or chip) that contains a unique card number and security information - such as expiration date, customer's account number and name – that relate to the customer. Access is given to the customer on entering his personal identification number (PIN). Banks mount ATMs in locations where customers are likely to demand cash including shopping malls, petrol stations, airports, and restaurants, among others. With ATMs the customer can access his/her account 24/7, deposit money and withdraw cash (Christoslav et al, 2003; Brain, 2000).

### ***Social Banking***

The customer service offered by companies has a direct influence on customers' satisfaction in almost all industries (Lightner, 2004) and this leads to customers' retention and business performance (Meuter et al, 2000). As a result, banks are now more aware of the power of social media and are active on social platforms to meet the rising customers demand for personalisation by demonstrating value and social care to them (Shanker and Khan, 2012). Banks are now part of businesses trying to interact with customers via social platforms by offering several models of social banking such as integrated CRM module for Twitter and Facebook and virtual branch for Facebook (Sair, 2019).

### ***Point of Sale (POS) Terminal***

This is an electronic device deployed at merchants' outlets to accept credit and debit cards. This electronic device can be a computer, cash register, magnetic card readers, optical and bar code scanners or combination of any of these devices (Dunn et al, 2016). The POS service carries valuable information on sales on a real time basis (Ellram et al, 1999). Equally, POS can be used to update inventories and purchase reorder when needed. POS is also a valuable tool in making effective use of customers' sale information to introduce a supply chain management and customer relationship management.

### ***Digital Wallet***

The digital wallet permits bank customers to conduct financial transactions quickly and securely. The digital wallet functions just like a physical wallet. Thus, instead of keeping money in physical wallet, money is kept in electronic wallet application installed in a mobile device. Money is loaded to the wallet from a user bank account and transactions are carried out from the wallet at ease and convenience. The digital wallet allows peer to peer (P2P) transactions including payments for utility bills, fees and charges, money transfer to wallets of others, and other online and offline payments.

### ***Hypotheses Development***

Fintech is a technology-based financial innovation that gives rise to new business models, applications, processes and products that significantly influences the provision of financial services (Dorfleitner et al, 2017). In the banking sector, fintech operates in the finance, asset management and payments areas providing services which include crowdfunding (Augustine, 2015), crowdlending (Conrad, 2012), social trading (Liu et al, 2014), robo-advice (Accenture, 2015), e-wallets (Roubini and Mihm, 2010), mobile payment (Merritt, 2010) and cryptocurrency (Maese, 2014), among others. These developments have positioned fintech in a very comfortable footing in the banking industry such that it has now become more popular and acceptable, particularly among the millennials (Baker et al, 2017), for providing faster and user-friendly services (Dorfleitner et al, 2017) and for their ability to provide many financial products in one place (Wisniewski, 2016). Based on this discussion, the following hypothesis is formulated for the study.

**H<sub>1</sub>:** Fintech companies are more popular and acceptable than conventional banks in Nigeria

The participation of Fintech companies in the provision of banking services is seen as threat to incumbent banks. This has prompted numerous studies on the destructive ability of fintech companies (Dickson et al, 2015). For example, Bunea et al (2016) investigated whether

fintech was a threat to US banks. They found that banks in the US consider fintech as a threat but only a few of the bankers mentioned fintech as threat in their annual reports. Similarly, in a study on the challenges customers faced in Hungarian banks, Feher and Varga (2017) found that banks with a generic strategy are most likely to be outplayed by fintech companies with the use of a digital solution. Furthermore, Larsson (2018) investigated the threats posed by fintech on incumbent banks in securing customers loyalty through digital services. He found convenience, a user-friendly website, and information adequacy placed fintech at an advantage relative to incumbent banks in Sweden. Accordingly, the following hypothesis is developed.

**H<sub>2</sub>:** The emergence and growth of the Nigerian fintech industry is considered by Nigerian banks as threat to their business

Technological competence and innovative skills is what made fintech companies to be destructive. This has left banks to engage in the provision of innovative banking products and services. In this regards, banks have set up innovative laboratories (Webster and Pizzala, 2015) to develop and test technology and solutions such as blockchain and cryptocurrency (Sposito, 2013; Brandel, 2013). Similarly, banks are investing greatly on digitalisation to meet the ever increasing demands of their customers (Haddad and Hornuf, 2016). With digitalisation, customers can now conduct banking transactions without stepping into a banking hall with their smartphones or tablets. Furthermore, banks have introduced digital-only banking entities which collect deposits and provide lending and investing services to increase customers' experiences and value (Marous, 2019). On the basis of this discussion, the following hypothesis is formulated for this study.

**H<sub>3</sub>:** Nigerian banks are providing adequate innovative banking products and services to manage fintech destruction

## **Research Method**

This study employs a qualitative research method to measure the perception of people on the innovative response of banks to fintech destruction. The choice of the qualitative method seems appropriate because the study is based on a real world setting where the respondents' perception cannot be manipulated (Patton, 2002). Equally, the use of the qualitative approach is justified because the findings of the study cannot be generalised across all countries because each country has its own characteristics that is peculiar to it.

### ***Research Sample and Data***

The population of this study comprises of experts in the field of innovative banking. Consistent with Zikmund (2004), three legitimate stakeholder groups – financial specialists, academia and the general public – were selected for this study. In recognition of factors such as the objectives, time and resources available for the study (Patton, 2002) and also considering the fact that the size of a population in qualitative research is a matter of judgement (Sandelowski, 1995), a total of 200 experts were selected judgmentally as the sample of the study. The option for judgmental sampling has met the requirement of this study because it results to the determination of a proper sample size (Sandelowski, 1995) with high degree of precision (Thietart, 2001).

Data was collected using a five-point Likert questionnaire. The use of the questionnaire is justified because the questionnaire offers an objective means of collecting data regarding the knowledge, beliefs, attitudes and behaviours people hold (Oppenheim, 1992) which serves the objectives of the study. The questionnaire was subjected to a pilot test across some of the respondents in order to identify its likely weaknesses and also to be conversant with the research etiquette (Lancaster et al, 2004). After these processes, the questionnaires were personally administered to the 200 of respondents sampled. A total of 138, representing 69% of the questionnaires administered, were returned correctly completed. This rate of return indicates that the questionnaire was soundly constructed (Walonick, 2010). The data collected was analysed using descriptive statistics and Kruskal-Wallis statistics.

## **Results**

### ***Descriptive Statistics***

Table 1, Panels A to C, presents the descriptive statistics of the respondents' views on how banks in Nigeria manage fintech disruptions through innovative banking. Panel A presents statistics relating to the emergence and growth of the Nigerian fintech industry. From the Panel it can be seen that over 70% of the respondents agree that the fintech industry is rapidly growing and that fintech companies are actively competing in the Nigerian banking sector. Similarly, 77% of the respondents agree that fintech is becoming popular and acceptable to bank customers, while 81% of the respondents' view that banks are at the risk of losing their customers to fintech.

In Panel B, 81% of the respondents believe that banks in Nigeria are aware of the development of fintech in the country. This development, according to 68% of the respondents, is viewed by banks as a threat to their businesses. In the same vein, 75% of the respondents, with a mean score of 3.46 and median of 4.00, agree that banks in Nigeria have

units or departments solely dedicated to the monitoring of fintech. Furthermore, 83% of the respondents believe that the only option for banks to contain the destructions of fintech is an innovative banking approach.

Panel C presents the results on the innovative banking strength of Nigerian banks. The majority of the respondents agree that Nigerian banks provide all the innovative banking products and services listed in Table 1 Panel C. With a mean score of 2.97 and a median of 3.00, the respondents seem to disagree that the innovative banking products and services of Nigerian banks are relatively cheaper and cost effective. However, 75% of the respondents believe that Nigerian banks provide the most competitive innovative banking products and services. Moreover, 62% of the respondents, with a mean score of 2.80, disagree that banks in Nigeria are leading in the provision of innovative banking products and services. Finally, on an average score of 3.50, the majority of the respondents (82%) agree that banks are proactive in the provision of innovative banking products and services.

**Table 1:** Descriptive Statistics

**Panel A:** Emergence and Growth of Fintech in Nigeria

S/No.	Questions	M	Md	SD	Responses					TR(%)
					SD(%)	D(%)	N(%)	A(%)	SA(%)	
1	Nigeria's fintech industry is rapidly developing	3.25	4.00	1.34	24 (17.4)	13 (9.4)	30 (21.7)	46 (33.3)	25 (18.1)	138 (100)
2	Fintech companies are actively competing in the Nigerian banking industry	3.42	4.00	1.25	11 (8.0)	26 (18.8)	27 (19.6)	42 (30.4)	32 (23.2)	138 (100)
3	Fintech companies are becoming more popular and acceptable to bank customers in Nigeria	3.46	4.00	1.12	10 (7.2)	16 (11.6)	35 (25.4)	54 (39.1)	23 (16.7)	138 (100)
4	Nigerian bank customers are contemplating switching to the services of fintech companies	3.44	4.00	1.24	15 (10.9)	17 (12.3)	25 (18.1)	54 (39.1)	27 (19.6)	138 (100)

**Panel B: Banks Awareness and Perception of Fintech in Nigerian**

S/No.	Questions	M	Md	SD	Responses					TR(%)
					SD(%)	D(%)	N(%)	A(%)	SA(%)	
1	Nigerian banks are aware of the development in Nigeria's fintech industry	3.43	4.00	1.46	24 (17.4)	16 (11.6)	17 (12.3)	39 (28.3)	42 (30.4)	138 (100)
2	Nigerian banks consider fintech as threat to their businesses	3.33	3.00	1.26	16 (11.6)	18 (13.0)	36 (26.1)	41 (29.7)	27 (19.6)	138 (100)
3	Nigerian banks have dedicated units for monitoring developments in fintech	3.36	4.00	1.18	12 (8.7)	22 (15.9)	29 (21.0)	54 (39.1)	21 (15.2)	138 (100)
4	Nigerian banks recognise innovative banking as a solution to the fintech threat	3.59	4.00	1.13	6 (4.3)	21 (15.2)	28 (20.3)	52 (37.7)	31 (22.5)	138 (100)

**Panel C: Innovative Banking Strength of Nigerian Banks**

S/ No.	Questions	M	Md	SD	Responses					TR (%)
					SD (%)	D (%)	N (%)	A (%)	SA (%)	
1	Nigerian banks provide each of the following innovative banking products and services Internet banking Mobile banking ATM services Social customer services P2P payments Point of sales (POS)	3.98	4.00	1.15	9 (6.5)	11 (8.0)	15 (10.9)	68 (49.3)	35 (25.4)	138 (100)
2	Nigerian banks innovative banking products and services are relatively simplified, convenient and cost effective	2.97	3.00	1.34	24 (17.4)	34 (24.6)	20 (14.5)	41 (29.7)	19 (13.8)	138 (100)
3	Nigerian banks innovative banking products and services are the most competitive in Nigeria	3.46	4.00	1.17	8 (5.8)	25 (18.1)	29 (29.0)	47 (34.1)	29 (21.0)	138 (100)
4	Nigerian banks innovative banking products and services cut across the payment, lending and investment segments of retail banking sub-sector in Nigeria	3.17	3.00	1.18	13 (9.4)	29 (21.0)	35 (25.4)	43 (31.2)	18 (13.0)	138 (100)
5	Nigerian banks are leading in the provision of innovative banking products and services over any player in the Nigerian retail banking sub-sector	2.80	3.00	1.43	36 (26.1)	26 (18.8)	28 (20.3)	25 (18.1)	23 (16.7)	138 (100)
6	Nigerian banks are proactive in the provision of innovative banking products and services	3.50	4.00	1.14	9 (6.5)	20 (14.5)	27 (19.5)	57 (41.3)	25 (18.1)	138 (100)

### ***Kruskal-Wallis and Post-hoc Pairwise Tests***

Kruskal-Wallis tests were conducted to investigate the existence of any differences between the expert groups. Post-hoc pairwise tests were conducted to analyse the causes of any differences.

### ***Test of Hypothesis $H_1$***

Tables 2 and 3 present respectively the Kruskal-Wallis and post-hoc pairwise tests results for testing hypothesis  $H_1$ . From Table 2, the results show a p-value of 0.000 across all the questions. This indicates that the relationships between the groups were significant. In other words, there are differences between the groups in the distributions of their responses for all the four questions. Therefore, in order to find the areas of differences, a post-hoc pairwise comparisons test was conducted and the results are presented in Table 3.

**Table 2:** Kruskal-Wallis test for Emergence and Growth of Fintech in Nigeria

<b>S/No.</b>	<b>Null Hypothesis</b>	<b>Chi-Square</b>	<b>Significance</b>
1	The distribution of response that Nigeria's fintech industry is rapidly developing is the same across the groups	38.276	0.000
2	The distribution of response that fintech companies are actively competing in the Nigerian banking industry is the same across the groups	38.071	0.000
3	The distribution of response that fintech companies are becoming more popular and acceptable to bank customers in Nigeria is the same across the groups	21.902	0.000
4	The distribution of response that Nigerian bank customers are contemplating switching to the services of fintech companies is the same across the groups	45.449	0.000

**Table 3:** Post-hoc Pairwise test for Emergence and Growth of Fintech in Nigeria

S/No.	Question	Differences	Mean Rank	Adj, Sig
1	Nigeria's fintech industry is rapidly developing	AC-FS GP-FS	43.02- 91.25 69.38- 91.25	0.000 0.023
2	Fintech companies are actively competing in the Nigerian banking industry	AC-FS GP-FS	44.60- 92.48 65.72- 92.48	0.000 0.003
3	Fintech companies are becoming more popular and acceptable to bank customers in Nigeria	AC-FS	50.47- 86.38	0.000
4	Nigerian bank customers are contemplating switching to the services of fintech companies	AC-FS GP-FS	45.25- 95.62 60.39- 95.62	0.000 0.000

### *Test of Hypothesis H<sub>2</sub>*

Table 4 and 5 present the Kruskal-Wallis and post-hoc results for banks' awareness and perception of fintech in Nigeria. All the results indicate significant relationships, suggesting that the expert groups differ in all the questions asked. The resultant post-hoc pairwise comparisons tests reveal a number of differences across the three different groups of experts. These differences are presented in Table 5.

**Table 4:** Kruskal-Wallis test for Banks Awareness and Perception of Fintech in Nigeria

S/No.	Null Hypothesis	Chi-Square	Significance
1	The distribution of response that Nigerian banks are aware of the development in Nigeria's fintech industry is the same across the groups	27.672	0.000
2	The distribution of response that Nigerian banks consider fintech as threat to their businesses is the same across the groups	54.860	0.000
3	The distribution of response that Nigerian banks have dedicated units for monitoring developments in fintech is the same across the groups	36.010	0.000
4	The distribution of response that Nigerian banks recognise innovative banking as solution to fintech threat is the same across the groups	28.698	0.000

**Table 5:** Post-hoc Pairwise test for Banks Awareness and Perception of Fintech in Nigeria

S/No.	Question	Differences	Mean Rank	Adj, Sig
1	Nigerian banks are aware of the development in Nigeria's fintech industry	AC-GP AC-FS	46.90-69.63 46.90-87.90	0.023 0.000
2	Nigerian banks consider fintech as threat to their businesses	AC-FS GP-FS	40.52-97.63 63.11-97.63	0.000 0.000
3	Nigerian banks have dedicated units for monitoring developments in fintech	AC-FS GP-FS	46.92-92.33 63.20-92-33	0.000 0.001
4	Nigerian banks recognise innovative banking as solution to the fintech threat	AC-FS GP-FS	51.04-90.50 60.96-90.50	0.000 0.001

### *Test of Hypothesis H<sub>3</sub>*

Tables 6 and 7 present the results for innovative banking strength of Nigerian banks. In Table 6, the results show that the respondents' groups differ in all the questions except on the issue relating to the provision of innovative banking products and services and Nigerian banks proactive measures in the provision of innovative banking products and services. The post-hoc pairwise comparisons tests show the academicians disagreeing with both the general public and the financial specialists on all the four areas of differences but this time the disagreement across the groups relate to the extent of agreement. The results are presented in Table 7.

**Table 6:** Kruskal-Wallis test for Innovative Banking Strength of Nigerian Banks

S/No.	Null Hypothesis	Chi-Square	Significance
1	The distribution of response that Nigerian banks provides each of the banking products and services listed in Table 1 Panel C (1) is the same across the groups	4.952	0.102
2	The distribution of response that Nigerian banks provide innovative banking products and services that are relatively more simplified, convenient and cost effective is the same across the groups	7.960	0.019
3	The distribution of response that Nigerian banks provide the most competitive innovative banking products and services in Nigeria is the same across the groups	15.984	0.000
4	The distribution of response that Nigerian banks provide innovative banking products and services that cut across the payment, lending and investment segments of the Nigerian retail banking sub-sector is the same across the groups	18.282	0.000
5	The distribution of response that Nigerian banks are leading in the provision of innovative banking products and services over any player in the Nigerian retail banking sub-sector is the same across the groups	10.390	0.006
6	The distribution of response that Nigerian banks are proactive in the provision of innovative banking products and services is the same across the groups	5.781	0.056

**Table 7:** Post-hoc Pairwise test for Innovative Banking Strength of Nigerian Banks

S/No.	Question	Differences	Mean Rank	Adj, Sig
1	Nigerian banks provide innovative banking products and services that are relatively more simplified, convenient and cost effective	AC-FS	56.12-76.88	0.024
2	Nigerian banks provide the most competitive innovative banking products and services in Nigeria	AC-FS GP-FS	57.57-85.62 60.30-85.62	0.001 0.006
3	Nigerian banks provide innovative banking products and services that cut across the payment, lending and investment segments of the Nigerian retail banking sub-sector	AC-FS	52.44-85.50	0.000
4	Nigerian banks are leading in the provision of innovative banking products and services over any player in the Nigerian retail banking sub-sector	AC-FS AC-GP	54.11-76.20 54.11-76.03	0.015 0.017

## Discussion of Results

The analysis of results in section 4 above has revealed a number of findings. First, the study revealed that majority of the respondents agreed that the fintech industry in Nigeria is rapidly developing and that fintech companies are actively competing in the provision of innovative banking products and services. However, the academicians group, with a mean rank of 43.02 and 44.60 disagreed. While shortage of infrastructure is a major constraint to fintech development in Africa (Demirguc-Kunt et al, 2018), the academicians view might not be correct because available evidence suggests otherwise. For example, between 2014 and 2015, various fintech companies have registered in Nigeria with a total investment of over \$200 million (KPMG, 2016). This massive progress has put Nigeria, alongside South Africa and Egypt, as the three top recipients of fintech investments in Africa (KPMG, 2016). Similarly, in terms of competitiveness, fintech is providing almost all the banking products and services that were hitherto the exclusive rights of the incumbent banks in a mind blowing manner (Chishti and Barberis, 2017) and for this reason fintech are becoming globally acceptable especially among the millennials (Baker et al, 2017).

Second, the study revealed that banks in Nigeria were fully aware of the developments in the fintech industry and considered fintech as threat to their businesses. For this reason, banks have established units dedicated for monitoring fintech. This was not concurred by the

academicians. The academicians did not believe that fintech were threats to banks (mean score: 40.52) and were not sure (mean score: 51.04) that innovative banking was a solution to the fintech threat in Nigeria. Again, this view might not be right even though there are reasons to believe that the development of fintech can be an opportunity to banks (Kerenyi et al (2018). Banks across the globe are either putting up venture capital to fund fintech companies or are partnering, acquiring or launching their own fintech companies (Webster and Pizzala, 2015). Similarly, prior studies have confirmed that fintech is a threat to banks across the globe (Bunea et al, 2016; Feher and Varga, 2017; Larsson, 2018) and as such Nigerian banks cannot be an exception. For example, a recent statistic by NCC (2018) indicated that active mobile phones users in Nigeria has reached 144 million at the end of

2017. This has damaging effect on banks as countries with larger mobile lines have witnessed the formation of more fintech startups (Haddad and Hornuf, 2016).

Third, the study revealed that about 57% of the respondents disagreed that Nigerian banks provide relatively cheaper, convenient and simplified innovative banking products and services. The groups were unanimous on disagreement. One of the reasons that could attribute to this negative perception is the exorbitant banks charges and fees Nigerian banks are charging. For example, 75% of Nigerian banks revenue comes from bank charges and fees (Omole, 2019). This is arguably one of the reasons for the continued problem of people opting not to open bank accounts. However, in terms of competitiveness in innovative products and services, the study revealed that Nigerian banks lead the way. For example, banks in Nigeria have introduced mobile payment technology that allows the use of the mobile phone to make payments and transfer funds. Prominent among these payment systems include: Guaranty Trust Bank's GTPay, Zenith Bank's GlobalPay, and United Bank for Africa's U-Collect, among other. Similarly, for mobile phone users who do not have access to the internet, many banks in Nigeria have launched digital platforms such as Skye Bank's "SkyeXperience", Sterling Bank's "Temenos'T24", and Zenith Bank's "Fusionbanking, among others.

Finally, the study revealed that Nigerian banks are not the leading player in the provision of innovative banking in Nigerian. One reason to explain this position is that the fintech phenomenon is something global. Numerous fintech companies whose home country is not Nigeria are very much visible in Nigeria because of the internet. Good examples include Amazon, PayPal, TransferWise, and FundBox, among others. Despite this finding, this study also confirmed that Nigerian banks were proactive in providing innovative banking products and services.

## **Conclusion**

This study examined the how banks manage fintech's destruction through innovative banking. On the basis of the literature review and the findings of the study, this study concludes that the fintech industry in Nigeria is growing rapidly and that fintech companies are actively competing in the provision of innovative banking products and services. Similarly, the study concludes that Nigerian banks are fully aware of the developments in the fintech industry and are providing effective innovative banking products and services to manage the destruction of fintech companies. In addition, the study concludes that the innovative banking products and services of Nigerian banks are not as simplified and cost effective as other players in the banking industry. However, in terms of competitiveness, the innovative banking products of Nigerian banks lead the way.

Finally, despite the novelty of the conclusions above, this study has one main limitation. The study did not separately investigate the extent to which Nigerian banks use each of the innovative banking products and services in managing the threats from fintech companies. Accordingly, further studies are recommended to investigate the effect of each of the banking products and services in managing the destruction from fintech.

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