

## ACCOUNTING INFORMATION SYSTEM AND CORPORATE PERFORMANCE OF QUOTED CONSTRUCTION COMPANIES IN NIGERIA

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### Abstract

*An Accounting information system (AIS) provides a tool for all departments in an organization (finance, production, sales, etc.) to enhance corporate performance particularly in this period of worldwide technological development. The paper aimed at ascertaining the relationship between AIS and corporate performance of quoted construction firms in Nigeria. Judgmental sampling techniques was deployed to select six (6) companies among the eight (8) construction/real estate companies quoted under the Nigeria Exchange Group. Data were collected from the published annual reports of the sampled construction firms for a period of nine (9) years (2012-2020). Descriptive statistics and ordinary least square regression techniques with the aid of STATA version 13 were employed to analyze the data. Findings reveals an insignificant positive relationship between cost of accounting software and the return on assets of quoted construction companies in Nigeria. Also, there is no significant positive relationship between the cost of accounting software and the earnings per share and dividend per share of quoted construction companies in Nigeria. The study recommends that managers should endeavor to effectively put into good use the firms' accounting software infrastructure to maximize its value.*

**Keywords:** Accounting Information System, Corporate Performance, Technological Development, Construction Companies.

### 1. Introduction

The universal improvements in information technology and the need to satisfy the demands of the users of accounting information have increased the importance of accounting information. (Curtis, 2016). The main aim of the accounting system is to provide financial data on purchases, sales, expenses, and income of the organization. Accounting information system which is a component of organization's information system facilitates corporate decision makings. It is designed to suit the environment, job requirements in addition to the structure of the organization. The management of companies focuses heavily on records generated from the accounting information system (AIS) as investing in sound and consistent accounting systems is of interest to management because it helps them in improved examination of the performance of their firms. AIS provide essential information to all categories of management which makes it important. Information assists management to discharge their duties of planning, controlling and evaluating performance as well as in making decisions effectively and efficiently.

Presently, expenditure on information system and budgets of many companies increases due to bad situations of the economy and competitions which created pressures on the cost of information. Information systems are developed using information technologies to assist people in executing tasks. Companies develop information system that supports decision making, communications and knowledge-based management. The important component of information system used for making decisions is the Accounting Information System (AIS). Accounting information system is an equitable instrument that assists managers to function effectively. Weak accounting information system endangers corporate performance, thus making management to function ineffectively. The consequences are distraught conditions which many Nigerian firms face (Olugbenga, 2014). Most businesses have not incorporated the use of better accounting information system in their day-to-day transactions, and it is a matter of concern which needs to be dealt with. It is on this premises that the study wishes to examine how accounting information system contribute to the corporate performance of quoted construction firms in Nigeria.

The broad aim of this study is to ascertain the relationship between accounting information system and corporate performance of quoted construction firms in Nigeria. Specifically, the study sought to: Determine the relationship between cost of accounting software and the Return on Asset (ROA) of quoted construction firms in Nigeria. Examine the relationship between cost of accounting software and the Earnings per Share (EPS) of quoted construction firms in Nigeria. Determine the relationship between cost of accounting software and the Dividend per Share (DPS) of quoted construction firms in Nigeria.

Three research questions raised to address the study are: What is the relationship between cost of accounting software and ROA of quoted construction firms in Nigeria? What is the relationship that exists between cost of accounting software and EPS of quoted construction firms in Nigeria?

What is the relationship between cost of accounting software and DPS of quoted construction firms in Nigeria? The study is guided by the under-listed null hypotheses: H<sub>01</sub>: There is no significant positive relationship between cost of accounting software and the ROA of quoted construction firms in Nigeria. H<sub>02</sub>: There is no significant positive relationship between cost of accounting software and the EPS of quoted construction firms in Nigeria. H<sub>03</sub>: There is no significant positive relationship between the cost of accounting software and the DPS of quoted construction firms in Nigeria.

## 2. Review of Related Literature

### 2.1 Conceptual Review

#### Accounting Information

Accounting information is a set of economic records of enterprise transactions expressed in money phrases. It can as well be seen as the product of the act of corporate reporting, which is arrived at after

recording, classifying, summarizing (in a tremendous manner an object of cash transaction and activities which are in component or at least of economic character) and interpreting the result thereafter (Sari & Bayu, 2019).

Furthermore, accounting information is a formal and complete assertion which describes the economic activities of a company; it carries all relevant information supplied in an understandable manner for proper and uniform choice making in terms of investment, making plans, overall performance assessment, and forecasting, expected yield on investment by the users (Adewaye & Akabi, 2012).

Accounting information is a language of economic activities, it analyzes financial transactions to provide outside reporting to users which include stakeholders, buyers, creditors, and government agencies etc. The importance of accounting data cannot be over emphasized as it helps in making sound investment decisions and reduces information asymmetry problem between managers and investors (Amahalu, Nweze & Obi, 2017). For financial reporting to function effectively, accounting information needs to be applicable, whole, and dependable.

### **Accounting Information System**

Accounting information system (AIS) is a process of collecting, storing, and processing monetary and accounting statistics which can be used for decision making, internally by control and externally with the aid of other involved parties such as investors, lenders, and tax authority (Kebede & Manaye, 2016).

Accounting Information system comprises a set of interrelated components or programme in computer that collect, store, and disseminate accounting data and information and at the same time provides a feedback mechanism to meet corporate objectives (Rahmi, Widya, Sari & Bayu 2019)

It is a device used for collection and recording of records and facts regarding occasions which have an economic effect upon businesses and the renovation, processing, and communication of such information to each all the stakeholders (Olusola et al. 2013).

### **Cost of Accounting Software**

Accounting software has been widely used as a proxy for measuring accounting information system. It explains the form of application software that records and analyzes accounting transactions within practical modules, along with accounts payables, account receivable, magazine, widespread ledger, payroll, and trail stability. It features as an accounting facts gadget. It can be evolved in residence by the business enterprise the usage of it, can be purchased from a 3rd celebration, or maybe a combination of a third-party software bundle with neighborhood adjustments. Accounting software programme may be

internet-based totally, which may be accessed everywhere at any time with any device that's net enabled or may be computing device primarily based. It varies greatly in its complexity and cost.

### **Corporate Performance**

Corporate performance encompasses a measure of how a company achieved its overall stated objectives (Bwana, 2017). Thrikawala (2011) defines corporate performance as the measure of how well a company uses the assets it has in the primary mode of operation and generates income. It is currently defined as the sum results of the operations of a company at a particular time (Okafor, 2017). It is also defined as the achievement of distinctive organizational goals evaluated in opposition to recognized ideals, completeness, and costs (Thrikawala, 2011).

There are different measures used in assessing corporate performance. However, in this study corporate performance is measured by investor's ratios such as Earnings per Share (EPS) and Dividend per Share (DPS). Return on Assets (ROA) was also used in measuring the corporate performance of firms.

### **Return on Assets (ROA):**

Return on assets is a profitability ratio that measures the number of profits which companies generate from their assets. It measures the efficiency of corporate managers in the generation of income from economic resources or assets of the organizations. It is represented as a percentage and a higher percentage implies that the managers are efficiently utilizing their statement of financial position in generating profit.

ROA is calculated as:  $\frac{\text{Net income/Net profit}}{\text{Average total assets}}$

### **Earnings Per Share (EPS):**

EPS shows the net earnings of companies allotted to every share of their common stock. Firms disclose Earnings Per Share that are adjusted for extraordinary items as well as possible dilution of shares.

Earnings Per Share is calculated using this formular:  $\frac{(\text{Net Earnings} - \text{preferred stock})}{\text{Outstanding shares}}$

### **Divided Per Share (DPS)**

DPS is the wide variety of stated dividends distributed by companies for each ordinary share remaining. It is the wide variety of dividends investors of organizations get for every single share. Ordinary stocks are the fundamental elective stocks of a business enterprise.

DPS can be calculated using the formula.

$$\text{DPS} = \frac{\text{Total dividend paid out over a period of time} - \text{Any specialized dividend}}{\text{Shares outstanding.}}$$

### **Accounting Information System and Corporate Performance**

Ponemon and Nagida (2013) emphasize that the principal cause for which accounting information is created is to enable choice-making. Nevertheless, for efficient financial reporting, amongst different necessities, it ought to be applicable, complete, and dependable. These qualitative features need that the accounting numbers ought to be fair and ought not to favour only one interest group. Hunton, (2017) examines, the connection between AIS and corporate performance and discovered that there was a sturdy connection between AIS and company overall performance, this implies that access to accounting records results in businesses being effective.

(Harash, 2015) concurs that AIS assist managers in making decisions. Its benefits are assessed via its enhancement of the procedures of making decisions, accounting number quality, evaluating performance, inner controls and easing corporate dealings.

## **2.2 Theoretical Framework**

The study is based on the Resource Based Theory. The foundational proponent of the resource-based view theory was Barney (2006). The theory basically assumes that business organizations being a collection of integrated capacities, can utilize their resources as mechanisms for the strategic resolution of common business issues. It stresses that firms can plunge deep into their resources to solve basic business issues and where the firm cannot utilize its own resource the firm can outsource for such. Firms with better management of resources at their disposal outperform firms that do not. This explains why companies that priceless, uncommon, exclusive, and well-mixed resource record better performance over their counterparts who do not adequately put their resources to business solutions. The study is related to this theory because from the theory it can be deduced that firms that properly put accounting software resources to optimal use expect a higher level of corporate performance than those that do not. Moreover, given the toughness of market competition, the resource-based view argues that any firm that fails to capitalize on any resource, be it human or technological stands the chance of being toppled by close competitors (Anaëli, 2017). Therefore, firms must implement accounting software so as to remain competitive and thereby strategize with such implemented resources for better managerial decision making that will be evident in the firm's corporate performance.

### 2.3 Review of Empirical Studies

Various studies on how AIS affects the performance of quoted construction companies have been viewed from different perspectives as follows:

Sogbo (2020) studied “the effect of accounting information on management decision making process in TAM Douala-Cameroon”. A survey method was used. The population comprised two hundred and four workers in the studied area, out of which a sample size of 35 was arrived at. Primary data was collected from respondents using questionnaires. Descriptive statistics and multiple regression analyses were used in analyzing data. Regression outcome shows that there is a positive relationship between all the predictor variables; reliability & comparability and decision making.

Rahmi, Widya Sari, and Bayu (2019) examined the effect of information technology, quality of accounting information and understanding of students on accounting software users. The study was a descriptive survey research. The population of the study comprised all the students in the Accounting Study Program of the Faculty of Economics, Universities Prima Indonesia. The sample size of the study was 290 students who were purposively selected. Questionnaire was used as instrument of data collection to source primary data from the respondents. PIs-algorithm, bootstrapping and blindfolding were deployed as the methods of data analysis in the study with the aid of SmartPIs program version 3. The findings of the study revealed the following: information technology, information quality, and accounting understanding have a significant effect on the satisfaction of users of accounting software.

Pramawati and Dodik (2018) examined the elements that impact the fulfillment of the implementation of AIS and AS of privately owned universities in Bali. Survey research design guided the conduct of the study. The population was 8 universities. The sample selected were 10 employees from each of the 8 universities, with a total of 80 people. Primary data were used and was obtained through questionnaire. The Partial Least Square was used in analysis with the aid of SmarPLS 3.0. Finding revealed that systems qualities, data qualities and systems usefulness affect their use and benefits derived by users of accounting software.

Akanbi and Adewoye (2018)) determined the effect of adoption of the accounting software on the financial performance of commercial banks in Nigeria. The population comprised 16 commercial banks with a sample size of 80 employees of the sampled banks. Data were obtained through a questionnaire. Cronbach's alpha test was used to measure the reliability of the measurement tool and also simple linear regression test was used to test the hypothesis. The finding reveals that the sampled banks adopted and used accounting software in rendering banking services at a high rate. This implies that AIS significantly and positively influences firm performance with  $\alpha < 0.05$ .



Beg (2018) examined how the use of accounting software influences the economic activities of selected Indian corporations. Data were obtained through a questionnaire. The sample size was 283 respondents. The simple linear regression model was used to test the hypotheses of the study. The findings indicated that the use of accounting software significantly influences the financial performance of ten major Indian companies.

Chong and Nizam (2017) investigated the influence of accounting software on the Organizational performance of organizations in Malaysia. This study was guided by the positivism paradigm and survey explanatory research design. The research used a cross-sectional data collection technique involving primary data obtained through a questionnaire. The study found that Software Efficacy and Comfort of Use moderately and significantly influence business performance. However, Software Data Quality, Accurateness and Consistency insignificantly influence corporate performance.

Syahirah and Fadzilah (2017) scrutinized the effects of the use of accounting Software on the corporate performance of business units in Malaysia. The work was guided by an exploratory survey research design. The target population of the study comprised all the accountants/users of accounting software employed in banking firms that operate principally in Malaysia. Random probability sampling was used to select 150 sample participants for the study. Primary data were collected for this research with the use of a structured questionnaire. The collected data were analyzed with the use of regression analysis. The findings of the study revealed that the use of accounting software has a statistically significant effect on the firm performance of business units in Malaysia.

Rahman, Ahammed, Rouf and Uddin (2017) examined how the usage of accounting software systems affects the corporate profitability of SMEs in Bangladesh. The study was guided by a descriptive survey research design. Out of all the SMEs in Bangladesh, a total of 300 firms were randomly selected as sample participants in the study. A structured survey questionnaire was used for primary data collection. ANOVA analysis technique was adopted in the test of the study hypotheses. The research outcome suggests that suitably applying and using accounting software systems significantly influences a strong business responsibility and accountability; the use of accounting software significantly affects owners' and policymakers' understanding of their performance and improvement; finally, the use of accounting software technology significantly reduces firms operating cost and significantly increases firm profitability and competitive advantages.

Anaeli (2017) study was a survey descriptive research and therefore used primary data from 90 respondents that were selected using purposive sampling techniques. The Probit regression results indicated that computerized AS statistically and significantly affects organization performance in LGAs in Arusha.

Ezenwoke (2017) examined the factors influencing the implementation of the e-accounting systems of Nigerian Micro/Small Businesses. It adopted the survey research design. The population was 660. Binary Logistic Regression was used in analyzing data. The research outcome showed that all the factors significantly influence e-accounting implementation.

Wickramsainghe, Pamarathna, Cooray and Dissanayake (2017) examined the effect of AS on the performance of organizations. The outcome of the analysis revealed that: accounting software does not affect the reliability of the information in the financial statement, but it affects the efficiency of information in the financial statement. The result also indicated that User Friendliness of the Accounting Information system affects business performance of organization.

Thuhoye (2017) studied the roles of AIS in the investment decisions of Tanesco Morogoro Municipal. Qualitative and quantitative data were used. The population was 50 employees of Tanesco Morogoro. It was discovered that the quality of accounting information in terms of its accuracy, adequacy, reliability, and mode of disclosure is a major determinant of the level of efficiency of investment decision-making.

Adetiloye and Eriabie (2017) researched accounting information and share prices in the food and beverage, and conglomerate sub-sectors of the Nigerian Exchange Group. It was discovered that market price per share has a positive and insignificant effect on the book value per share and earnings per share of the sampled firms.

Saeidi (2014) examined the impact of the use of computerized accounting software or system on the financial performance of firms in Iran. The study adopted a survey research design, primary data, and the use of a questionnaire. A questionnaire containing 30 questions was designed to elicit primary data from the respondents. The paper found that the use of computerized AS insignificantly affects the financial performance of the firms in Iran.

### **Gap in Literature**

Different scholars have carried out an empirical investigation in the direction of the present study. However, to the best knowledge of the researchers, none was focused solely on accounting information system of construction companies. Also, previous scholars failed to use Earnings per Share, Dividend



per Share and Return on Asset as a proxy in showing the relationship between accounting information systems and corporate performance. As a result of the above, there is still a glaring gap in knowledge which of course needs to be bridged. To address this gap in the literature, this study was conducted to examine the relationship between the accounting information system and corporate performance of quoted construction firms in Nigeria.

### 3. Methodology

#### Research Design

This study adopted a correlational research design.

#### Population, Sample Size and Sampling Technique

The population was made up of 8 construction/real estate firms on the Nigerian Exchange Group as at March, 2021. Judgmental sampling was employed in selecting 6 firms. UPDC Real Estate Investment Trust and Roads Nig. Plc. were excluded based on incomplete data. The sampled firms are: Arbico Plc, Julius Berger Nig. Plc, SFS Real Estate Investment Trust, Smart Products Nigeria Plc., UACN Property Development Company Plc., Union Homes Real Estate Investment Trust

Source: NSE Fact book, 2021

#### Method of Data Collection and Technique for Data Analysis

Secondary data were used and were obtained from the published annual report/accounts of the construction firms from 2012 to 2020. Descriptive statistics and Pooled Ordinary Least Square regression technique were respectively used in data analysis and hypotheses testing with the aid of STATA version 13.

#### Model Specifications

To be able to analyze the data using OLS, Firm Size (FSize) was added as control variables, the researcher constructed an econometric model as follows:

$$CP = f(AIS, FSize, \dots)$$

Where,

AIS = Accounting Information System; CP = Corporate Performance; FSize = Firm Size

$$\text{In an econometric form: } Y_{it} = a_{it} + bX_{it} + e_{it} \dots \dots \dots \text{eqn 1}$$

Substituting AIS for X and performance surrogates for Y, we have:

$$ROA_{it} = a_0 + b_1AIS_{it} + FSize_{it} + e_{it} \dots \dots \dots \text{eqn 2}$$

$$EPS_{it} = a_0 + b_1AIS + FSize_{it} + e_{it} \dots \dots \dots \text{eqn 3}$$

$$DPS_{it} = a_0 + b_1AIS_{it} + FSize_{it} + e_{it} \dots \dots \dots \text{eqn 4}$$

Where,

a = constant; b = coefficient of the independent variable;  $ROA_{it}$  = Return on Assets of firm *i* in year *t*;  $EPS_{it}$  = Earnings Per Share of firm *i* in year *t*;  $DPS_{it}$  = Dividend Per Share of firm *i* in year *t*;  $AIS_{it}$  = Accounting Information System of firm *i* in year *t*; e = error term; FSize = Firm Size

**Measurement and Operational Description of Variables**

The operational measurement of variables is described below.

**Table 1: Operational Measurement of Variables**

Variables	Type of Variable	Acronym	Definition
1. Accounting Information System	Independent	AIS	Cost of accounting software (i.e., expenditure on accounting software)
2. Return on Assets	Dependent	ROA	$\frac{\text{Earnings after tax}}{\text{Total Assets}}$
3. Earnings Per Share	Dependent	EPS	$\frac{\text{Earnings after tax}}{\text{Outstanding Number of Shares}}$
4. Dividend Per Share	Dependent	DPS	$\frac{\text{Dividend}}{\text{Outstanding Number of Shares}}$
5. Firm Size	Control	FSize	Amount of Total Assets of the Firm

Source: Authors' Compilation, (2021)

**Note:** Large volume data were log transformed to correct for outliers.

**Decision Rule**

Reject  $H_0$  and accept  $H_a$  if the P-value of the test is less than  $\alpha$ -value (level of significance) at 5%, otherwise accept  $H_0$ .

**4. Data Presentation, Analysis and Discussion of Results**

**Data Presentation**

The data that were collected included cost of accounting software, Return on Assets, Dividend per Share and Earnings per Share for the respective accounting periods. The extracted data are presented in Appendix I.

**Descriptive Statistical Analysis**

Descriptive analysis was done using mean and standard deviation as shown in table 2 below.

**Table 2 Descriptive Statistics of the Variables**

Variables	Variable Obs	Mean	Std. Dev.	Min	Max
ROA	54	.0148221	.1081379	-.5439555	.2075559
EPS	54	2.225148	3.207768	-6.56	8.76
DPS	54	1.601296	2.50338	0	8.1

AIS	54	61686.81	101936.4	0	292358
FSize	54	6.871267	1.029788	5.033761	8.46441

**Source: Analysis Output (2021) Using STATA Ver. 13.**

As seen in table 2 above, the average value for Return on Assets (ROA) is approximately 0.15. The minimum and maximum values are -0.54 and 0.21, respectively.

The standard deviation is 0.11. For Earnings Per Share (EPS), the mean value is 2.23; the minimum and maximum are -6.56 and 8.76, respectively, and the standard deviation is 3.21 which indicates that there is presence of outliers. For Dividend Per Share (DPS), the mean value is 1.60. The minimum and maximum values of DPS are 0 and 8.1, respectively with a standard deviation of 2.50. By rule of thumb, there is no indication of outliers since the standard deviation is lower than 3. Accounting Information System has a mean value of ₦61,686,810 with a standard deviation of 101,936,400. The minimum and maximum investment in AIS show ₦0 and ₦292,358,000, respectively, which indicates the presence of outliers. Finally, for Firm Size (FSize), the mean value is 6.871267 with a standard deviation of 1.029788. The minimum and maximum Firm Size are 5.033761 and 8.46441, respectively which shows no indication of outliers.

### Hypothesis Testing

The hypotheses that were formulated for the study were tested using Pooled Ordinary Least Square regression technique which was computed with the aid of STATA version 13.

**Table 3 Regression Results**

	ROA Model (Pool OLS)	EPS Model (Pool OLS)	DPS Model (Pool OLS)
<b>CONS.</b>	.0982058 {0.331}	-1.719751 {0.608}	.2724813 {0.915}
<b>AIS</b>	4.63e-07 {0.004} **	-4.66e-06 {0.363}	-8.19e-06 {0.038} **
<b>FSIZ</b>	.0079748 {0.021} **	.6159825 {0.226}	.2668965 {0.487}
<b>F-STAT/W-STAT</b>	7.67{0.001} ***	0.80 {0.4534}	2.37{0.1035}
<b>R- Squared</b>	0.2311	0.0305	0.0851

Note: (1) bracket {} are p-values

(2) \*\*, \*\*\*, implies statistical significance at 5% and 1% levels respectively

Source: Compiled Analysis Output (2021) using STATA ver. 13

### Hypotheses I

H0<sub>1</sub>: There is no significant positive relationship between Cost of Accounting Software and ROA of quoted construction companies in Nigeria.

To examine the relationship stated in hypothesis one, the model below was deployed.

$$ROA_{it} = a_0 + b_1AIS_{it} + FSize_{it} + e_{it}$$

The hypothesis testing produced the results presented on table 3 above. The detailed result is presented in table 4 at the appendix section.

### **Interpretation of Result**

The first regression analysis was conducted to determine the amount of variation in Return on Asset (ROA) explained by cost of accounting software (AIS). The calculated value of R<sup>2</sup> is 0.2311 which means that 23.11% of the corresponding variation in ROA is due to change in the AIS. The rest 76.89% is due to other elements that are not in the model. The results of the analysis are shown in Table 4.2.

The F-statistic has an F value = 7.67 which is not significant with p-value = 0.0012 < 0.05. By implication, the overall model is not significant in predicting the ROA of the sampled firms.

Analysis of the regression model coefficients shows that AIS has a positive beta co-efficient of 0.4368 as indicated by the co-efficient matrix with a p-value = 0.004 < 0.05. The control variable, Firm Size, has a positive beta coefficient of 0.0759 with a p-value = 0.600 > 0.05; while the constant value of ROA is 0.098. Therefore, only cost of accounting information system contributes significantly to the model. The regression equation is presented as follows:

$$ROA = 0.098 + 0.4368 \times AIS + 0.0759 \times FSize_{it} + e_{it}$$

The researcher therefore accepts the null hypothesis and confirmed indeed that there is a positive and insignificant relationship between Cost of Accounting Software and the return on asset of quoted construction companies in Nigeria.

### **Test of Hypothesis II**

H0<sub>2</sub>: There is no significant positive relationship between Cost of Accounting Software and the EPS of quoted construction companies in Nigeria.

In order to examine the relationship between cost of accounting software and earnings per share of quoted construction firms, the regression model below was deployed.

$$EPS_{it} = a_0 + b_1AIS + FSize_{it} + e_{it}$$

The hypothesis testing produced the results as presented in table 3 above. The detailed result is presented in table 5 at the appendix section.

### Interpretation of Result

The second regression analysis was conducted to determine the amount of variation in Earnings Per Share (EPS) explained by cost of accounting software (AIS). The calculated value of  $R^2$  is 0.03 which means that only 3% of the corresponding variation in EPS can be explained by changes in the independent variables. The rest 97% is due to other issues that are not in the model. The results of the analysis are shown in Table 4.

The F-statistic has an F value = 0.80 which is not significant with p-value = 0.453 > 0.05. By implication, the overall model is not significant in predicting Earnings Per Shares of quoted construction firms in Nigeria.

The model coefficients shows that AIS has a negative but insignificant co-efficient of -0.1482 with a p-value = 0.363 > 0.05. The control variable, Firm Size, has a positive but insignificant beta coefficient of 0.1977 with a p-value = 0.22 > 0.05; while the constant value of EPS is -1.7198. Therefore, the predictors do not contribute significantly to the model. The regression equation is presented as follows:

$$EPS = -1.7198 + -0.1482 \times AIS + 0.1977 \times FSize_{it} + e_{it}$$

The researchers therefore accept the null hypothesis and confirmed indeed that there is no significant positive relationship between cost of accounting software and the Earnings per share of quoted construction companies in Nigeria.

### Test of Hypothesis III

$H_{03}$ : There is no significant positive relationship between the Cost of Accounting Software and the DPS of quoted construction companies in Nigeria.

To examine the relationship between cost of accounting software and dividend per share of quoted construction firms, the regression model below was deployed.

$$DPS_{it} = a_0 + b_1 AIS_{it} + FSize_{it} + e_{it}$$

The hypothesis testing produced the results as presented in table 3 above. The detailed result is presented in table 6 at the appendix section.

### Interpretation of Result

The third regression analysis was conducted to determine the amount of variation in Dividend Per Share (DPS) explained by cost of accounting software (AIS). The calculated value of  $R^2$  is 0.085 which means that only 8.5% of the corresponding variation in DPS is due to changes in AIS. The rest 91.5% is due to other elements that are not in the model. The results of the analysis are shown in Table 5

The F-statistic has an F value = 2.37 which is not significant with  $p\text{-value} = 0.1035 > 0.05$ . By implication, the overall model is not significant in predicting the Dividend Per Shares of quoted construction firms in Nigeria.

The model coefficients reveal that AIS has a negative and significant coefficient of -0. with a  $p\text{-value} = 0.038 < 0.05$ . The control variable, Firm Size, has a positive but insignificant beta coefficient of 0.1098 with a  $p\text{-value} = 0.48 > 0.05$ ; while the constant value of DPS is 0.2725. Therefore, only the cost of accounting software contributes significantly to the model. The regression equation is presented as follows:

$$\text{DPS} = 0.2725 + -0.3334 \times \text{AIS} + 0.1098 \times \text{FSize}_{it} + e.$$

The  $p\text{-value}$  of the test is  $0.1035 > 0.05$ . Therefore, the researchers accept the null hypothesis and confirmed indeed that there is no significant positive relationship between the cost of accounting software and the dividend per share of quoted construction companies in Nigeria.

## 5. Discussion of Findings

The result reveals that the cost of accounting software insignificantly relates to ROA of the quoted construction companies in Nigeria. The ROA will have a constant value of 9.8% if the coefficients of the predictor variable and control variable are zero. However, the results show that an increase in the cost of accounting software by 1 unit will reduce ROA by 0.4368. In addition, the control variable, Firm Size, does not significantly affect the ROA of the firms. The finding of the study agrees with that of Saeidi (2014). but disagree with those of Sogbo (2020); Beg (2018); Chong and Nizam (2017). The reason for the difference is attributed to the fact that the prior studies used a different time scope and different sectors.

Also, the study revealed that cost of accounting software does not significantly relate to Earnings Per Share of quoted construction companies in Nigeria. The EPS will have a constant value of ₦1.72 if the coefficients of the predictor variable and control variable are zero. However, the results show that an increase in the cost of accounting software by 1 unit will not affect EPS. In addition, the control variable, Firm Size, does not significantly affect the EPS of the firms. This finding is in tandem with the submission of Anaeli (2017) and Syahirah and Fadiziah (2017) who reported no significant effect of AIS on firm performance.

Finally, it was shown that the cost of AS significantly relates with DPS of quoted construction companies in Nigeria. The DPS will have a constant value of ₦0.2725 if the coefficients of the predictor variable and control variable are zero. However, the results show that an increase in the cost of accounting software by 1 unit will reduce DPS by 0.3334. In addition, the control variable, Firm Size, does not significantly



affect the DPS of the firms. However, the findings do not agree with the results of Saeidi (2014). The study deployed primary data and survey descriptive research design. The result of the study showed that accounting software has no significant relationship with the financial performance of firms in Iran. The reason for the difference between the findings of the present study and that of Saeidi (2014) could be attributed because this study deployed secondary data and Ordinary Least Square technique. The difference between the findings of the present study and those of prior related studies is that the researchers utilized evidence from a different sector and deployed a time scope that differs from those of prior literature such as Anaeli (2017) and Syahirah and Fadiziah, (2017).

The cost of accounting software not having a significant relationship with the performance measures used could be a result of the following:

**Constant Power Outage:** Whenever there is a power failure, the AIS equipment/machines remain idle.

**Costs of Diesel/Fuel:** The high cost of diesel/fuel is a contributory factor in not having a significant positive association. Constant power supply or availability of electricity is very important for the effective functioning of AIS. Hence where there is a power failure or no diesel available due to the high cost of purchasing it, this will result in the system not being used at the right time, and this can adversely affect profitability. Moreover, the high cost of burning diesel/fuel could also reduce the profitability of these companies.

**Outsourcing of Services:** Most companies do not want to hire employees or rather use in-house technicians to repair their machines/equipment when they become faulty or dysfunctional. These companies prefer to outsource the repair of such equipment. This results in delays in work as the equipment most often are not repaired on time. The repairs can take weeks and even months. Most often, the original parts of the equipment are lost, or damaged while being sent out for repairs. As there is a delay in repair, there is idle time in the use of these AIS machines/equipment. This results in a loss of profits or reduces profitability. When profitability is reduced, the relationship of the AIS on the performance of these companies can be insignificant and negative. Had it been that those companies have in-house employees who will quickly service the AIS equipment, then there won't be delays and idle time, and profitability will not be affected.

## 6. Summary of Findings, Conclusion and Recommendations

### Summary of Findings

1. There is an insignificant positive relationship between the cost of accounting software and ROA of quoted construction companies in Nigeria.

2. There is no significant positive relationship between the cost of accounting software and the EPS of quoted construction companies in Nigeria.
3. There is no significant positive relationship between the cost of accounting software and the DPS of quoted construction companies in Nigeria.

### **Conclusion**

This study scrutinized the association between AIS and the corporate performance of quoted construction companies in Nigeria. It was shown that the extent of the relationship between the independent and the dependent variables is weak. The major findings of the study revealed that while the cost of accounting software has positive and significant effects on the Return on Assets, the cost of accounting software has no significant relationship with Earnings Per Share and Dividend Per Share of the quoted construction firms in Nigeria.

By implication, although the information from AIS can be effective in the decision-making processes of users of such information and for other managerial functions, using the information is of immense benefit when the benefit exceeds the cost. This conclusion is informed by the result of the study which shows that even though investment in accounting software enhances ROA of sampled companies, the cost of the accounting information system does not improve the dividend distributed to shareholders, nor does it enhance the earnings of the firms. It is therefore concluded that accounting information systems tend to contribute to firm performance only when the system contributes to faithfulness, constancy, and trustworthiness of accounting information.

### **Recommendations**

The researchers recommended as follows.

Managers should endeavour to effectively put to good use the firm's accounting software infrastructure to maximize its value.

Accountants should take part in the development of the firm's accounting software to help the firm develop the most suitable information system that will contribute to organizational success.

Shareholders should encourage firm managers to invest in computerized accounting information system.

### **Contribution to Knowledge**

Previous studies that were conducted focused on the Nigerian Banking sectors, SMEs, manufacturing sector, etc. the present study took a different direction by studying Nigerian construction companies. This research contributed to the body of knowledge by addressing this.

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