

# Effect of Financial Technology on Financial Performance of Deposit Money Banks in Southwest, Nigeria

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## ABSTRACT

Financial Technology in the recent times, has significantly intensified competition in Nigerian Banking Industry, hence Deposit Money Banks (DMBs) face persistent pressures from a wide and diverse range of competitors, while the regulatory environment becomes less protective of the financial institutions. This study therefore examined the effect of financial technology on the financial performance of deposit money banks in southwest, Nigeria. The study employed an Ex-Post Facto research design to establish functional relationship among customers and employees of the DMBs branches in the South West geopolitical zone in Nigeria. The descriptive statistics, which involved the current levels of financial performance on deposit money banks showed an improvement in the return on assets due to the deployment of financial technology with the weighted average of 216 or 35.94% while more than 97% of respondents perceive the level of improvement in equities of banks in Nigeria as moderate followed by the rate of improvement in net income margin of banks with weighted mean of 192 or 31.9%. The empirical results showed that the deployment of automated teller machine, mobile banking, internet banking and point of sales on the financial performance of banks have significantly and positively improve banks' return on asset, equity and the net income. This is an indication that the financial performance of Nigerian banks' are highly sensitive to changes in the alternative banking channels as 1%, rises in automated teller machine increase the return on asset by 0.18%. In the same vein, increase in mobile banking to the tune of 1% raised the level of return on asset by 0.29%. Thus the study concludes that the deployment of mobile banking and internet bank drive virtually all the indicators of bank financial performance in Nigeria. However, the paper recommends that, the deployment of mobile banking was more pronounced, and particularly in the area of banks' return on equity although all the alternative banking channels contributes to bank financial performance in Nigeria.

**Keywords:** Automated Teller Machine, Mobile Banking, Point of Sales, Returns on Equity.

## INTRODUCTION

Financial technology a technology-enabled financial solutions that cover the whole commodities' scope, offered by deposit money banks has significantly intensified competition in the Nigerian Banking Industry in the recent times. This competition has become global in nature where Deposit Money Banks (DMBs) in Nigeria face persistent pressures from a wide and diverse range of competitors, while the regulatory environment of financial institutions becomes less protective (Abdulsalam, 2006, Elumaro & Obamuyi 2018; Ibekwe, 2021).

These persistent pressures on the banking industry and the incessant Bank Distress with the inconsistency

Policies of Central Bank of Nigeria usually result in loss of jobs, significant capital flights, devalued currency, and loss of depositors' (Obamuyi, 2011) as depositors are only insured up to a maximum of two hundred thousand naira only and further closing down of companies.

Financial Technology which is a new form monetary service merges information technology (IT) with monetary services such as remittances, payments and also management of assets (Lee & Kim, 2015). The appearance of technology has led to better ways of doing business in the modern era (Stiroh, 2001). Ongori and Migiro (2010) argued that information and communication technology (ICT) has conveyed an absolute change of standards on the performance of financial institutions and on the delivery of services to the clients in the banking business.

In an attempt to fast-track growth, reduced persistent pressure and advance the delivery of customer services, as well as lessen the transaction costs, DMBs have ventured into technology-enabled financial services. Financial technology has been recognized as a catalyst for improved service delivery in the financial system (Ibrahim, 2018). Kagan, Acharya, Rao, and Kodepaka (2005) evaluated the effect of internet banking on the functioning of community banks in America. The study found that banks that offered a broad choice of banking services over the internet performed better than those without. They also discovered that banking over the internet helped the community banks in enhancing their ability as indicated by a higher return on equity.

Kilonzi (2015) did a research on Mobile banking technology, innovation strategy and competitive advantage of commercial financial institutions in Kenya. The study utilized primary data through questionnaires to the employees of commercial banks in Kenya. The paper findings concluded that investment in Mobile banking technology will give banks a competitive advantage. In the light of the foregoing, this paper in its main objectives, examined the influence of financial technology on the performance of financial deposit money banks in southwest Nigeria and the specific objectives are to;

1. examine the effect of Financial Technology on Returns on Assets (ROA)
2. examine the effect of Financial Technology on Returns on Equity (ROE)
3. examine the effect of Financial Technology on Net Income (NI)

Although, empirical studies in this area have undergone a remarkable growth, despite the volume of empirical evidence, the effect of financial technology on performance of the banking sector is inconclusive thus financial technology could not be said to improve the persistent pressures on the banking sector performance within the period studied. The need for a study of this kind is more important in an environment like Nigeria where there is a yawning gap between theory and evidence, which is characterized by growing calls for effective research

## LITERATURE REVIEW

### Conceptualizing Financial Technology and Financial Performance

Financial Technology a new form monetary service that merges information technology (IT) with monetary services such as remittances, payments and also management of assets (Lee & Kim, 2015). According to Kagan (2020), financial technology (FinTech) is used to describe new technology that seeks to improve and automate the delivery and use of financial services. At its core, FinTech is utilized to help companies, business owners and consumers better manage their financial operations by utilizing specialized software that are used on computers.

FinTech companies are those that use technology to make the financial system more efficient (Mishkin & Strahan, 1999). Basically, financial technology is divided into several types based on the services they

provide. According to Schüffel (2016), Fintech refers to computer software and other technology employed to support banking and financial service delivery. The Financial Technology definition used in this study draws essentially from the one given by the Schüffel (2016). This are represented by Automated Teller Machine, Point of Sale Terminal, Internet Banking and Mobile Banking.

The concept of financial performance is vital to this study, Salahu (2016) define financial performance as the achievement of a particular task measured by standards of accuracy, completeness, cost and speed. Richard, Devinney, Yip and Johnson (2009) argue that performance is a measure of actual results of an organization against its goals and objectives. The goals include financial performance (profits, return on assets, return on investment); market share, and return on shareholders' value. Mutindi, Namusonge, Obwogi (2013) further define performance as overall productivity in terms of customers, profitability, and market share.

### **Theoretical Review**

According to Davis (1989), technology acceptance model (TAM) suggests that there is a relationship between user's acceptance of any innovation and user's apparent ease of use and usefulness of such technology. TAM suggests that issues that determine the decision about how and when a technology will be used include the perceived ease of use and the perceived usefulness of a particular technology. A number of studies have been carried on the effect of financial technology on bank performance both locally and internationally. For instance, Kagan *et al.* (2005) evaluated the effect of internet banking on the functioning of community banks in America and found that internet banking helped community banks in enhancing their ability to earn as indicated by a higher return on equity. Neder (2011) also assessed the impact of banking innovation on functioning of financial institutions in Saudi Arabia between 1998 and 2007, and established that use of mobile phones, ATMs and branch networks enhance profitability, whereas a high number of PoS and mobile banking failed to significantly increase profits. Probably due to the high level of competition in the Nigerian banking industry, the rate of financial technology deployment has been on the increase in the recent times.

### **Empirical Review**

Adiga, Adigwe, Okonkwo, and Ogbonna (2022) examined financial technology and banking sector performance in Nigeria. This study was anchored on Technology Acceptance Model (TAM) which was subjected to Auto Regressive Distributed Lag (ARDL) technique to test the interaction between independent variables. The study concluded that financial technology significantly explained the variation in banking sector performance components in ROA, ROE, and non-interest income. The effect of financial technology on performance of the banking sector is inconclusive thus financial technology could not be said to improve and exert the required impact on the banking sector performance within the period studied.

Kijjambi (2014) conducted a study on the factors responsible for the economic functioning of business financial institutions in Uganda. The research targeted all the licensed commercial banks in Uganda.. Linear multiple regression analysis was used in the period of 2000 – 2011. The paper established that organizational competence; interest income, asset quality, inflation along with capital adequacy are aspects influencing the functioning of local commercial financial institutions in Uganda over the period of study.

Nyaga (2013) conducted a research on the effect of mobile money services on the accomplishment of small with medium sized firm in towns within Kenya. Data was collected in Naivasha municipality. The city was selected in a purposive sample for expediency from 31 municipals and 24 towns in the country. The study concluded that mobile money has made a considerable input to the accomplishment of small and medium sized firms in town centers. Many traders depend more on mobile money than the formal banking sector for their daily business operations. And also it was clear that the contributors in this research had a very good

considerate of the primary roles of mobile services. Mobile money services clearly have a positive impact on productivity.

### Conceptual Framework

Figure 1 showed the relationship between financial technology (FinTech) and the financial performance of DMBs. Fintech was proxied by Automated Teller Machine (ATM), Mobile Banking (MOB), Internet Banking (INTB) and Point of Sales (POS) as independent variables. The dependent variables are Financial Performance, proxied by returns on assets (ROA), returns on equity (ROE) and the net income (NI).

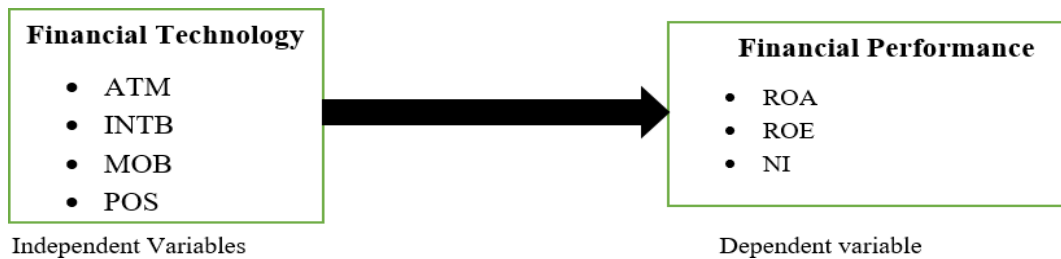


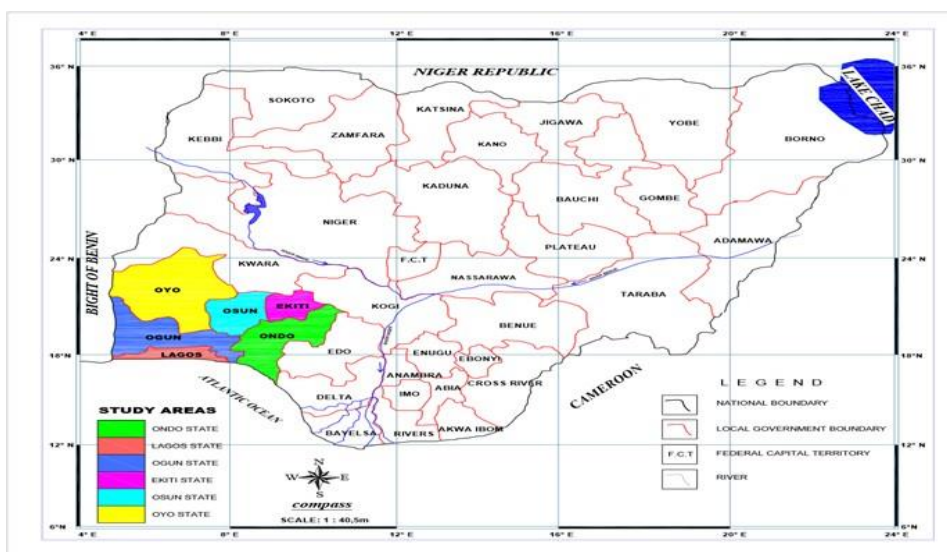
Figure 1: Conceptual Framework for the Effect of Financial Technology on Performance Adapted from Kaplan and Norton (1996)

### MATERIAL AND METHODS

This paper used the *Ex Post Facto* research design. This is to establish functional relationship among variables (Ary, Jacobs, Irvine & Walker, 2018). Figure one comprised the study area in the South West of Nigeria six states namely; Ekiti, Lagos, Ogun, Ondo, Osun and Oyo states, Nigeria.

South West, Nigeria was selected because all the DMBs have established their presence in the region, partly due to the fact that the region controls about 23% of the DMBs branches in the country (CBN Report, 2018). Furthermore, the Head Offices of DMBs are domiciled in Lagos. Moreover, Lagos is considered as the “economic engine” of Nigeria and the state controls roughly 75% of activities in the banking industry at any given time (Idowu & Adegoke, 2014).

Figure 2: Map of Nigeria showing the Study Area;



Source: CESRA GIS Laboratory, FUTA, 2021.

The target population for the paper includes customers and employees of the DMBs branches in the South West geopolitical zone in Nigeria. As shown in Table 1, the number of DMBs' branches with presence in the South West geopolitical zone in Nigeria totaled, one thousand, nine hundred and seventy-one (1,971). However, the paper considered only the DMBs with presence in the state capitals of the selected states in South West, Nigeria. The state capitals were chosen because they are the seats of the state governments while they constitutes the commercial nerve centres of each State. Thus, only sixteen (16) of the twenty-two banks listed banks were considered as these banks all have presence in the state capitals of the selected States in the South West, Nigeria.

In view of the fact that the total number of employees and customers of the DMBs are unknown, the study used the Cochran's Formula (1963) for infinite or unknown population to determine the appropriate sample size of the employees and customers from the selected states. Mathematically, the formula is given as:

$$n_0 = \frac{z^2 pq}{e^2}$$

Where,  $n_0$  = sample size,  $z$ = the selected critical value of desired confidence level,  $p$  = the estimated proportion of an attribute that is present in the population,  $q = 1 - p$  and  $e$  = the desired level of precision (probability of error). To calculate the sample size of unknown population, assuming the maximum variability is equal to 50% ( $p = 0.5$ ), and taking 95% confidence level with  $\pm 5\%$  precision, the calculation for required sample size will be as follow:

$p = 0.5$  and hence  $q = 1 - 0.5 = 0.5$ ;  $e = 0.05$ ;  $z = 1.96$ , So,

$$n_0 = \frac{(1.96)^2 (0.5) (0.5)}{(0.05)^2} = 384.16$$

The study then adopted multi-stage sampling procedure. The first stage involves the purposive selection of four South West (SW) states in Nigeria. The second stage involved the purposive selection of 16 banks out of 22 DMBs with presence in all the State Capitals of the selected states in SW, Nigeria; and those with their Head Office/Liaison offices in Lagos, Nigeria. The third stage entails the purposive selection of one DMB branch per bank in each of the selected states' capitals in SW, Nigeria. The fourth stage include random selection of six staff per DMB branch. Finally, convenience sampling technique was used for selection of six customers at the branch offices.

The target respondents for the paper includes six respondents from Branch Manager, Head of Operation, Marketing (Relationship) manager, Customer Service Officer, Fund Transfer Officer and Teller, and then six customers at each of the DMB selected. These categories of staff were selected because of their level of knowledge and experience. Thus, the total number of respondents in the survey was seven hundred and sixty-eight (768) which includes three hundred and eighty-four (384) each from both employees and customers of the selected DMBs.

The paper predominantly employed primary data with the use of two sets of structured questionnaires. The model focused on the effect of Financial Technology and the financial performance of selected banks, financial technology (proxied by ATM, internet banking, mobile banking and Point of Sales Terminal) were used as the independent variables. The relationship between financial technology and financial performance are represented as follows:

$$FPERF_i = \gamma_0 + \gamma_1 ATM_i + \gamma_2 INTB_i + \gamma_3 MOB_i + \gamma_4 POS_i + \epsilon_i \dots \dots \dots (1)$$



Where:  $FPERF_1$  = Financial performance proxied by the ability of the DMB to make profit. which are returns on assets (ROA), returns on equity (ROE) and the net income (NI), ATM = Automated Teller Machine, INTB = Internet Banking, MOB= Mobile banking, POS= Point of Sale Terminal,  $\gamma_0$  = constant term.

## RESULTS AND DISCUSSION

### Demographic characteristics of respondents (customers)

The distribution of respondents across various demographic variables were presented in Table 1. The results showed that there are more female (60.2%) bank customers than male (39.8%) counterpart in Nigeria. In terms of marital status, 200 or 28.6% banks customers are yet to marry while 423 or 60.52% bank customers are married. If maturity is consistent with marriage then it can be conjectured that more than 60% of bank customers are matured people.

Table 1: Background Information of Respondents (customers)

Background Information	Options	Frequency	Percent
Gender	Male	278	39.77
	Female	421	60.23
	<b>Total</b>	<b>699</b>	<b>100</b>
Marital Status	Single	200	28.61
	Married	423	60.52
	Divorce	12	1.72
	Widow	64	9.16
	<b>Total</b>	<b>699</b>	<b>100</b>
Age Bracket	around 20 Years	100	14.31
	Less than 20 Years	91	13.02
	21-30 Years	31	4.43
	31 – 40 Years	94	13.45
	41- 50 Years	153	21.89
	Over 50 Yearts	230	32.9
	<b>Total</b>	<b>699</b>	<b>100</b>
Highest 4academic Qualifications	SSCE	198	28.33
	NCE/OND	2	0.29
	B.Sc/HND	257	36.77
	PGD/M.Sc	183	26.18
	Ph.D	59	8.44
	<b>Total</b>	<b>699</b>	<b>100</b>
State of Residence	Ekiti	116	16.6
	Lagos	88	12.59
	Ogun	61	8.73
	Ondo	266	38.05
	Osun	105	15.02

	Oyo	63	9.01
	<b>Total</b>	<b>699</b>	<b>100</b>
Employment Status	Employed	406	58.08
	Unemployed	6	0.86
	Self-Employed	129	18.45
	Others	158	22.6
	<b>Total</b>	<b>699</b>	<b>100</b>
Sector where you are employed	Banking	2	0.29
	Manufacturing	3	0.43
	Services	175	25.04
	Educational	153	21.89
	Health	79	11.3
	Energy	49	7.01
	Others	238	34.05
	<b>Total</b>	<b>699</b>	<b>100</b>
Your banker	Polaris	145	20.74
	Sterling	1	0.14
	UBA	126	18.03
	Wema	33	4.72
	Access	1	0.14
	Heritage	6	0.86
	Union	136	19.46
	First Banks	230	32.9
	Zenith	7	1
	GTB	14	2
	<b>Total</b>	<b>699</b>	<b>100</b>

Sources: Authors Compilation (2023)

The results in figure 1 indicated that the young youths accounted for 125 or 17.88% of customers using banking services in Nigeria. Approximately 64% of bank customers in Nigeria are highly educated. By implication, this level of education are expected to provide honest and unbiased response regarding financial technology and its performance. The employment status of the respondents showed that users of bank services who are salary earners accounted for 406 or 58.08%. This was followed by respondents with other employment status other than the ones stated (such as apprenticeship) with 158 or 22.6%. Users of bank services who are unemployed accounted for 06 or 0.86% while those who are self-employed are 129 or 18.45%.

As revealed in Table 1, respondents who are in the services sector (such as entertainment, sports, salon, etc) accounted for 175 or 25.04%. Closely followed by those in the education sector, constituting 153 or 21.89%. The results showed that First Bank has the highest customers among the respondents, constituting 128 or 18.31% this was followed by GTCO with 105 or 15.02% and UBA customers 99 or 14.16% while Access Bank customers accounted for 47 or 6.72%. Union bank, Wema bank and Heritage bank have the least customers among responded recording 36 or 5.15%, 33 or 4.72% and 31 or 4.43% respectively.

### Demographic characteristics of Employees

The demographic characteristic of respondents constituting bank workers was presented in Table 2. There are more female workers in the banking sector than male. Specifically, out of the 601 respondents, 313 or 52.08% are female while male respondents are 288 or 47.92%. In terms of marital status, 399 or 66.39% are married while 202 or 33.61% are single. No bank workers among the respondents either divorced or widow. Observably, Nigeria bank workers are mostly youth over 70% of respondents are at most 40 years of age. The implication of this is that the banks hire workers at their productive age. However, since female are more than male and married workers are more than single ones, it follows that there is the likelihood of young married female workers in the banking sector. With this pattern, the productivity of these young married workers may be questionable.

In terms of educational background, it was observed that bank workers are highly educated. In fact no bank workers among the respondents has less than higher national diploma (HND) certificate. Further, as much as 310 or 51.58% of respondents have postgraduate diploma or Masters Certificate holder.

Table 2: Demographic characteristics of employees

Variable	Status	Freq.	Percent
Gender	Male	288	47.92
	Female	313	52.08
	<b>Total</b>	<b>601</b>	<b>100</b>
Marital	Single	202	33.61
	Married	399	66.39
	<b>Total</b>	<b>601</b>	<b>100</b>
Age bracket	21-30 Years	231	38.43
	31-40 Years	195	32.45
	41-50 Years	101	16.81
	Over 50 Years	74	12.31
	<b>Total</b>	<b>601</b>	<b>100</b>
Educational Qualification	HND/B.Sc	291	48.42
	PGD/M.Sc	310	51.58
	<b>Total</b>	<b>601</b>	<b>100</b>
Professional Qualification	ATS	17	2.83
	ACIB	88	14.64
	Aca	71	11.99
	FCIB, AMNIM, FIMC CMC,	25	5.83
	Finance	17	2.83
	ICAN	301	50.09
	IPMA	19	3.16
	NIL	18	3.0
	NIM	17	2.83
	Nislt	17	2.83
	<b>Total</b>	<b>601</b>	<b>100</b>
Office Location	Ekiti	119	18.0



	Lagos	201	30.41
	Ogun	103	15.58
	Ondo	115	19.13
	Oyo	123	20.47
	Total	601	100
name of current employer	Polaris	46	7.65
	Sterling	22	3.66
	UBA	75	12.47
	Wema	47	7.82
	<b>Ecobank</b>	<b>39</b>	<b>8.49</b>
	Heritage	31	5.15
	<b>Union</b>	<b>75</b>	<b>12.74</b>
	<b>First Bank</b>	<b>141</b>	<b>23.46</b>
	<b>Zenith</b>	44	7.32
	<b>GTB</b>	<b>81</b>	<b>13.48</b>
	<b>Total</b>	<b>601</b>	<b>100</b>
Role in Bank	Operations/Customer service	235	39.1
	Relationship Management/Marketing	251	41.76
	Any Other role	115	19.13
	Total	601	100
Your Bank deploys financial Technology	Yes	601	100
	Total	601	100

Source: Authors Computation, (2023)

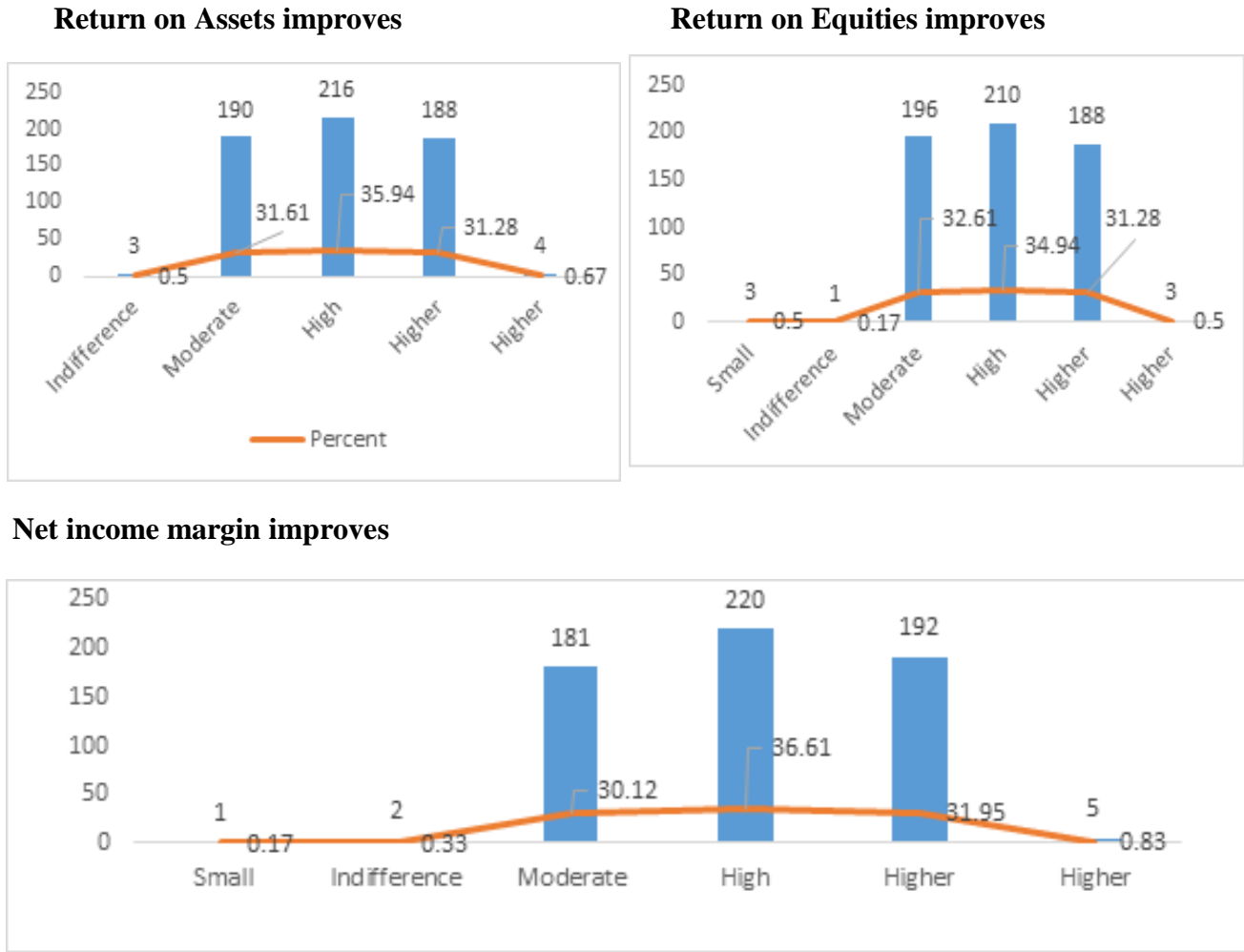
Out of the various certified professional courses in Nigeria, ICAN (institute of chartered accountant of Nigeria) was the certificate owned by majority of respondents, while most respondents' office location are located in Lagos. As revealed in Table 2, most of the respondents work in First bank with 141 or 23.45%. Next is GTCO/GTB where as much as 81 or 13.48 respondents work. Further, 75 or 12.47 respondents are workers of UBA and Union bank while 46 or 7.65% and 44 or 7.32% work at Polaris and Zenith bank respectively. Observably workers in Nigeria banks are mostly found in the marketing section and as this result showed, as much as 41.8% bank workers are in the marketing department. This characteristic is important for this study because those in the marketing department should be able to give reasonable answer to questions bordering on financial technology, how it evolves, how it performs and of course feedback from customers.

### Current Levels of Financial Tech. and the financial performance in the study area

There are many indicators for measuring the performance of any company but three are prominent. These three are returns on asset, returns on equities and net income. Increase in any of these three indicators suggests that the banks performs well. The results revealed that workers who rated the improvement of return on assets of their banks as high are 216 or 35.94%. Further, 190 or 31.61% indicated that the rate of improvement of return on assets is moderate while 188 or 31.28% rate the improvement on return on assets higher. There are very few respondents who rated the improvement on return on asset either low or indifference. Therefore, it can be said that following the adoption and evolution of financial technology in Nigerian banks, the performance of banks measured by return on assets has improved. The second indicator of bank performance was return on equities where more than 97% of respondents perceived the level of

improvement in equities of banks in Nigeria as moderate followed by the rate of improvement in net income margin of banks which was found to improved unambiguously well in Nigeria banks as at the period of this study.

Figure 3: Financial Performance of DMBs



Source: Authors Compilation, (2023)

Table 3 revealed the weighted average of the three most chosen response. The rate of improvement in return on asset was 198, the same weighted average of the three most chosen response on the rate of improvement on return on equities and net income. This weighted average actually demonstrated the consistency in the respondents in rating the level of the financial performance of their respective bank. In summary, bank performance in Nigeria, appeared to be improve in the recent time.

Table 3: Weighted average of 3 most chosen option across bank performance indicators

Option	return on asset	return on equities	net income
Moderate	190	196	181
High	216	210	220
Higher	188	188	192
<b>Average</b>	<b>198</b>	<b>198</b>	<b>198</b>

Source: Authors Compilation, (2023)

### The Regression Analysis of Financial Technology and Financial Performance Model

Table 4 showed the empirical results on the deployment of various financial technology as it affects each proxy of bank financial performance. The First model was the effect of the deployment of automated teller machine, mobile banking, internet banking and point of sales on return on asset. The results showed that alternative banking has significantly and positively improved banks' return on asset. In particular, if the deployment of automated teller machine rises by 1%, return on asset will rise by 0.18%. In the same vein, increase in mobile banking to the tune of 1% will raise the level of return on asset by 0.29%. The deployment of internet banking has positively and significantly improved the return on asset, the return on asset will rise by 0.27% as the deployment of internet banking increases by 1 percentage point.

The deployment of more point of sales for use by the customers also increase return on asset positively and significantly. In this regard, as the deployment of point of sales increases by 1%, return on asset will rise by 0.25%. Comparatively, the magnitude of response of return on asset to deployment of financial technology showed that mobile banking mostly affected return on asset compared to other alternative banking channels. Closely followed was the internet banking. The result showed that mobile banking and internet banking have stronger effects on return on asset than others. In the case of return on equities, increase in the deployment of automated teller machine, deployment of mobile banking, deployment of internet banking and deployment of point of sales positively and significantly influence the level of return on equity of banks.

Table 4: Effects of Financial Technology on Bank Financial Performance

VARIABLES	RETURN ON ASSET	RETURN ON EQUITY	NET INCOME
AUTOMATED TELLER MACHINES	0.182***	0.198***	0.238***
	(4.14)	(4.55)	(5.67)
MOBILE BANKING	0.293***	0.306***	0.260***
	(7.03)	(7.42)	(6.54)
INTERNET BANKING	0.269***	0.258***	0.246***
	(6.11)	(5.92)	(5.61)
POINT OF SALE	0.246***	0.226***	0.230***
	(5.90)	(5.48)	(6.52)
R-SQUARED	0.79	0.76	0.92
R-SQUARED ADJUSTED	0.78	0.74	0.90
AKAIKE INFORMATION	1648.20	1635.30	1592.70
SCWARTZ CRITERION	1665.80	1652.90	1610.30
OBSERVATIONS	601	601	601

**Note:** RETURN ON ASSET, RETURN ON EQUITY and NET INCOME respectively stand for perception rating of respondents to level of return on asset, return on equity and net income, being some indicators of bank performance. Values in parentheses are t-statistics; \*, \*\*, \*\*\* indicate significant at 10%, 5% and 1% respectively

Source: Author's computation, underlying data from field survey and processed by Stata 17

Observing the magnitude of return on equity to response of all the alternative banking channel, it was revealed that return on equity mostly responds to the deployment of mobile banking. Both the return on assets and return on equity mostly responded positively and significantly to mobile banking and internet banking more than automated teller machine and point of sales. This results is in line with the findings of

Adiga, Adigwe, Okonkwo, and Ogbonna (2022) that examined financial technology and banking sector performance in Nigeria. The study concluded that financial technology significantly explained the variation in banking sector performance components in ROA, ROE, and non-interest income.

Like return on asset and return on equity, net income also responded positively and significantly to deployment of automated teller machine, deployment of mobile banking, deployment of internet banking and deployment of point of sales. Increase in automated teller machine by 1% will engender improvement in net income by 0.24%. Observably, all the alternative banking channels contributed significantly to net income earnings of banks in Nigeria, Out of the four alternative banking channels, deployment of mobile banking has the highest effect on net income, followed by the deployment of internet banking while the deployment of point of sales is the least effect of alternative banking channel on net income of banks

A cursory study of the results showed that deployment of mobile banking and deployment of internet bank drive virtually all the indicators of banks financial performance in Nigeria. Looking at it critically, deployment of mobile banking has the highest effect on bank performance (return on equity (0.31) and return on asset (0.29)), followed by the deployment of internet banking (0.27 for return on asset, 0.26 for return on equity 0.25 for net income). Conversely, deployment of automated teller machine return the least effect on banking performance with the very least coming from its effect on return on asset (0.18) followed by return on equity (0.19). Thus it can be said that although the deployment of all these alternative banking channels contributed to bank performance, deployment of mobile banking was more pronounced, and particularly in the area of banks' return on equity.

## CONCLUSION

This paper with the results obtained concluded that customers of banks are mostly female, married but aged. That users of alternative banking channels are highly educated and gainfully employed. Virtually all bank workers dealing with financial technology are highly educated and also possessed one professional qualification or the other and most of the bank workers are found in the marketing department. Mobile banking and automated teller machine are the most effective alternative banking channel influencing the financial performance of banks. Mobile banking is most effective in high uptime, account opening, dealing with enquiries and complaints while automated teller machine is indicated as most effective in terms of efficiency, and second most effective in dealing with enquiries and complaints. Mobile banking also reported the highest most effective channel when it comes to user-friendly, followed by the availability of internet banking.

The deployment of various financial technology increased workers' satisfaction in the banking sector. The conclusion regarding the effect of financial technology on bank performance is that the deployment of mobile banking and deployment of internet bank drive virtually all the indicators of bank performance in Nigeria. However, the deployment of mobile banking has the highest effect on bank performance, followed by the deployment of internet banking conversely, deployment of automated teller machine return the least effect on banking performance. Thus it can be said that although the deployment of all these alternative banking channels contribute to bank performance, deployment of mobile banking is more pronounced, and particularly in the area of banks' return on equity.

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