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AGENCY BANKING, MOBILE MONEY OPERATION AND BANK PERFORMANCE IN BENUE STATE, NIGERIA

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Abstract

This study will examine agency banking, mobile money operation and bank performance in Benue State. Three proxies of agency banking namely; point of sale, mobile telephone banking and automated teller machine card usage were examined to see their effects on the performance of deposit money banks in the study area. The study adopted survey design and used structured questionnaire for data collection. The population and sample of the study consist 1,350 management staff and registered mobile money agents in the study area. A purposive sampling was used to select the elements to be used for the study. The instrument of data collection was subjected to content and construct validity while the reliability of the instrument was tested using Cronbach's Alpha statistics. Descriptive statistics was used analyze descriptive data while multiple regression analysis was used to estimate the effect of the independent variables on the dependent variable of the study. The major finding from the study indicates that point of sales and mobile telephone banking have positive and significant effects on bank performance in the study area. It was recommended among others that deposit money banks need to improve in their operations to ensure a deeper penetration into the rural area. The study has contributed significantly to the ongoing debate of the role of agency banking on financial inclusion and bank performance in the study area.

Keywords: *Mobile Money, Agency Banking, Bank, Performance, Benue State, Nigeria.*

I INTRODUCTION

Most countries the world over adopted financial inclusion as veritable tools towards achieving the Sustainable Development Goals of 1, 2 and 8 denoting poverty reduction, hunger elimination and wealth and employment creation. This has been done through the instrumentality of agency banking. Agency banking is a type of branchless banking that allows the traditional banks to extend their network of branches and services in a cost-efficient manner through authorized agents. Overtime, the financial sector in most African economies have transformed from just providing access to credit for the poor, to rural banking, community banking and more recently to micro financing, financial inclusion and wellness. All these strategies are aimed at ensuring that the active poor in rural communities have access to the needed finance for productive ventures. The nexus between agency banking strategies and financial inclusion have been a debatable paradox for a long period of time due to the important role play by deposit money banks in finance inclusive economy functions. However, the goal of financial inclusion has not been achieved due to geographical distance of banks to rural area, poor bank innovation and technological advancement to rural settlement. Globally, it is believed that sound agency banking structure contribute a foremost part in the expansion of bank financial service and economic activities of stakeholder in the rural areas of any economy. Through this agency banking model, commercial banks have inclusively extended their conventional financial services in enhancing rural areas' economic activities without a financial capacity for a formal branch, though increasing economic activities performance (Muthoka, Oluoch, & Muiruri, 2018).

The major concern of authorities in the financial system across the globe is the high rate of financially excluded adults especially in the rural communities in Africa economies; where in average of 24% of adults in sub-Saharan Africa, 11% in central Africa to about 51% in southern Africa have accounts in formal banks (World Bank Report, 2018). This high level of financial exclusion has prompted stakeholders such as policy makers and regulators to give the agency model attention even though banking regulations still stifles its growth. Likewise in Nigeria, the level of financial inclusion have raised concerns among regulatory stakeholders; as World Bank Report (2019) indicated that 73.2 million adults representing 41.6% of the adult population in Nigeria are financially excluded. Financial inclusion symbolizes distribution of financial facilities at an affordable cost to the deprived sections and low-income groups (Nyota & Muturi, 2019).

Statement of the problem

Agency banking policy of in Nigeria is however a new policy implemented by Central Bank of Nigeria; though, its wide acceptance is yet to be effected due to various inadequacy of electronic payment systems; the consistence use of POS as a drive to implement cashless policy is yet to gain acceptance by all and sundry in the country. The various issues associated with the use of POS such as syntax error, over-debiting customers accounts, reversal errors etc culminated the wide rejection of the policy. Several authors such as Adu (2016) and Tunde and Edori (2017) have established that agency banking is still bedeviled with lots of issues which needs further investigation. Based on these divergent views of different researchers, this research work is anchored on the impact of POS on cashless policy; issues and prospect.

Objectives of the study

This study aims at assessing agency banking and bank performance in selected deposit money banks in Benue State. The specific objectives of the study are to:

i. To examine the effect of point of sale operation in enhancing bank performance in Benue State
ii. To assess the effect of mobile telephone banking in enhancing bank performance in Benue State.
iii. To determine the effect automated teller machine operation in enhancing bank performance in Benue State
iv. Examine the preference between the use of bank and fintech platform in banking operations in the study area.

II LITERATURE REVIEW

Conceptual framework

Concept of agency banking

A recent development in the effort to reduce the size of the unbanked population and increase financial inclusion is the introduction of agent banking which has been defined differently by authors. A review of the various definitions is provided in the table below to enable appreciation of the salient features of agent banking. Agency banking is the delivery of financial services outside conventional bank branches, using agents or other third-party intermediaries as the principal interface with customers, and relying on technologies such as card-reading point-of-sale (POS) terminals and mobile phones to transmit transaction details. Gardner (2000) contends that agent banking systems are up to three times cheaper to operate than branches for two reasons. First, agent banking minimizes fixed costs by leveraging existing retail outlets and reducing the need for financial agent banks to invest in their own infrastructure. Although agent banking incurs higher variable costs from commissions to agents and communications, fixed costs per transaction for branches are significantly higher (Kent, 2009). Agents will not provide quality service to customers without ongoing, on-site and in-store supervision to ensure the agents are liquid, consistently branded, and following the prescribed business processes

Dimensions of agency banking

a) Point of Sale (POS) Machine

A point of sale machine is the payment device that allows credit/debit cardholder to make payment at sales/purchase outlet. It allows to perform the following services such as; retail payment, cashless payments, cash back balance inquiry,

air time vending, loyalty redemption, etc. The POS involves a computer terminal in retail stores that will transfer funds instantly from the bank deposit of the store in which customer is making purchase in the process the computer will verify that customer has sufficient funds to cover the purchase and will inform the customer of the new bank balance. It equally refers to the place where a customer executes the payment for goods or services and where sales taxes may become payable. It can be in a physical store, where POS terminals and systems are used to process card payments or a virtual sales point such as a computer or mobile electronic device (Mobile Money for the Unbanked, 2013).

b) Mobile Telephone Banking

Mobile banking is on the cusp of transformation and innovation from a niche service for the technologically elite to a mass market service demanded by all customer segments. As banks develop their strategies for giving customers access to their accounts through cell phones and other mobile devices, they should also regard this emerging platform as a potential catalyst for generating operational efficiencies and as a vehicle for new revenue sources. Smart phones are giving consumers more options by being able to access account information and perform transactions without requiring access to bank branches, ATMs, or computers, consumers are able to "bank" wherever and whenever they want and they are learning to expect such convenience. Most large banks have made substantial investments in mobile banking capabilities, and smaller financial institutions are not far behind. In addition, mobile network carriers, credit card processors, and online personal finance services that allow consumers to aggregate their accounts on a single website or app are among the many nonbanks jockeying for position in this fast growing space. Product and service innovation that allows banks to offer customers features they cannot find online, such as remote check deposit, person to person (P2P) payments and real time fraud notification are on the increase. Such features make mobile banking a richer experience next few years (Ovia, 2015).

Automated Teller Machine (ATM)

The Automated Teller Machine **(**ATM) is a combined computer terminal, with cash vault and record-keeping system in one unit, permitting customers to enter the bank's book keeping system with a plastic card containing a Personal Identification Number (PIN). It can also be accessed by punching a special code number into the computer terminal linked to the bank's computerized records. It is cash dispensing machines, deposits, funds transfer between two or more accounts and bill payments (Muthoka, Oluoch, & Muiruri, 2018). The automated teller machine provides the functions of a physical teller in the bank but in this case, the functions are automated. It's easy and convenient to use (which validates the technology acceptance theory) and is available 24hrs 7days in a week. ATM supports for financial transactions of users from financial institution in a public space without the need for a bank cashier, clerk or any bank employee. ATM consists of public ATM card having magnetic strip which contains details user's information, card number, some security information, authentication is provided by the entering of customers' personal identification number (PIN).

Concept of bank performance

Bank performance has been diversely defined by a wide-ranging experts and authorities with different attributes but is strongly linked to corporate efficacy. Daft (2013) defines bank performance as the organization's ability to attain its goals by using resources in an efficient and effective manner. Armstrong (2013) noted that performance is a multi-dimensional construct, the measurement of which varies depending on a variety of factors. Performance can be seen as a record of outcomes achieved as well as a person's accomplishments. Performance can therefore be regarded as behaviour – the way in which organizations, teams and individuals get work done. He concludes that when managing the performance of teams and individuals both inputs (behaviour) and output (results) needs to be considered. This performance management covers competency levels and achievements as well as objectives setting and review.

Bank performance is defined as a continuous and action oriented focus on improving performance by using objectives, standards, appraisal, and feedback (Ababneh, 2008). Rouse (2017), looks at corporate performance as a corporate assessment of how well an organization executes on its most important parameters, typically, financial, market and shareholder performance. It is also said to be the accomplishment of a given task measured against or proven known standard of accuracy, competences, cost, and speed. Corporate banking performance analysis is concerned with the health of the organization, which has traditionally been measured in terms of financial performance. However, in recent years, the concept of corporate health has become broader. Hence, non-financial factors such as social responsibility and reputation, innovation, employee morale and productivity are also considered. To this study, bank performance is the achievement of the objectives set forth by the bank to improve customer patronage and satisfaction within the agreed time and with minimal costs while using the available resources.

Dimensions of bank performance

i) Customer patronage

Consumer patronage is the approval or support provided by customers with respect to a particular brand. Patronage delivers the foundation for an established and growing market share. Consumers have unpredictable degree of patronage to particular services, stores and other entities. Consumers can be categorized into four groups which consist of hard core patrons who are consumers of one particular product always; split patrons usually become loyal to either two or three products within a specified period of time; shifting patrons move from one product to another and finally switchers are consumers who are not loyal to any brand at all.

According to Kent (2009), customer patronage describes the support enterprises enjoy from the customers, or a sharing of earnings with eligible customer-owner. This increased pool of potential customers can dramatically improve sales, resulting in increased profitability. Kent reiterates that customers, like employees, are important in operating a successful company. Expansion through strategic alliance when done properly, can place the company in the forefront of many customers' minds. The level at which customers patronize enterprises with the ability to pay or make purchase determine the performance of enterprises. Performance here can be viewed as whether the firms are surviving, developing, growing and making profit. For customers to re-patronize products and services of the bank, information and communication technology becomes the channel through which the services are rendered (Fouad, 2013).

ii) Customer Satisfaction

Customer satisfaction is a feeling of pleasure resulting from comparing a product's perceived performance or outcomes in relation to the customer's expectations. If the performance falls short of expectations, the consumer is dissatisfied. If the performance matches the expectations, the consumer is satisfied. If on the other hand, the performance exceeds perceived expectations, the customer is highly satisfied or delighted. In other words, for a buyer to be satisfied depends on the service offering's performance in relation to the buyer's perceived expectations. Given that the contemporary customers are more informed than ever before, Cleopatra (2015) posited that meeting their expectation as regards satisfaction is increasingly becoming more difficult.

According to Kotler & Keller (2016) customer satisfaction is generally important to a company since a highly satisfied customer is generally expected to remain loyal for longer period, buys more as much as the company introduces new products and modify existing ones, talks favourably about the company and its products (good mouthing), pays less attention to competing brands as well as being less sensitive to price changes, offers product (goods and services) ideas to the company, and most importantly costs less to serve and retain than new customers due to the routine nature of relationship (transactions) between them. This implies that, satisfied customers represent assets to the company. This is because satisfied customers tell others about their pleasant experience about the company and their product(s) and consequently recommend the products to other consumers as well as potential customers. This results to repeat purchases, retention of customers and eventually loyal customers.

Theoretical Framework

i. Agency Theory

Agency theory has been the subject of extensive research since its introduction in modern form by Jensen and Meckling (1976). The generality of the theory of Agency appears unquestionable and it has been widely adopted. According to Nurcan (2005) as cited by Ndegwa (2017), the model effectively predicts specific marvels under scrutiny. An agency relationship arises when at least one principals draw in someone else as their operator to play out an administration for their benefit. It is expected that the relationship will prompt an effective division of work. The goal being to gain an advantage or opportunity. In addition, it leverages on strength. Execution of this goal brings about the designation of some basic leadership and technical expertise to the operator. Agency Theory is relevant to this study, because it appreciates the role of the agent in achieving a desired goal. According to the theory, the delegation of responsibility by the principal and the resulting division of labour are helpful in promoting an efficient and productive economy. The delegation of responsibility in the context of this study is the outreach of financial services from the banking halls to where people live and work ensuring rise in financial inclusion.

ii. Technology acceptance theory (TAT)

This study is anchored on Technology Acceptance Theory (TAT) which was propounded by Fred Davis in 1989. The theory of technological acceptance explains how individuals accept new technology and it leads to growth in an economy. The major assumptions of this theory are that it shows how a user of a proposed technology welcomes and adapts to a new technology. He stated that two factors determine the complete acceptance of a technology. These factors are perceived usefulness and perceived ease of use. Perceived Usefulness is a factor that affects user's acceptance because it is based on how capable the new technology will help improve job performance. The technology must be capable of producing an advantageous result and must also be able to generate a positive performance (Davis, 1989).

As for perceived Ease of Use, Fred Davis defined it as how easy it is for users to make use of new technology. It means that the ability to employ the new technology should be effortless. Prior to the implementation of the cashless policy, Nigeria was a huge cash-based economy. In order to increase the effect of the policy on citizens, the people have to believe that the policy will be easy to use and also result in positive performance thereby, leading to economic growth. Mobile money products must also be reengineered to make payment effortless which will stir the country toward a cashless economy (Nwankwo & Eze, 2013).

Empirical review

Afande and Mbugua (2015) in Kenya studied the extent to which banks have been able to partner with agents, commercial entities whose primary objective and business is any service other than the provision of financial services. The study focused on selected commercial banks in Nyeri County, Kenya and was completed in a period of three months. Data was collected by use of questionnaires, which were administered to bank branch managers and appointed

agents. Findings revealed that greater geographical coverage brought about by agent banking is the strongest predictor of financial inclusion. Lack of liquidity and security concerns were found to be low.

Ndegwa (2017) in Kenya studied the effectiveness of agency banking as a financial inclusion strategy. The study adopted a cross-sectional survey design. The study targeted 38 administration managers and supervisors of the commercial banks in Kiambu which had adopted the agency banking model. Data was analyzed using descriptive (frequency distribution and percentages) and inferential statistics (Regression). The study concluded that geographical coverage is the most important benefit and therefore the most significant driver of financial inclusion.

Mustapha (2018) examined the effect of E-payment technology on bank performance in emerging economies-evidence from Nigeria (2012-2017) using time dimensional and panel least square models was to analyze the data. Two dependent variables, namely the performance index and the risk exposure variable were used and the experimental variables include values of ATM transactions and POS technology transactions, the total value of mobile money transfers, and the value of online payment transactions. It was the finding of the study that bank performance disagrees with autoregressive and random walk processes and consequently entails that investors should not be bothered about prior bank performances but concerned about present bank resources. The limitation of the study is that the F-statistics which is a weighted statistics for model fitness is not significant and this points to the fact that the model used for the study is not fit.

Godwin (2012) examined e-banking as a catalyst to customer service delivery in the Nigerian deposit money banks: A study of selected banks. The study used primary data; the instrument used in gathering the primary data was questionnaire. Pearson Product Moment Correlation Techniques was employed. The result revealed that there is positive relationship between electronic banking and customer service delivery in United Bank for Africa Plc, Access Bank Ltd and Keystone Bank Ltd. The study also revealed that there is positive relationship between Automated Teller Machine and Mobile Banking and customer service delivery in United Bank for Africa Plc, Access Bank Ltd and Keystone Bank Ltd.

Kehinde and Adelowo (2016) carried out a study to assess the level of Nigerians preparedness for e-commerce and cashless policy using the level of Information Communication Technology (ICT) adoption, usage and infrastructure available covering a space of 13 years. The paper concluded that ICT policy needs to be fully implemented and private and public sectors collaborations or partnership should be supported to facilitate the ecommerce and cashless policy.

Taiwo, Kehinde, Afieroho and Agwu, (2016) carried out a study to appraise the implementation of the cashless policy since its introduction into the Nigerian Financial system in 2012. Another objective of the study was also to access the persistent challenges facing its implementation. They issued 120 questionnaires to respondents in Zenith Bank, First Bank, and United Bank of Africa. The results were analyzed using the Statistical Package for Social Sciences (SPSS) and one sample t-test. The results showed that the cashless policy will have the desired impact if a lot is done to ensure the implementation of an effective cashless policy system.

Siam (2016) examined the effect of electronic banking on bank's profitability in Jordan. The population of the study included all working banks in Jordan which have sites on the internet for the periods of 1999-2004. The study used econometric methods involving unit root, Johansen cointegration and error correction which estimated the longrun and the shortrun dynamics in the system. The result from the data analysis showed that there is a correlation with statistical significance between electronic banking and banks profitability. Showing a negative effect in profitability in the short run and a positive effect in profitability in the long run. Thus, managers and banks employees in the area prefer their banks to expand their electronic operation in servicing customer but not converting all banks to total electronic banks.

III MATERIALS AND METHODS

Research Design

The researcher adopts the survey research design in this research work. The choice of the survey research design for this research is justified in view on fact that the population of this study is spread over a wide geographical area thus necessitating the use of the sampling technique and questionnaires to obtain general overall information on agency banking in the study area.

Study Area

This study was conducted in Benue State, Nigeria. The selection of this state was base on the existence of all the post consolidated banks in Nigeria. The presence of most of their branches in the Local Government areas and this is an indication that mobile banking is in use by respondents in the area who are customers of the various banks.

Benue State is in the North Central region of Nigeria. It is popularly called the food basket of the nation due to its agricultural production. Agriculture is a main part of the economy, and the state also has other mineral resources such as limestone used in the production of cement. The main ethnic groups are Tiv, Idoma and Igede. Others are Jukum, Wurukum, Agatu, Etulo among others. There are three geopolitical Zones in Benue State namely; Zone A, B & C.

These geopolitical zones have presence of 15 deposit money banks operating in their zones along side other mobile money agents.

Population of the Study

The target population for the study are operators of agency banking and mobile money services operating in the study area. Fifteen Local Government Areas were studied. Five local Government from each geopolitical zones of A, B & C. The population of the study is 1,350 respondents who are bank employees and mobile money agents in the study area. This population was determined when field study was done in the study area to determine the number of management staff in the bank and operators of the mobile money in the study area. Also, the management staff of the selected banks formed the respondents to the study bank. This is because, bank performance is a management issue and it is only the management staff that may be able to provide valid information on bank performance. Out of the 26 deposit money banks in Nigeria (see appendix iii), 15 of them have banking presence in Benue State Nigeria. The detail is as shown in Table 1:

Table 1: Bank and Mobile Money Agents Population in the Study Area

S/No	Banks	Mobile Money Agents
1	Access Bank Plc	Paga Mobile
2	Polaris Bank Plc	First bank's Firstmonie
3	Ecobank Nigeria Plc	MTN'S Momo
4	Fidelity Bank Plc	Kudi mobile
5	First City Monument Bank Plc	Opay (Paycom Nigeria Limited)
6	First Bank of Nigeria Plc	Polaris surepadi
7	Guaranty Trust Bank Plc	Palmpay
8	Heritage Banking Company Ltd	Qikqik
9	Keystone Bank	Pocketmonie
10	Stanbic IBTC Bank Ltd	U-mo
11	Sterling Bank	Eazymoney
12	United Bank for Africa Plc	Google wallet
13	Union Bank of Nigeria Plc	Gtbank mobile money
14	Unity Bank	Stanbic IBTC mobile money
15	Zenith Bank Plc	Ecobank mobile money

Source: *Human Resource Department of the Banks Studied, and* https://bit.ly/3UC7CJH

Sampling Techniques

In Table 1, purposive sampling was used to chose three banks namely First Bank, United Banks for Africa and Zenith Bank. This is because they are the leader in agency banking among the deposit money bank while three network Fintech namely; Opay, Moniepoint and MTN's Momo were chosen as they are also leader in the mobile money industry.

Sample Size

The sample size was made up of the selected management staff of 1,350 bank and mobile money operators in the study area.

Instruments of Data Collection

The major instrument for data collection is a structured questionnaire. A questionnaire is designed to extract specific information. Four point scales rating measure of strongly agreed (SA) agreed (A), Disagreed (D) and strongly disagreed (SD) questions was employed in the questionnaire. The questionnaire contains 2 sections. Section A contains the demographic characteristics of the respondents. Section B contains the questions on the specific objectives of the study.

Validation and Reliability of Instrument

In this study, the two (2) most common types of validity, which are Content and Construct Validity, were considered. While content validity was carried out through the expert contributions in the field of research methodology, construct validity was tested with the use of Factor Analytical tool that considered Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity (BTS).

Table 1: Kaiser-Meyer-Olkin and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.956
Bartlett's Test of Sphericity	Approx. Chi-Square	8.066
	df	6
	Sig.	.023

Source: *Author's Computation, 2023*

After the pilot test was conducted, the input variable factors used for this study were subjected to exploratory factor analysis to investigate whether the constructs as described in the literature fits the factors derived from the factor

analysis. As shown in Table 1, factor analysis result indicates that the KMO (Kaiser-Meyer-Olkin) measure for the study's independent variable items is 0.956 with Barlett's Test of Sphericity (BTS) value to be 6 degree of freedom at a level of significance p =0.023. Our KMO result in this analysis surpasses the threshold value of 0.50 as recommended by Hair, Anderson, Tatham, and Black (1995). Therefore, we are confident that our sample and data are adequate for this study.

Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.743	43.581	43.581	1.743	43.581	43.581	1.489	37.229	37.229
2	1.127	28.179	71.760	1.127	28.179	71.760	1.381	34.531	71.760
3	.627	15.666	87.426						
4	.503	12.574	100.000						

Extraction Method: Principal Component Analysis.
Source: *Author's Computation, 2023*

The Total Variance Explained Table shows how the variance is divided among the 4 possible factors. Two factors have eigenvalues (a measure of explained variance) greater than 1.0, which is a common criterion for a factor to be useful. When the Eigenvalue is less than 1.0 the factor explains less information than a single item would have explained. Table 2 shows that the Eigenvalues are 1.743 & 1.127 are all greater than 1. Component one produced a variance of 37.229 while component 2 yielded a variance of 34.531, thus giving a total variance of 71.760. This shows that the variables have strong construct validity.

Reliability of Instrument
This is the consistency between independent measurements of the same phenomenon. It is the stability, dependability and predictability of a measuring instrument. It is also the accuracy or precision of a measuring instrument.

Table 3: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.864	.986	4

Source: Author's Computation, 2023

Table 3 shows the reliability statistics which indicates that the overall Cronbach Alpha value is 0.864. Reliability Cronbach Alpha statistics of 0.70 is considered adequate and reliable for social science study. Based on the result in Table 3, the instrument of this study falls above the limit of a reliable instrument for research study.

Method of Data Collection
For this research work, data was collected using both primary and secondary data sources. The primary data sources for this research proposal include information on mobile money operators and management staff of the selected banks in the study area. Secondary data sources for this research include relevant textbooks, documentaries/directories, Central Bank of Nigeria Statistical Bulletin, journals, newspapers, periodicals which were used in the review of related literature.

Model Specification
Guided by the nexus between the variables of the study, a functional relationship is established between the variables of the study. As shown below, the implicit form of the model is shown as:

$$BPF = f(POS, MTB, ATM) \quad - \quad - \quad - \quad - \quad - \quad (1)$$

Where,
BPF = Bank performance
POS = Point of Sale Operation
MTB = Mobile Telephone Banking
ATM = Automated Teller Machine Operation

The explicit form of the model is stated as shown below:

$$CLP = b_0 + b_1POS + b_2MTB + b_3ATM + U_t - \quad - \quad - \quad - \quad (4)$$

Where,
b_0 = Regression intercept
b_1, b_1, b_3 = Regression coefficients
U_t = error terms

A priori expectation
($\boldsymbol{X_1}$) = Point of sale operation; *a priori* expectation is positive

(X_2) = Mobile telephone banking; *a priori* expectation is positive
(X_3) = Automated teller machine operation; *a priori* expectation is positive

Data Analysis Techniques

The data for the study was collected, coded and analyzed with the aid of computer-based Statistical Package for Social Sciences (SPSS version 23.0 for Microsoft Windows). Various statistical methods were used in analyzing this study: percentages, frequency and tables were used to examine the respondents' bio-data and other research objectives. Multiple regression analysis was used to evaluate the relationship between the variables of the study. This technique was used by Sorinlu (2019) and several others in examining the relationship between mobile banking variables and its effect on the bank and the economy. However, probability value of the regression estimate was used to test the three hypotheses for this study. Decision rule: The following decision rules were adopted for accepting or rejecting hypotheses: *If the probability value* b_i *[p* (b_i) >1/2b_i] we accept the null hypothesis, that is, we accept that the estimate b_i is not statistically significant at the 5% level of significance. *If the probability value* b_i *[p* (b_i) < 1/2b_i] we reject the null hypothesis, in other words, that is, we accept that the estimate b_i is statistically significant at the 5% level of significance.

4.0 RESULTS AND DISCUSSION

Preliminary Diagnostic Tests

Normality Assumption

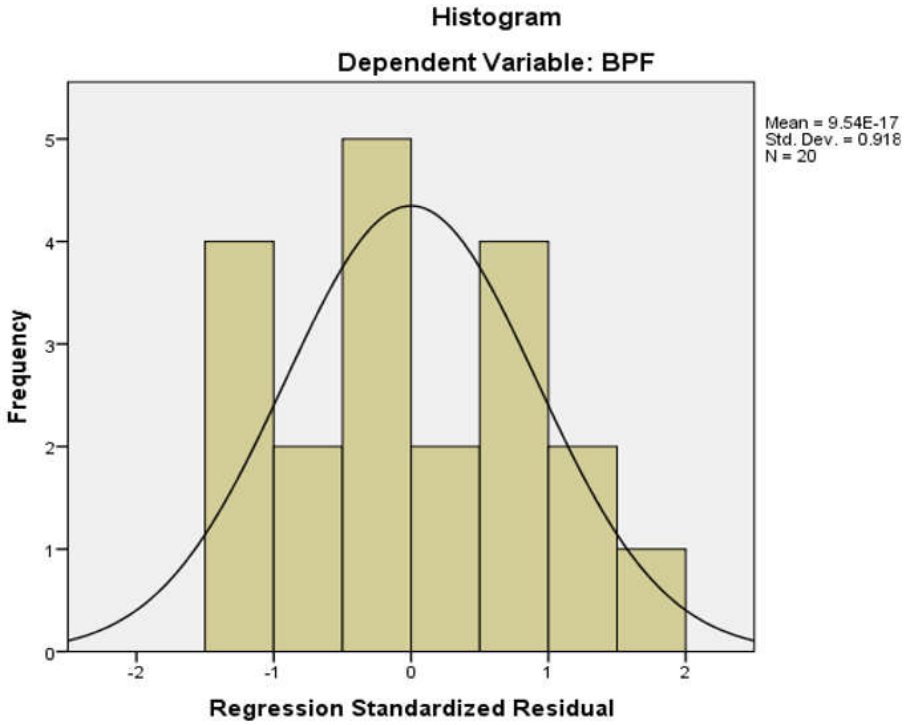


Figure 1: Regression Standardized Residual
Source: Author's Computation, 2023

Figure 1 above shows a histogram of the residuals with a normal curve superimposed. The residuals look close to normal, implying a normal distribution of data. Here is a plot of the residuals versus predicted dependent variable of Bank performance in the study area (BPF). The pattern shown above indicates no problems with the assumption that the residuals are normally distributed at each level of the dependent variable and constant in variance across levels of Y. It is very unlikely that a histogram of sample data will produce a perfectly smooth normal curve like the one displayed over the histogram, especially if the sample size is small. As long as the data is approximately normally distributed, with a peak in the middle and fairly symmetrical, the assumption of normality has been met.

Table 4: Statistical Significance of the model

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	807.817	3	269.272	2.472	.023[b]
	Residual	2703.133	16	108.946		
	Total	3510.950	19			

a. Dependent Variable: BPF
b. Predictors: (Constant), ATM, POS, MTB
Source*: SPSS 20.0 Result Output, 2023*

The result of the statistical significance of the model is presented in Table 4. The F-ratio in the ANOVA table above tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predicts the dependent variable F (3, 16) = 2.472, p =0.023[b] (i.e., the regression model is a good fit of the data).

Table 5: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.967[a]	.935	.857	12.99791

a. Predictors: (Constant), ATM, POS, MTB
b. Dependent Variable: BPF
***Source**: SPSS 20.0 Result Output, 2023*

Table 5 shows the model summary. The coefficient of determination R^2 for the study is 0.935 or 93.5%. This indicates that 93.5 % of the variations in the model can be explained by the explanatory variables of the model while 6.5% of the variation can be attributed to unexplained variation captured by the stochastic term. The Adjusted R Square and R^2 show a negligible penalty (85.7%) for the explanatory variables introduced by the researcher.

Table 6: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	36.254	21.703		1.670	.114		
	POS	.622	.269	.429	2.312	.016	.987	1.013
	MTB	.570	.282	.327	2.021	.036	.814	1.228
	ATM	-.448	.361	-.304	-1.242	.232	.804	1.243

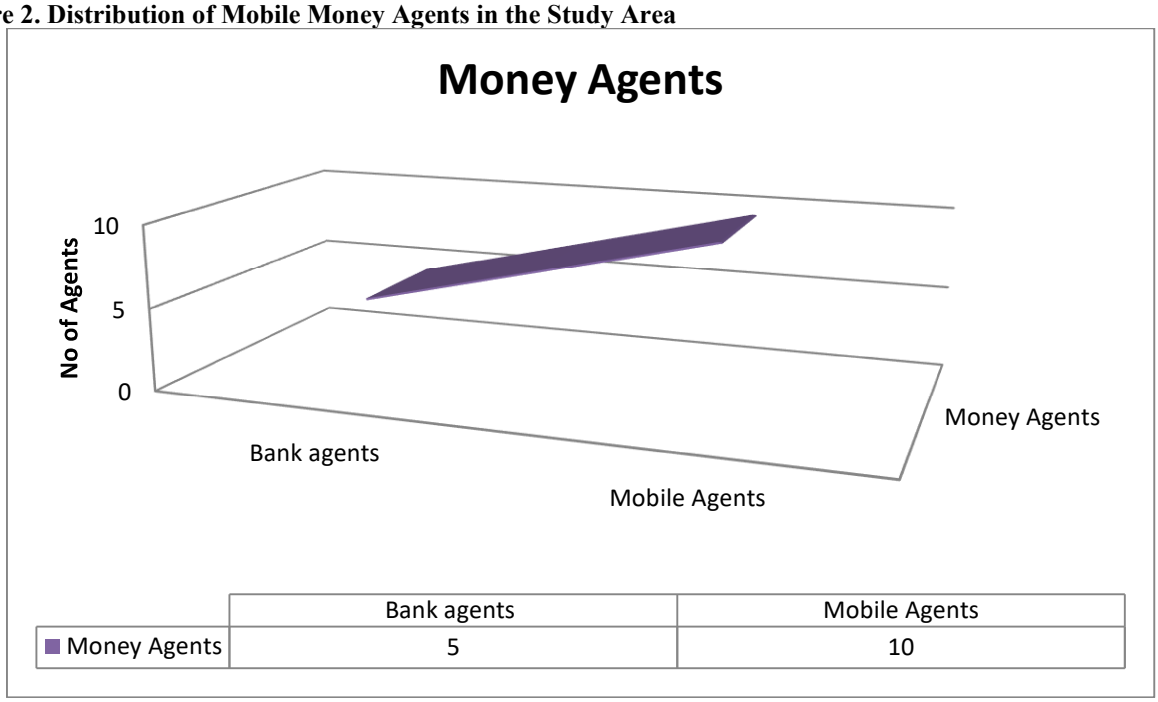
a. Dependent Variable: BPF
***Source**: SPSS 20.0 Result Output, 2023*

i. Effect of point of sale operation in enhancing bank performance in Benue State.
The result of the first specific objectives of the study indicates that point of sale (POS) has a positive effect in enhancing bank performance in Benue State and the effect is statistically significant ($p<0.05$) and in line with *a priori expectation*. This means that a unit increase in point of sale (POS) will lead to a corresponding increase in bank performance in Benue State (BPF) by 42.9% in the study area. The finding is in line with that of Siam (2016) who examined the effect of electronic banking on bank's profitability in Jordan and found that there is a correlation with statistical significance between electronic banking and banks profitability.

ii. Effect of mobile telephone banking in enhancing bank performance in Benue State.
The result of the second specific objectives of the study indicate that mobile telephone banking (MTB) positive effect in enhancing bank performance in Benue State and the effect is statistically significant ($p<0.05$) and in line with *a priori expectation*. This means that a unit increase in mobile telephone banking (MTB) will lead to a corresponding increase in bank performance in Benue State (BPF) in the study area by 32.7%. This finding is in tandem with that of Abubakar (2014) who studied the effects of electronic banking on growth of deposit money banks in Nigeria using time series data for the period of 2006- 2012. The study found a positive relationships exist between mobile banking and total deposits and between internet banking and total asset.

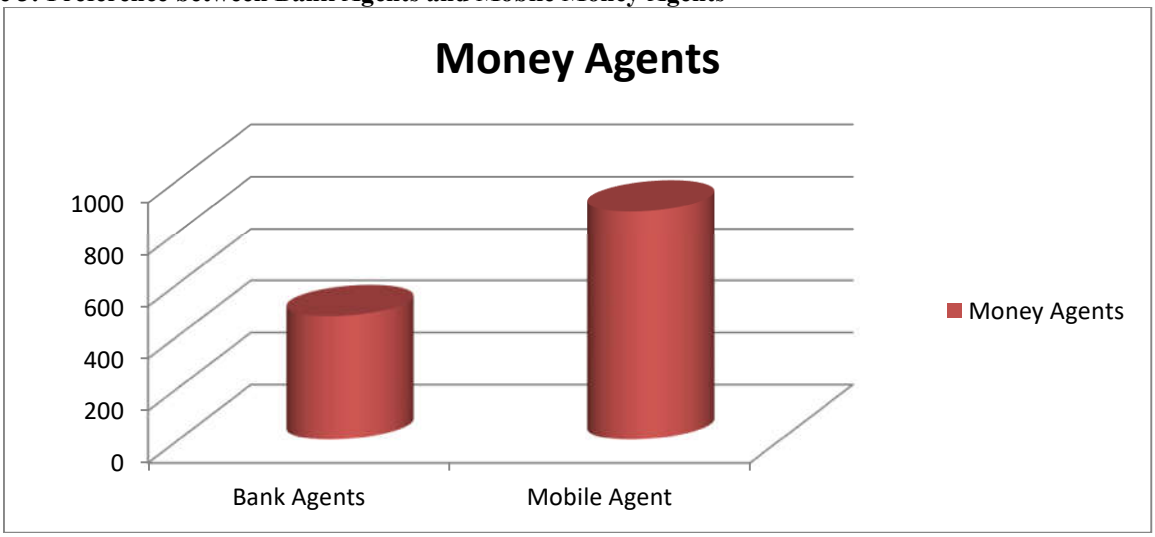
iii. Effect automated teller machine operation in enhancing bank performance in Benue State.
The results of the third specific objectives of the study shows that automated teller machine operation (ATM) has a negative effect in enhancing bank performance in Benue State and the effect is not statistically significant ($p>0.05$) and not in line with *a priori expectation*. This means that a unit increase in automated teller machine operation (ATM) will lead to a corresponding decrease in bank performance in Benue State (BPF) in the study area by a margin of 30.4%. This finding is contrary to that of Godwin (2012) who examined e-banking as a catalyst to customer service delivery in the Nigerian deposit money banks: A study of selected banks. The researcher found that there is positive relationship between Automated Teller Machine and Mobile Banking and customer service delivery in the selected deposit money banks. The negative effect of the use of ATM on bank performance as obtained from the current study could be as a result of several factors which is not limited to poor network at ATM stands, inefficiency in handling of dispense error issues, internet fraudsters which target card users among other hosts of myriad issues.

Figure 2. Distribution of Mobile Money Agents in the Study Area



As shown in Figure 3, there are low presence of bank mobile money agents (5) against their counterpart in the Fintech industry which have the presence of ten different mobile banking agents.

Figure 3: Preference between Bank Agents and Mobile Money Agents



As show in Figure 3, more banking users prefer to use the mobile banking agents than mobile banking from the traditional banks as more of these Fintech companies have presence even in the rural areas in the study area. This has implication on the penetration of the Fintech companies as a substitute for the traditional banking on bank performance in the study area. This is because, the mobile banking offered by the Fintech companies and telecommunication network offer seamless and low cost of transactions compared with their traditional banking counterpart. As a result, more people feel at ease carrying out banking transactions with them than with the traditional banking counterpart. The advantage for the Fintech companies in mobile banking is also in the use of customers' phone number as their account number, thereby making transactions easy and seamless.

V CONCLUSION AND RECOMMENDATIONS

The study examined the effect of agency banking as a means to improve access to banking services thereby improving the bank performance in Benue State. Agency banking when implemented correctly has the potential to bring about financial inclusion, improve ease of doing business in the study area thereby improving local economy. Though the agency banking is not without problem, a good implementation of the concept will bring about the desired benefit to the bank and the society. The use of mobile money transfer will bring the cashless policy closer to even the uneducated as it will help in financial inclusion of even people that are not serviced by the conventional banking services in the urban and the rural areas of the State and Nigeria at large. The use of mobile money transaction will help to reduce the level of cash transaction in the study area. This study concludes that the use of point of sales and mobile telephone banking are

positive and significant predictor of bank performance in the study area. It is recommended that in order to withstand the onslaught and the level of penetration which the Fintech companies have brought into the mobile banking arena, the deposit money banks; a) need to improve in their operations to ensure a deeper penetration into the rural area, b) make their services seamless to attract more customers and c) take advantage of their physical presence in the study area which is essential for effective dispute resolution.

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