



# Relevance of Computer in Processing Accounting Information: Evidence from Deposit Money Banks in Nigeria

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**Abstract:** The study examines relevance of computer in process accounting information in deposit money banks in Nigeria. The purpose of the study is to investigate whether point of sale (POS), internet banking (INBANK) and mobile payment affect processing of accounting information of deposit money banks in Nigeria. The study employed survey research design, using questionnaire as instrument for data collection to assess the suitability of computer methods in processing accounting information. The qualitative data such as point of sales transaction (POS), mobile payment (MOPAY) and internet payment (INBANK) were measured using five point likert scale. The study employed correlation technique, ordinary least square regression model and descriptive statistics as a tools for data analyses. Result of the study found that mobile payment (MOPAY), point of sale transaction (POS) and internet banking (INBANK) methods significantly affect processing of accounting information of deposit money banks in Nigeria. The study recommended amongst others that deposit money banks in Nigeria should expand and invest more on the services of point of sales transaction so as to enable timely and faithful presentation in the processing in accounting information.

**Keywords:** Computer, processing, Accounting and information.

## 1. Introduction

Banking system across the globe is seen as ultimate driver of economy trajectory of any nation given the mandate of money creation and lending services to customers. Before the coming of computer in Nigeria, bank record keeping and other related services were conducted manually with documentation poorly

scattered in many shelves of banks. This makes record keeping so difficult and compounded the complexity of tracing transaction easily, loss of time and resources including performance measurement. The banking business is very complex, volatile and operate in uncertain economic climate, this situation necessitate the need for a machine that can be programmed to automatically carry out sequences of arithmetic or logical operations for the attainment of its goal. However, the improvement in technology, innovation and use of computer system has indeed influenced the performance of all Nigerian Banks in the last decade. This is so because, banks in Nigeria now massively embrace informational communication technology (ICT) as major channel to expand and descend services to customers in a location where there is no banking hall. Susan, Bassey and Bala, (2021) observed that ICT and computer system has dramatically transformed the world, enabling banking innovations and productivity, connecting people and communities, improving standards of living and creating employment opportunities across the globe. Although, the Nigerian economy is facing economic downturn, yet the banking industry stands out because of the use of computer system and several other innovation to stabilize the financial sector.

Given the foundation of business policy formulation and decision making in a critical sector of any nation economy, the relevance of accounting information cannot be over emphasizes in Nigerian deposit money banks. Accounting information as it relates to computer system are often classified into financial and non-financial information. Financial information of banks are quantitative in nature. With respect to this study, it shows volume of financial transactions and other deductions from various computer processing methods while non-financial information comprises of policy statement, corporate social responsibility and other services provided by banks. It will appear quite challenging in today's business world for banks to operate seamlessly without the use of computer processing method and ignoring accompanying accounting information. However, for accounting information to be useful in decision making, bank need proper appraisal of such information so as to determine its relevance and enable comparism for the elimination of non-value added computer processing method (Olalekan, Enyi & Ishola, 2019). This is because, the advancement of technology in recent time has aided the efficiency of information gathering using different computer processing system.

Despite the awareness creation and benefits in the use of computer processing methods, banks in Nigeria are still faced with poor net-worth system and real time

gross settlement in providing needed accounting information. The problems have further resulted to sub-problems of slow banking operation, slow storage and retrieval system, time wastage and reduction in customers patronage thereby contribute to providing doubt to the quality, reliability and validity of the information on which basis decision is to be made. Therefore, it became very apparent and necessary for banks to search for a better method, which would seek to improve and speed up banking operations in the country. It is expected that this information must be timely, clear, adequate, and free from error so as to measure desired satisfaction and performance. Thus the study intends to fill the existing gap by taking a critical look on the relevance of computer in processing accounting information in Nigeria deposit money banks.

### **Objectives of the Study**

The broad objective of this study is to examine the relevance of computer in processing accounting information in Nigeria deposit money banks.

The following are the objectives of the research:

- (i) To investigate whether point of sales transaction (POS) affect accounting information of deposit money banks in Nigeria.
- (ii) To examine the extent to which Mobile payments affect accounting information of deposit money banks in Nigeria.
- (iii) To investigate effect of internet banking on accounting information of deposit money banks in Nigeria.

## **2. Theoretical Framework and Literature Review**

### **2.1. Theoretical Framework**

#### *Contingency theory, Fred E. Fiedler (1964)*

The theory suggests that an information system should be designed in a flexible manner taking into consideration environmental influence and structure of the system. This means that information systems is required to be planned within a specific framework to enable achievement of result. Most accounting information system research in recent time has showed that accounting information system have considered contingency elements in their research model. This element include organizational structure, business strategy and environmental condition but have neglected the influence of computer methods in processing accounting

information design. Lamminen, Forsvik, Voipio and Lehtonen. (2015) declared that in contingency approach neither the type of strategy, nor the organizational arrangement will directly affect performance. Relatively, contingency theory proposes that the greatest vital factor of performance is the contingent fit between the preferred strategy and its contextual variables. Their assumption is similar to information technology researches, the studies also sees information technology from the technological viewpoint only but was unable to integrate other viewpoints of information technology complexity such as informational, functional and managerial.

### *Technology acceptance model, Davis (1968)*

The theory was developed by Davis in 1968. It emphasizes on the acceptance and use of information technology in the advancement of knowledge and service delivery for the greater benefit of users. It encompasses two theoretical construct which include perceived Usefulness (PU) and Perceived Ease of Use (PEOU) that affect the intention to use a system. Davis (1989) defines perceive usefulness as the rate to which people have some level of confidence in the system and believe that using it will enhance efficiency in their job performance. In his study, Anol (2001) found perceived usefulness to influence job satisfaction. In contrary, perceive ease of use measure the degree of easiness people may have in the use of computer methods in processing accounting information. Since computer methods used in the study are programmed to track financial transactions and other services provided by banks to customers, this theory has it relevance on the acceptability of the computer methods by stakeholders and their behavioral intention toward adoption of the technology and its continuous usage by banks.

## *2.2. Literature Review*

### *2.2.1. Mobile Payments*

Mobile payment is automated means of carrying out payment with the aid of mobile device such as cell phone, tablet to start, approve and additionally affirm as exchange of financial incentive as a trade-off for merchandise and venture (Taylor, 2013). Mobile payment has many categories, but the machinery to convey it can be classified into two categories, remote m-payment and proximity payments. The remote payments require customer's registration, usually comprising the download of an application, and the use it on their mobile device to pay for items (Agarwal et

al, 2007). The proximity payment do not require internet but mobile phone must be connected to designated network. It uses code specifically designed by banks to transfer, make payment, purchase of data and air time from customer wallet. Chimaobi (2018) maintained that customers utilize telephone banking, as type of internet banking, to complete or carry out retail transactions by phoning phone communication units that are linked to a bank's automated system. Change of pin and fund transfer are two examples of activities that can be carried out.

### *2.2.2. Point of Sale (POS)*

Point of sale transaction is consider as one of the major break-through of computer processing method in advancing financial deepening in the Nigerian banking system. It is basic product that have spread the services of bank to very remote communities and drastically reduce queuing in the bank thereby assist in the collection of accounting information require by bank in profit measurement. POS is an electronic device use for the purpose of making electronic transfer and deposit on behalf of the commercial bank, it accept bank debit and cash cards for purchase and provide real-time access to bank account funds and information. The operator often maintain account with deposit money bank which enable the facilitation economic transaction without customer visiting the bank. The machine is pervasive, easy to use and very portable. POS are found in stores, restaurant, hospitals, schools, churches and other service centers. This is because, very transaction carried out using the POS platform is directly linked up with bank customer account details and has in recent time enable job creation. Because a nation's economy depends on a secure, convenient, and economical payment system, monetary authorities worldwide have actively watched and encouraged effective and efficient payment systems (Akanbi, 2022).

### *2.2.3 Internet Banking*

As method of processing accounting information, the innovation and introduction of internet banking has enable flexibility in financial transaction and performance enhancement of banks. Internet banking is an internet portal that enable bank customers to access different kind of banking services ranging from bill payment and facilitation of several investment offer through website (Pikkarainen, Pikkarainen, Karjaluoto, & Pahnla, 2004). When it was introduced in the banking industry in Nigeria, Internet banking was majorly used as an information medium through

which banks marketed their products and services on their Websites. However, the advancement of technology in recent time has change the narrative as banks now use internet banking for transactional and informational medium such as writing cheque, bill payment, fund transfer, checking and printing of statements of account virtually using a computer system. Internet banking is also refers to E-banking. In the study of Aduda, and Kingoo (2012) the result indicated that E-banking exerted strong and positive effects on return on assets in the Kenyan banking sector. Thus, making banking transaction very easier by bringing services closer to customers. Wario and Okibo, (2014) observed that E-banking increase bank market share and customer base through enhanced service delivery to enlarged customers. Internet banking renders location and time irrelevant, and empowers customers with greater control of their accounts (Foley, & Jayawardhena, 2000).

#### *2.2.4. Accounting Information System and its Characteristics*

Accounting information system is basically answerable for the provision of past and future financial information that relates to costing for resources and activities, assets and liabilities, capital and operating expenses, and different income streams of the organization. Many scholars have conducted a study to ascertain the effectiveness of accounting information on different situations. In their study, Egolum and Eze (2021) investigated the effect of Accounting Information on lending decision of quoted deposit money banks in Nigeria from. This study used 15 deposit money banks and Simple Linear Regression was used for the analysis. The regression result indicated that individual regression of the proxies for accounting information which is Earnings per Share and Return on Equity have positive and statistical significant effect on non-performing loan at 5% level of significant respectively. The study also recommends that CBN and other regulatory bodies should strengthen supervision of banks to prevent a sharp buildup of NPLs in the future. Olalekan, Enyi and Ishola (2019) studied accounting information system as an Aid to decision making process in deposit money banks in Nigeria. The study adopted survey research design to elicit information from employees of all licensed commercial DMBs in Nigeria totaling 100,590 this constituted the study population. The sample size comprised 420 randomly selected staff in the operations, information technology, finance and control functions. The data collected, through the use of questionnaire, were analysed using descriptive and inferential statistics through the use of the ordered logistic regressions. The study established that AIS has a significant positive effect

on decision making process. The study recommended that management of DMBs should continuously evaluate their accounting information system and ensures that the qualitative characteristics are not compromised. Also Osazevbaru and Ikhu-Omoregbe (2022) examine the relationship between accounting information and deposit money banks' lending decision. The study used expo facto research design as data were collected from the annual reports of fourteen deposit money banks and the thirteen industrial goods companies listed on the Nigerian Exchange Group as at 31st December, 2021. From the data collected, ordinary least square regression and t-statistic techniques were adopted for the data analysis. The result showed that cash availability is positively and significantly associated with deposit money bank lending decision, while borrowing firms' characteristics was negative but significant. It was also observed that money deposit banks rely more on statement of financial position, followed by statement of cash flow and income statement respectively when taking lending decisions. The study recommended that deposit money banks should consider cash availability as a very important information when making use of accounting information in the financial statement.

For accounting information to achieve its anticipated objectives, reflects its importance and meets its functions, it should have some basic characteristics. These characteristics should be outstanding factors to measure the effectiveness and quality of accounting information. Srinivas and Gopiseti (2012), assert that the characteristics have the aim of guiding accounting administrators in developing accounting standards and also provide a pathway for accountants to differentiate between what is important in financial decision making. However, the Financial Accounting Standards Board (FASB) in their Statement of Financial Accounting Concepts (SFAC) No. 8, speaks to the "Qualitative characteristics of useful financial information". This concept distinguished between the fundamental qualitative characteristics and the characteristics that can enhanced the accounting information qualities. The IASB approach is summarized as follows.

Fundamental qualitative characteristics.

- (I) **Relevance of accounting information:** Accounting information is said to be relevance when it influences economic decision of users and have the ability to predict future activities of an organization including the expected cash flow.
- (II) **Faithful representation:** Accounting information is said to be faithful when such information is free from material error, neutral and unbiased. For financial

information to be useful, it must represent relevant phenomena that it purports to represent.

Enhanced qualitative characteristics.

- (I) **Comparability:** comparability allow users to identify and understand trend in the results of a given organization over several time periods by looking at the similarities amongst items of accounting information.
- (II) **Verifiability:** verifiability means that different expert and independent observers could reach compromise that a precise representation is faithful.
- (III) **Timeliness:** Accounting information must be made available to decision makers on time so as to influence their pattern of decision.
- (IV) **Understandability:** Financial information need to be concise and clear for user to have reasonable knowledge of business and economic activities.

However, FASB (2010) noted that one of the major constraint to information provided by financial reporting is cost of facilitating the information. Though, cost is not qualitative attributes of financial reporting but must be justified to ascertain the underlining benefits of the information.

### **2.3. Empirical Review**

Aigbovo and Orobator (2022) examine electronic banking and financial performance of deposit Money Banks in Nigeria. In other words, there are mixed findings regarding the effect of electronic banking on banks financial performance. Hence, in this study, the effect of electronic banking on financial performance of deposit money banks in Nigeria was investigated and the period of study was from 2009 – 2018. The multivariate panel estimation and the dynamic panel data regression were employed in the data analysis. The results obtained from the GMM estimate reveal that total value of Automated Teller Machine transaction positively and significantly impact on financial performance of deposit money banks while total value of point of sale transactions exert negative influence on deposit money banks financial performance. Also, the relationship between total value of mobile payment transactions and financial performance was also negative but fail the significant test. The study recommends that deposit money banks should increase the number of ATM machines to reduce the queue usually observe in most ATM to encourage their continuous usage. Also, deposit money banks should collaborate with Telecommunication network providers and security agents to checkmate



and prosecute hackers in order to reverse the negative effect of mobile payment on deposit money banks' financial performance. Furthermore, deposit money banks should collaborate with Telecommunication network providers to resolve the problem of poor network service that has mar the progress in Point of Sales adoption rate in Nigeria

Okonkwo, Ekwueme and Chizoba (2022) investigated E-payment and performance of deposit money banks in Nigeria. The study employed Ex post facto research design. A sample size of 13 deposit money banks in Nigeria was used from the population of 22 banks. Data were analyzed with descriptive statistics and the hypotheses regression analysis was carried out with the aid of E-Views 9.0 statistical software. The study revealed that MPAY payment method has a positive effect on return on assets of quoted deposit money banks in Nigeria, but not statistically significant at 5% level of significance, and online (WEB) payment methods has a negative effect on return on assets of quoted deposit money banks in Nigeria, and this effect was not statistically significant at 5% level of significance. The study therefore, recommended that Nigerian deposit money banks should collaborate with phone service providers to checkmate and prosecute hackers in order to reverse the negative effect of mobile payment on banks' profitability in Nigeria.

Adam, Nabil and Mohanad (2018) examined *The Impact of Electronic Banking Services on Customer Satisfaction in the Sudanese Banking Sector*. The purpose of the study was to examine impact of electronic banking services on customer satisfaction at Sudanese banks. Questionnaires were designed by the researchers. Data and information was collected and analyzed from the internet users in the Sudanese banks clients. The study found that there are statistical significant differences of electronic services provided by the Sudanese banks on customer satisfaction. The study attempted to explain the various means of electronic banking services which might lead to the customer satisfaction. This paper showed that the banking services over the internet has a positive impact on customer satisfaction. This study recommended that the bank management should focus on spreading the knowledge of the electronic banking services to the customers. This study emphasized the importance of the electronic banking services and recommended that the bank management should spread the technological awareness among current and prospective customers, and develop suitable infrastructure for electronic banking services in the Sudanese banking sector.

Korolo, A and Korolo, (2023) study electronic accounting system and financial performance of quoted deposit money banks in Nigeria in Nigeria from 2011 to 2020 and their financial performance using an electronic accounting system. The study employed an explanatory and descriptive research design. Both primary and secondary data were used in the study, and they were gathered through surveys, one-on-one interviews, and annual reports. Automated Teller Machines (ATM) and Point of Sale (POS) were used to measure the electronic accounting system's independent variable, while Return on Asset was used to measure the dependent variable, financial performance. (ROA). The results of this study showed that the return on assets of listed banks in Nigeria is significantly positively correlated with automated teller machines (ATM) and point of sales (POS). The study concluded that adopting an electronic accounting system significantly improved the financial performance of Nigeria's deposit money banks, as banks are more profitable the more engaged their clients are with their electronic transactions. The report suggests, among other things, that deposit money banks step up their efforts to deploy more ATM delivery locations and improve their functionality.

Nwakoby Charity and Ofobruku (2018) studied impact of information and communication technology on the performance of deposit money banks in Nigeria between the periods 2006 to 2015. The study used expo facto research design, as data set were obtained from Nigeria Bureau of statistics and CBN annual report and Statistical Bulletin. The data obtained were analyzed using log-linear regression model and the computation of the result was done using the econometric computer software package, e-view version 8.0. The result indicated that the adoption of various forms of information and communication technology has greatly influenced the quality of banking operations, performance and has specifically increased banks return on equity. Information and communication technology usage can sustain returns on equity of deposit money banks in the long run. It was recommends that investment in information and communication technology should form an important component in the overall strategy of banking operation, as it will make Nigerian banks to be more efficient, profitable, and competitive.

Akamanwam, E (2021) examines influence of Computerized Accounting Systems on Financial Reporting Quality in Small and Medium Enterprises. The objective of the study was to investigate whether computerized accounting systems do not significantly influence relevance, faithful representation, comparability, verifiability and understandability of financial reporting information in SMEs. The

researcher measured computerized accounting systems (CAS) as the independent variable with five determinants constructs, namely internal controls, automated data-processing, relational database, automated reporting, and enhancing technologies. The dependent variable, financial reporting quality (FRQ), was measured with five determinants, namely relevance, faithful representation, comparability, verifiability, and understandability. The study used web-based self-completed questionnaire obtained from a sample of 370 firms randomly selected from SMEs in the South-South region of Nigeria. The total of 223 completed questionnaires (60.3%) were used for the study. Data obtained were analysed using descriptive statistics and structural equation modelling procedure with the aid of SPSS-Statistics and SPSS-Amos software. Result indicated that CAS usage has a significant positive influence on financial reporting quality in terms of relevance, faithful representation, comparability, verifiability, and understandability. The study recommended SMEs to adopt computerized accounting systems to improve their financial reporting quality.

Ubesie, Chime and Chineke (2022) investigated the effect of information and communication technology (ICT) on accounting practice in Nigeria. The main purposes of the study are to ascertain the effect of information and communication technology (ICT) on efficiency of accounting practices in Nigeria and to determine whether the application of ICT ensure timely delivery of accounting practices. The study used survey method through questionnaire instrument using five point likert's scale. Analysis of variance was used to test the formulated hypotheses with the aids of SPSS. The result of the study showed that the application of ICT has positive effect on efficiency of accounting practice and ensure timely delivery of accounting works in Nigeria. it was recommended that preparers of accounting information should adopt ICT in all aspect of accounting practices for effectiveness.

### **3. Methodology**

The study used survey research design. This design is appropriate for this study because it assist the researcher to draw inferences about the population through the use of well-structured questionnaire. Given the large population size in the fourteen affected banks having been under the controlled and supervised of central bank of Nigeria (CBN), the study used purposive and random sampling with minimum of 15 and maximum of 25 staff selected from each bank. A structured questionnaire which passed the reliability and validity test, was used in collecting data for the

study and this was administered on the sampled employees. The data collected from the questionnaire were analysed using correlation technique, ordinary least square regression model and descriptive statistics as a tools for data analyse. The dependent variable is accounting information measured by relevance, comparability, faithful representation, verifiability, timely and understandability of accounting information while independent variable is computer processing method is measured by mobile payment, internet banking and point of sale methods.

The model is expanded as follows;

Dependent Variable (Y) = Accounting information (AINFO)

Independent Variable (X) = Computer processing method (CPM)

This is expressed mathematically as  $Y = f(X)$

Where:

CPM = Computer processing method

INBANK = Internet banking

MOPAY = mobile payment

POS = point of sale transaction (POS)

AINFO = Accounting information

FR = Faithful representation

REL = Relevance

COMPAR = comparability

VER = Verifiable

TIM = Timely

UND = Understandability

$AINFO = f(INBAK, MOPAY, POS)$  (1)

Hence  $AINFO = \beta_0 + \beta_1INBAK + \beta_2MOPAY + \beta_3POS + \epsilon_{it}$  (2)

Where:

$\beta_0$  = Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  = Model Co-efficient, and

$\epsilon_{it}$  = Error term

#### 4. RESULT PRESENTATION AND INTERPRETATION

**Table 1: Descriptive Statistics**

	<i>AINFO</i>	<i>INBANK</i>	<i>MOPAY</i>	<i>POS</i>
Mean	2.119048	2.396825	1.777778	3.158730
Median	2.000000	2.000000	2.000000	3.000000
Maximum	5.000000	5.000000	5.000000	5.000000
Minimum	1.000000	1.000000	1.000000	1.000000
Std. Dev.	1.281294	1.290453	0.828385	1.235558
Skewness	0.853385	0.621633	1.449221	-0.150628
Kurtosis	2.510544	2.175714	5.984174	1.894556
Jarque-Bera	16.55130	11.68207	90.85786	6.891992
Probability	0.000255	0.002906	0.000000	0.031873
Sum	267.0000	302.0000	224.0000	398.0000
Sum Sq. Dev.	205.2143	208.1587	85.77778	190.8254
Observations	126	126	126	126

Source: E-view compilation (output), 2024.

Descriptive statistics show the summary of data and other basic characteristics within the series. The summary statistics for annual changes the main variables in the study are presented for the sampled banks are reported in Table 1 above. The descriptive are reported in this manner because, the values for the general variables are large and may not present much information about the characteristics of the datasets. From the Table, average annual changes in accounting information for the study banks is 2.12 per cent, although the maximum value of 5.0 suggests that there were banks with terrific changes in accounting information disclosure over the period of the study. This is also confirmed by the standard deviation value of 1.28 which is much lesser than the mean value, suggesting that accounting information of deposit money banks are evenly spread across the reported mean value. Indeed, the skewness value of 0.85 suggests that most of the actual changes accounting information provided by deposit money banks are less than that of the reported mean value. There are large outliers that are pushing up the mean value. Average computer processing method using internet banking (INBANK) is 2.40 per cent, which is greater than average accounting information required. Also, average movement in mobile payment (MOPAY) by the banks each year is

1.77per cent, while average growth in point of sale transaction (POS) was 3.16 per cent. All these average changes are large and indicate that the deposit money banks experience quit rapid annual transitions in terms of computer processing system or transaction in Nigeria. The Jarque-Bera statistics for all the variables are all significant at the 5 per cent level, which shows the absence of normality in their respective data distributions. This outcome is to be expected since different banks was adopted for the datasets. Hence, the result shows that deposit money banks characteristics may be exerting strong heterogenous influences for the datasets.

**Table 2: Granger Causality Tests between computer processing and Accounting information**

<i>Null Hypothesis:</i>	<i>Obs</i>	<i>F-Statistic</i>	<i>Prob.</i>
INBANK does not Granger Cause AINFO	124	0.13902	0.8704
AINFO does not Granger Cause INBANK		1.48046	0.2317
MOPAY does not Granger Cause AINFO	124	1.50374	0.2265
AINFO does not Granger Cause MOPAY		1.19211	0.3072
POS does not Granger Cause AINFO	124	1.21372	0.3007
AINFO does not Granger Cause POS		2.01761	0.1375
MOPAY does not Granger Cause INBANK	124	0.71344	0.4920
INBANK does not Granger Cause MOPAY		0.81040	0.4471
POS does not Granger Cause INBANK	124	1.63404	0.1995
INBANK does not Granger Cause POS		6.19348	0.0028

Source: E-view compilation (output), 2024.

We test causality among the computer processing variables as well as between the variables and the accounting information. The outcome of this tests will give backing to the argument of a possible reverse causality running from accounting information to computer processing system among the banks. The result of the causality test using the Dumitrescu-Hurlin Panel Causality technique is presented in Table 2 above. From the result, it is seen that only the F-statistics for the null hypothesis of causality running from INBANK to AINFO and from AINFO to INBANK passed the significance test. This shows that the strongest reverse causality between computer processing system and accounting information by banks. Thus, it is seen that INBANK influences the behaviour of AINFO, MOPAY and transactions by bank customers also influence INBANK. Among the computer process system variables, there is reverse causality between INBANK and POS in computer processing system employed by banks.

**Table 3: Correlation Matrix**

	<i>AINFO</i>	<i>INBANK</i>	<i>MOPAY</i>	<i>POS</i>
<i>AINFO</i>	1	-0.1158	-0.005	0.063
<i>IBANK</i>	-0.115	1	0.165	0.080
<i>MOPAY</i>	-0.005	0.165	1	-0.105
<i>POS</i>	0.063	0.080	-0.105	1

Source: E-view compilation (output), 2024.

The patterns of relationships among the independent variables (computer processing variables) in the study are evaluated with the correlation analysis shown on Table 3 above. The result showed a positive and negative correlations among all the variables, although not all correlations are strong. The correlation between internet banking (INBANK), mobile payment (MOPAY) and accounting information (AINFO) are not positive but the relationship between mobile payments (MOPAY) and accounting information (AINFO) is negative and significant. This means that computer method of processing financial and non-financial accounting transaction using INBANK and MOPAY do not influence accounting information disclosure of banks, MOPAY is seen to influence deposit money bank accounting information but the relationship between them are not positive. Point of sales (POS) and INBANK is shown to be highly positively correlated with processing accounting information, though the extent of the relationship is not significant. This suggest that the more POS and INBANK are employ by deposit money banks the greater the chance of processing accounting information using computer method will become.

**Table 4 Estimation results of the relationship between computer processing system and accounting information**

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	2.102681	0.444858	4.726631	0.0000
INBANK	-0.125118	0.090718	-1.379190	0.1704
MOPAY	0.037010	0.141658	0.261264	0.7943
POS	0.079290	0.093972	0.843765	0.4005
R-squared	0.193593			
Adjusted R-squared	0.047552			
S.E. of regression	1.284337			
Sum squared resid	201.2415			
Log likelihood	-208.2844			
F-statistic	0.802812			

Durbin-Watson Stat 1.615

Source: E-view compilation (output), 2024.

The coefficients of the independent variables, as shown in table 4, highlight the exact relationship amongst the variables. The regression result showed that a decrease in internet banking (INBANK) transaction will result in a change in the process of accounting information of deposit money banks by 0.125. The coefficient further shows that an increase in mobile payment (MOPAY) and point of sales (POS) transaction will result to an increase in the process of accounting information. The model results in table 4 also show R square and Adjusted R square values, which constitute important indicators for interpreting the model coefficient of variation. As revealed in the result, the R Square is 0.19 and the Adjusted R square is -0.0049. This means that the predictors explain 19% variation in processing accounting information of the studied banks. The regression value is weak but statistically significant, leaving 81% changeability in the bank accounting information to other factors not considered in the model. Equally, the adjusted R square captures up to 4% of the line of best fit of the model relating computer processing method with accounting information of deposit money banks. The p-values of individual variables show positive figures higher than 0.05 for the 95% confidence level. This implies that there is a positive but insignificant relationship between computer processing method and accounting information of banks. The DW statistic indicates a positive auto-correlation amongst the variables meaning that the relationship between the dependent and independent variables is strong.

The F-statistics of the estimated coefficient of computer processing method was observed to be 2.802 and the statistical table value is 2.704 at 0.05 percent confidence interval. Given that the computed figure of 2.802 is greater than the table value of 2.704 with the degree of freedom  $n - 5$  ( $126 - 5$ ) = 121 at 0.05 percent level of significance. The null hypothesis is rejected and the alternative accepted. Therefore, the study concluded that there exists a significant relationship between computer method and processing of accounting information of deposit money in Nigeria.

### **Tests of Hypotheses**

The hypotheses formulated in this study are tested using the t-ratios from the panel regression results from the regression result estimates in Table 4. The study adopted 5% level of significance to conduct the test on the different hypotheses formulated.

#### **Hypothesis One**

POS transactions does not significantly affect accounting information of deposit money banks in Nigeria.



The test of this hypothesis is done based on the coefficient of the point of sale transaction (POS) variable in Table 4. In the result, the coefficient of point of sales transaction (POS) was 0.4005 ( $p < 0.01$ ), indicating that there is a relationship but the extent of the relationship is not significant at 5 per cent level. Based on this, the null hypothesis is rejected, which shows that POS significantly affect processing of accounting information of deposit money banks in Nigeria. In particular, POS significantly increase accounting information of banks in Nigeria.

### **Hypothesis two**

Mobile payments has no effect on accounting information of deposit money banks in Nigeria.

The test of this hypothesis is done based on the coefficient of the mobile payment transaction (MOPAY) variable in Table 4. In the result, the coefficient of MOPAY was 0.7943 ( $p < 0.01$ ), indicating that there a relationship but the extent of the relationship is not significant at the 5 per cent level. Based on this, the null hypothesis is rejected, which shows that MOPAY significantly affect processing of accounting information of deposit money banks in Nigeria. In particular, MOPAY significantly increase accounting information of banks in Nigeria.

### **Hypothesis three**

Internet banking does not significantly affect accounting information of deposit money banks in Nigeria.

The test of this hypothesis is done based on the coefficient of the point of sale transaction (POS) variable in Table 4. In the result, the coefficient of internet banking (INBANK) was 0.1704 ( $p < 0.01$ ), indicating that there a relationship but the extent of the relationship is not significant at the 5 per cent level. Based on this, the null hypothesis is rejected, which shows that INBANK significantly affect processing of accounting information of deposit money banks in Nigeria. In particular, INBANK exerted decrease in accounting information of banks in Nigeria.

### **Discussion of Findings**

The results obtained in the empirical analysis of this study provides certain outcomes that are pertinent for discussion. First, the study shows that there are some forms of the application of computer methods in processing accounting information of

deposit money banks in Nigeria. From estimated result in table 4, the test of these hypotheses is positive at 5 per cent significant level. This result shows that point of sale (POS) significantly affect processing of accounting information of deposit money banks in Nigeria. In particular, POS significantly increase accounting information of banks in Nigeria. The result is in line with the study's theoretical expectations that POS value of transaction provide accounting information relating to customers daily transactions outside the banking hall. The increase in POS transaction as shown in the study attest to the general assumption that POS has reduce queuing, enable viability and effectiveness of financial transactions of banks in Nigeria. The study is at variance with the result of Orobator and Aigbovo (2022) that *total value of point of sale transactions exert negative influence on deposit money banks financial performance. The study agree with finding of Korolo and Korolo, (2023) that POS has a significant relationship with return on assets of banks in Nigeria.*

The result of hypothesis two indicated that mobile payment (MOPAY) significantly affect accounting information of deposit money banks in Nigeria. In particular, mobile payment significantly increase processing of accounting information of banks in Nigeria. This could be as a result of the suitability in network area and the effectiveness of mobile payment method to provide information for confirmatory purpose so as to enable identification of parties involve at a glance. The study do not agree with the finding of Nwakoby, Charity and Ofobruku (2018) that mobile payment usages provided by commercial banks is negatively related to return on equity and not statistically significant. Therefore, finding any increase in investments in those banking services does not significantly influence bank performance.

Moreover, result of hypothesis three indicates that internet banking (INBANK) significantly affect processing of accounting information of deposit money banks in Nigeria. In particular, INBANK exerted decrease in processing accounting information of banks in Nigeria. This imply that, bank investment in internet banking services produces no accounting information as good number of bank customers may not be privilege to utilize the services. The result of the study agree with the finding of Orobator and Aigbovo (2022) that the value of internet banking was statistically significant. The result further indicates that total value of internet banking transaction improves the performance of deposit money banks.

## 5. Summary of Finding, Conclusion and Recommendation

### *Summary of Finding*

In this study, relevance of computer methods in processing accounting information in Nigeria deposit money banks was examined. The study is focused on the utilization of different computer methods in processing accounting information so as to evaluate its efficiency for the purpose of making inform decision. The decisions is to considered point of sales transaction, internet banking and mobile banking method as prominence computer methods in process accounting information in banks. Thus, the study examined previous researches in this area and the gap created in the findings. A sample of fourteen deposit money banks were used in this study, questionnaire instrument was developed and administered to respondents. Out of seventy (70) questionnaire, only 56 were returned and that constitute the data used for the analysis using correlation technique, ordinary least square regression model and descriptive statistics.

In general, the results from the empirical analysis reveals that mobile payment (MOPAY), point of sale transaction (POS) and internet banking method significantly affect processing of accounting information of deposit money banks in Nigeria, but they exist a decrease in the level influence in internet banking method in process accounting information.

### **Conclusion**

Generally, it is agreed that computer is a machine that can be programmed to automatically carry out sequences of arithmetic or logical operations. These programs enable computers to perform a wide range of tasks such as processing accounting information needed by organization to measure performance. Although, banking sector drive the activities of other sectors of the economy and determine the flow of monetary resources, and control of fiscal policy instruments. Accounting information become very crucial as its mirror both financial and non-financial transaction of banks, especially with the aid of computer methods in processing accounting information. This study therefore contributes to the existing literature that examines the impact of computer in processing accounting information. The argument in this study is that computer methods of processing accounting information can distort or enhance bank investment services depending on the efficiency of the system. It is evident from this study that the use of computer

method in processing accounting information of banks is significant. This is because, it could quickly and accurately prepare accounting and financial data at a glance.

### **Recommendations**

The findings made in the study give impetus for the following recommendations which are useful to both the bank industry and customers. The following recommendations are made:

Given the results of the study, it is recommended that deposit money banks in Nigeria should expand and invest more on the services of point of sales transaction so as to enable timely and faithful presentation in the processing in accounting information.

Furthermore, banks should improve on the services of mobile payment and internet banking so as to reduce physical cash transaction and the associated risk in processing accounting transaction related to physical cash movement.

### **References**

- Adam A, Nabil M, Mohanad A (2018). The Impact of Electronic Banking Services on Customer Satisfaction in the Sudanese Banking Sector. *International Business Research*; 11(6) 1913-9012
- Agarwal, S., Khapra, M., Uchat, N & Menezes, B (2007). Security issues in mobile payment systems. 5<sup>th</sup> International conference on E-governance (pp 142-152).
- Aigbovo, O and Orobator, B (2022) Electronic Banking and Financial Performance of Deposit Money Banks in Nigeria. *Journal of Economics and Development Studies*. 1-7
- Akamanwam, E (2021) Influence of Computerized Accounting Systems on Financial Reporting Quality in Small and Medium Enterprises. *Research Journal of Finance and Accounting*. 12 (22), 2222-2847.
- Akanbi, F. (2022). Investigating the Perceived Threats of Computerized Accounting Information Systems in Developing Countries: An Empirical Study on Nigeria. *Journal of Accounting and Finance*, 14(3), 45-59
- Chimaobi, C. M. (2018). Impact of internet banking on profitability of commercial banks in Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35 (8), 982–1003.
- Egolum, P and Eze M (2021) The Effect of Accounting Information on Lending Decision of Quoted Deposit Money Banks in Nigeria. *International Journal of Academic Accounting, Finance & Management Research*. 5 (4), 86-96.

- Foley, P., & Jayawardhena, C. (2000). Changes in the Banking Sector- The Case of Internet Banking in the UK Chanaka Jayawardhena and. *Internet Research*, 10 (1), 19–31.
- Korolo, A and Korolo, (2023) Electronic Accounting System and Financial Performance of Quoted Deposit Money Banks in Nigeria. *Journal of Accounting and Financial Management*. 9 (10), 2504-8856.
- Lamminen, J., H. Forsvik, V. Voipio and L. Lehtonen, (2015). Decision making process for clinical it investments in a public health care organization—contingency approach to support the investment decision process. *Finnish Journal of eHealth and eWelfare*, 7(2-3): 122-134.
- Nwakoby, N., Charity, P and Ofobruku, S (2018) Impact of information and communication technology on the performance of deposit money banks in Nigeria. *International Journal of Management and Sustainability*. 7(4), 2306-0662
- Okonkwo, Anene A. and Ekwueme, Chizoba M (2022) E-payment and performance of deposit money banks in Nigeria. *Research Journal of Management Practice*. 2 (3) 2782-7674
- Olalekan O, Enyi P and Ishola, R. (2019) Accounting Information System as an Aid to Decision Making Process in Deposit Money Banks in Nigeria. *International Journal of Research and Innovation in Social Science*. 3(3), 2454-6186.
- Orobator, B and Aigbovo, O (2022), Electronic banking and financial performance of deposit money banks in Nigeria. *Journal of Economics and Development Studies*, 2-17.
- Osazevaru, A and Ikhu-Omoregbe, G (2022) Accounting information and deposit money banks' lending decision: Lenders and borrowers perspectives. *Journal of Economics, Management & Social Science*. 8(2).
- Pikkarainen, K., Pikkarainen, T., Karjaluoto, H., & Pahnla, S. (2004). Consumer Acceptance of Online Banking: An Extension of the Technology Acceptance Model. *Internet Research*, 14 (3), 224–235
- Srinivas, G. & Gopiseti, R. (2012). Accounting information system (AIS) - A Conceptual study. *Indian Streams Research Journal*, 1(V), 1-4.
- Susan P, Basse, E & Bala, I (2021) Effect of ICT on Financial Performance of Deposit Money Banks Listed on the Nigeria Exchange Group TSU-International Journal of Accounting and Finance. 1(1), 28811-2709
- Taylor, E (2013). Staying ahead of the Game. Mobile Technologies in Retail: A Review of Benefit and Risk (pp 8-9). Efficient consumer response Australasia (ECRA) loss prevention Group.
- Ubesie, M., Chime, U and Chineke, A (2022) Effect of Information and Communication Technology (ICT) on Accounting Practice in Nigeria. *International Journal of Marketing and Communication Studies*. 6 (2), 2545-5273
- Wario, A. Y., & Okibo, B. W. (2014). Effects of E-Banking on Growth of Customer Base in Kenyan Banks. *International Journal of Research in Management & Business Studies*, 1 (1), 78–84.