

Impact of Accounting Information System on the Performance of the Petroleum Industry in Nigeria

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Abstract

Currently, the demand for accounting information system is increasing due to its high influence on the organizational performance and emerging area to be investigate. Thus, the current article aims to examine the impact of accounting information system on the performance of the petroleum industry in Nigeria. The leading contribution of the petroleum industry in the gross domestic product (GDP) of the country and extensive use of accounting information has enhanced the need for investigation of this emerging area. The data has been collected from the financial statements of the eight oil and gas companies in Nigeria that are the most prominent contributor in GDP form year 2011 to 2020, and descriptive and panel multiple regression has been used for analysis with the help of stata-13 package. The results show that only earning after tax as one of the proxies for information accounting system has positively linked with the performance of the management. This study concluded that the oil and gas industry in Nigeria doesn't implement the effective AIS in their organization that is the reason for the low performance of the management in the oil and gas industries under study. This research recommends that management of oil and gas companies in Nigeria should make use of automated Accounting Information System (AIS) known as 'Contract Plus – Financial & Project Accounting' package in their Finance Department. This software will generate financial data to be analysed by the accountants and subsequently used by top level of management for strategic decision making, thus, these managers could identify future opportunities and limitations face by the company and industry.

Keywords: Accounting Information System, Gas Industry, Performance

INTRODUCTION

Technology has contributed to the advancement of various fields, accounting information has become one of an essential tool in information and technology which is not only focused on financial controls but also has established an enormous impact on the measurement of the oil sector. Today's accounting system focuses on providing relevant, reliable and timely financial information to decision makers, who use the information to make key financial decisions concerning their business entities. Those decision makers including oil and gas sector (and those interested in their financial information) see accounting information as a veritable tool in the implementation of an entity's guidelines and policies. Accounting Information System (AIS) is focused on collecting, processing, and communicating financial oriented information to a company's external parties (such as investors, creditors and tax agencies) and internal parties (principally management). This information is gathered from the financial statement of the company. It reveals profit or loss for a given period, and the value and nature of a firm's assets and liabilities and owner's equity. The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. Information is the main source of decision-making, so this information must be characterized by a set of characteristics, in order to achieve the goals required for decisionmaker. Accounting information is one of the oldest information systems known in companies, as accounting information described with a great importance in identifying the financial and economic reality of the firms, and how company's relationships with its environment (Kassem, 2004). In general Accounting information system plays an important role in the management of firms, and one of the most important reasons for the existence of accounting and its continuous evolution is that it provides the appropriate information for both managers' and external parties concerned with such information. The study tries to assess the impact of accounting information systems on the petroleum industry in Nigeria through providing high quality of accounting information.

Oil and gas industry play an important role in the Nigerian economy through revenue generation to the government, employment generation and being the major contributor to the growth of the Gross Domestic Product. Oil and Gas Companies, like other entities, are required to prepare and present

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their financial statements in accordance with Generally Accepted Accounting Practices and International Accounting Standards. Such financials are expected to be relevant, reliable and faithfully representing the financial position and performance of the affairs of the reporting entity at any particular point in time. The performance of companies can be measured by the use of accounting information or stock market values in a financial accounting practices context. When accounting information is used, accounting ratios are employed. Among the common accounting ratios used to measure profitability are: return on assets (ROA), return on capital employed (ROCE) and return on equity (ROE). Return on assets is an indicator of how profitable a company is relative to its total assets. It gives an idea as to how efficient management is at using its assets to generate earnings. In Nigeria, not enough researches have been carried out by scholars on the impact of Accounting Information System on the Performance of petroleum industry. Some Scholars have look at the effect of Waste Management Expenditure on the Profitability of Oil and Gas Companies in Nigeria. Others have looked at the effect of Security and Militancy Costs of the Performance of Oil and Gas Companies in Nigeria. But none have looked at the problem of how financial accounting information employed by petroleum industry impact on their Performance, particularly their profitability. This study has an earnest desire to have a deeper and clearer understanding regarding the impact of Accounting Information System on the performance of petroleum industry in Nigeria. After a lot of research and analyses to recognize the nature of the relation between the study variables, starting from identifying a problem and testing the data collected to reach good understood, better interpretation, until extraction valuable results, the study therefore seeks to evaluate the impact of Accounting Information System on the Performance of the Petroleum Industry in Nigeria.

LITERATURE REVIEW

Concept of Accounting Information System

Accounting Information System (AIS) has traditionally focused on collecting, processing, and communicating financial oriented information to a company's external parties (such as investors, creditors and tax agencies) and internal parties (principally management). According to Borhan and Nafees (2018) accounting information system is the process of collecting, analysing and converting data into action. This definition justifies accounting information system as a computer based system that collects data, process and analyses data and produces results or output. Accounting information system according to Manchilot (2019) may be a computer-based electronicsystem used for collecting, storing, processing and communicating financial and accounting data through financial statements with the aim of supporting and guiding organizational decision making process. Computers are the hub of accounting information as they provide a platform for the workability of all information systems. For an accounting information system to be operational, its appropriate software application must be on the computer system intending to be used. Kashif (2018) states that accounting information system is a combination of people, equipment, policies, and procedures that work together to collect data and transform it into useful information. Borhan and Bader (2018) defined accounting information system is a system which contains a group of harmonized business, components, and resources which processes, manage, and control the data for producing and carrying the relevant information for decision makers in the organization. Accounting information requires series of processes to carry out its function just like any other system. It is a connected and homogeneous set of the resources and different components (human, equipment, finance, etc) that interact simultaneously inside a specific framework to work towards the achievement of organizational goals. AIS is a system that provides people with either data or information relating to an organization's operation to support the activities of employees, owners, customers, and other stakeholders in the organization's environment by effectively supplying information to authorized people in a timely manner.

Relevance of Accounting Information System

The main function of AIS is to assign quantitative value of the past, present and future business events (Rehab, 2018). Accounting information, in the form of periodic reports or special analyses, is often a source of information for making decisions. These decisions may include pricing, production levels and product mix, outsourcing, inventory policy, customer servicing, labour negotiations, and capital investments (Horngren, Harrison, Bamber, Willis and Jones, 2005; Sprinkle, 2003). Accounting

information systems play an important role in the implementation of the managerial functions of the organization such as planning and control (Samer, 2016). In the planning function, AIS provide data relating to study and analyze the goals set for the organization. It also provides information regarding the relationship between cost, volume and profit required to determine the amount of interdependence and interaction between them. AIS under the planning function also helps in preparing lists of future needs and financial flows and planning of budgets for the development of quantitative criteria and converting them into financial standards to reflect the different aspects an organization's activities and presentation of the detailed plans and policies of the work and coordination across different departments (Frezatti, Andson, Guerreiro and Gouvea (2011). On the other hand, in the control function, it requires a clear and specific plan that shows the desired objectives and defines the foundations on which results are evaluated and analyzed in order to correct distractions.

This function is regarded as a practical test of decision making and implementation, follow up the actual implementation in accordance with the plans, policies and standards established, the discovery of deviations and correct them, provide reasons to protect the property of the shareholders and the preservation of their interests, resource development and follow up the activity of the organization, and to achieve the desired goals, thus ensuring the effectiveness of the organization (Onaolapo and Odetayo, 2012). Computerized accounting tools as integral part of AIS are directly related to the economic and financial results of firms (Urquía, Pérez, and Muñoz, 2011). Advantages of an optimal use of AIS in an organization might include: Better adaptation to a changing environment, better management of internal business transactions and a high degree of competitiveness. There is also a boost to the dynamic nature of firms with a greater flow of information between different staff levels and the possibility of new business on the network and improved external relationships for the organization, mainly with foreign customers accessed through the firm's web (Pérez, Urquía and Muñoz, 2010).

Subsystems of Accounting Information System

According to Hall (2008) an accounting information system may be divided into four major subsystems including the transaction processing system, general ledger/financial reporting system, fixed asset system and management reporting system. The transaction processing system supports daily business operations with numerous documents and messages for users throughout the organization. Transaction processing systems (TPS) are the basic business systems that serve the operational level of the organization. A transaction processing system is a computerized system that performs and records the daily routine transactions necessary to the conduct of the business (Laudon and Laudon, 2006). The general ledger/financial reporting system produces the traditional financial statements, such as income statements, balance sheets, statements of cash flows, tax returns, and other reports required by law. This system is designed to collect data and information on AIS, customers, suppliers and wages, closure of accounting books, preparation of trial balance and a list of results and the budget of the organization and the reports of income and expenses and submit these statements to the owners and investors (Samer, 2016). The reliance of this system on the computer help the organization in cutting costs and using the fewest number of workers as well as in the completion of the accounting task in an accurate and orderly manner, and conducting financial control process. Fixed asset system processes transactions pertaining to the acquisition, maintenance, and disposal of fixed assets, while the management reporting system, which provides internal management with special purpose financial reports and information needed for decision making, such as budgets, variance reports, and responsibility reports.

Samer (2016) also identified some subsystems of accounting information system to include inventory control system, customer accounts system, suppliers account system and payroll system. The inventory control system is designed to process the bills of stored materials, identify materials that need to be re-supply, and generate reports showing the inventory situation. The reliance of this system on the computer helps the organization in customer service, recording changes in the level of inventory, reducing costs, and preparing documents. Customers' accounts system is designed to determine amounts owed by customers in accordance with the information of payment and purchase processes. Additionally, the system is intended to produce a monthly customer accounts and credit

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reports. A computer-based customer accounts system provides the organization with accurate bills and monthly reports on credit provided to customers, which in turn enhances the processes of payment, collection and provision of liquidity. Suppliers accounting system provides daily information on procurement and payment to suppliers, preparing checks, pay bills and treasury reports. The reliance of this system on the computer, results in establishing good working relationships and achieving a good credit price and taking advantage of discounts through the payment to suppliers quickly and accurately, and financial control on the amounts paid by the organization. Payroll system is designed to display daily data on workers and attendance cards, generate payment checks and workers' payrolls, prepare special reports on work analysis. The reliance of the system on the computer help the organization in the preparation and submission of special reports related to tax, returns, deductions and analysis of labour productivity and labour costs. The lists of subsystems of accounting information systems are not limited as these systems are designed for management of firms to meet their day-to-day accounting need.

Oil and Gas Industry in Nigeria

The Nigerian oil and gas industry has been vibrant since the discovery of crude oil in 1956 by the Shell Group. However, the sector was largely dominated by multinational corporations until the early 1990s when Nigerian companies began to make a foray into the industry. Local participation was boosted with the implementation of the Nigerian Content Directives issued by the Nigerian National Petroleum Corporation (NNPC) about a decade ago, and eventually, by the promulgation of the Nigerian Oil and Gas Industry Content Development (NOGIC) Act (The Act) in 2010. The Act seeks to promote the use of Nigerian companies/resources in the award of oil licenses, contracts and projects. In terms of structure, the industry is broadly divided into: Upstream sector and Downstream Sector. Upstream sector is characterized by exploration and production of crude oil and gas (petroleum operations). The upstream oil sector is the single most important sector in the Nigerian economy, accounting for over 90% of the country's exports and about 80% of the Federal Government (FG's) revenue. The Downstream Sector on the other hand consists of; Transmission and Conveyance which involves the transportation of oil and gas to the refinery and gas stations. There is a pipeline network from the wellhead to the refinery or plant. Tankers and purpose-built vessels are also used for this purpose; Refining which involves transforming the crude to products such as PMS, diesel, kerosene, etc. and; Distribution and Marketing- which entails the distribution and marketing of refined petroleum products and other complementary activities. Distribution also involves the transportation of refined petroleum products from the refineries through pipelines, coastal vessels, road trucks, rail wagon etc. to the storage/sale depots.

Return on Assets

This is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. It is calculated by dividing a company's annual earnings by its total assets. It is computed as follows:

$$\text{ROA} = \text{Net income (EBIT)}/\text{Total assets (expressed as a percentage)}$$

ROA tells us what earnings were generated from invested capital (assets). ROA for public companies can vary substantially and will be highly dependent on the industry.

Return on Capital Employed

ROCE indicates the efficiency and profitability of a company's capital investment. It is one of the most important operating ratios that can be used to assess corporate profitability. It is expressed as a percentage and can be very revealing about the industry in which a company operates in, the skills of management and occasionally the general business climate. As a general rule, a firm with a high return on capital employed will probably be a very profitable business. ROCE is calculated as follows:

$$\text{ROCE} = \text{PBIT (Net Income)}/\text{Capital Employed}$$

Where: Capital Employed = Total Assets – Current Liabilities = Equity + Non-Current Liabilities.

Return on Equity

Return on equity (ROE) is a measure of financial performance calculated by dividing net income by shareholders' equity. Because shareholders' equity is equal to a company's assets minus its debt, ROE is considered the return on net assets. ROE is considered a measure of the profitability of a corporation in relation to stockholders' equity. ROE is expressed as a percentage and can be calculated for any company if net income and equity are both positive numbers. Net income is calculated before dividends paid to common shareholders and after dividends to preferred shareholders and interest to lenders.

Return on Equity= Net Income/Average Shareholder Equity

Empirical Review

Olaofe, Akanni, Ekundayo, Ajibola and Ajibola (2020) This research examines accounting information system on performance of corporate organizations in Nigeria. The role of professionals in accounting, information technology and academics were explored. To attain the aim of the study, 30 questionnaires were administered and 25 retrieved which was analysed and the single factor ANOVA technique was used to test the hypothesis. Findings from the research depicted accounting information systems have a positive impact on corporate organizations performance in Nigeria because the observed F of 251.43 obtained was greater than F critical value of 2.74. As recommended, corporate organizations should massively invest in accounting information system, adopt merit-based recruitment and ensure periodic training of accounting information systems personnel. Abdallah, (2013) and Adrian-Cosmin (2015) test the impact of the accounting information systems on the quality of financial statements. They found there is a strong effect of using the accounting information systems on the quality of financial statements. Onalapo and Odetayo (2012) found that Accounting Information System (AIS) enhance organizational performance especially in global technology advancement, agree with Patel (2015), who detect the importance of accounting information systems, that helps in facilitating decision making and amend organization's environment, structure and requirements of task, furthermore, emphasizes accounting information plays an necessary role in decision making process related to the financial and economic issues such as cost accounting system, management accounting system, price and profitability which provide the useful information to the manager to make the financial and economic decisions, also they a certain that (AIS) played a significant role in survival of organization.

Tan (2016), test the impact of AIS on internal auditors in Turkey, he revealed the importance role of accounting information systems in companies through enable all levels of management to access comprehensive information that goes into the planning and controlling of activities within business organizations. In addition, AIS provide high quality of information to internal and external users and typically cover six main aspects: people, procedures, data, software, information technology infrastructure and internal controls. Hla and Teru (2015), examined the efficiency of accounting information system and performance measures – literature review. The main objective s of many businesses to adopt this system are to improve their business efficiency and increase competitiveness. The qualitative characteristic of any Accounting Information System can be maintained if there is a sound internal control system. Internal control is run to ensure the achievement of operational goals and performance. Therefore the purpose of this study is to examine the efficiency of Accounting Information System on performance measures using the secondary data in which it was found that accounting information system is of great importance to both businesses and organization in which it helps in facilitating management decision making, internal controls ,quality of the financial report ,and it facilitates the company's transaction and it also plays an important role in economic system, and the study recommends that businesses, firms and organization should adopt the use of AIS because adequate accounting information is essential for every effective decision making process and adequate information is possible if accounting information systems are run efficiently also, efficient Accounting Information Systems ensures that all levels of management get sufficient, adequate, relevant and true information for planning and controlling activities of the business organization.

Akanbi and Aruwaii (2018) also examined the impact of accounting information systems (AIS) adoption by manufacturing industries on their general accounting activities and also to estimate the relationship that exist between AIS devices and accounting activities. Regression and correlation analyses were used to analyse and interpret the objectives. The regression model results that F-value ($0.000 < 0.050$) and Adj R² = 0.6970 showed that AIS devices has 68.70% impact on the efficiency of accounting activities in the manufacturing industries if properly implemented. The result of Kendall's correlation matrix showed the statistical coefficient of 62% indicating that there is a strong correlation between dependent and independent variables, the coefficient of determination (R²) = 0.418 revealed that there is a significant relationship in using accounting information system to fast track accounting activities. The tested hypotheses of this study were measured at level of 95% confidence interval. The study concluded that accounting information systems devices are spontaneously and simultaneously appropriate for manufacturing industries engaging in accounting activities, also revealed that there is a significant relationship between accounting activities and Accounting information systems. The study also concludes that accounting information systems adoption in manufacturing firms has the following benefits: facilitation of financial statements preparation, enhancement of inventory valuations, enhancement of budgetary management, and favoring General Accepted Accounting Principles adoption. Therefore, manufacturing firms should embrace more and well-structured accounting information systems to enhance accounting activities.

Theoretical Framework

Contingency Theory

The contingency theory was first proposed by Fiedler in 1964 as managerial leadership theory. According to Fiedler (1964) the contingency theory suggest that there is no one best way of leading and that a leadership style that is effective in one situation may not be successful in others. Gordon and Miller (1976) however laid out the basic framework for considering accounting information systems from a contingency perspective where the accounting information systems also need to be adaptive to the specific decisions being considered within a framework. Contingency theory suggests that an accounting information system need to be adapting to desired specific decisions while considering the environment and organizational structure confronting an organization (Dandago and Rufai, 2014). Applying this to the subject, contingency theory suggests that in order to improve performance, managers of firms must devote particular attention to their use of accounting information system, taking care to adopt the systems best tailored to their special circumstances. There are some criticisms of the Fiedler's contingency theory. However, one of the biggest criticisms of the contingency theory that best relates to the study under review is lack of flexibility (Mitchell, Biglan, Oncken, and Fiedler, 2017). Fiedler (1964) believed that because natural leadership style is fixed, the most effective way to handle situations is to change the leader. The theory does not allow for flexibility in leaders (Mind Tools, 2018). Relating this to the study indicates that managers will incur more cost to change accounting information system that does not tender to their required decision needs rather than carryout modifications.

Resource-based view Theory

The resource-based view theory was propounded by Barney in 1991. According to Barney (1991) the resource-based view avers that the source of sustainable advantage derives from doing things in a superior manner; by developing superior capabilities and resources. The resource-based view proffers a means of evaluating potential factors that can be deployed to confer a competitive edge for business organizations. A key insight arising from the resource-based view is that not all resources are of equal importance, nor do they possess the potential to become a source of sustainable competitive advantage. The resource-based theory is divided into three levels; capability, competence and skills. (Cragg, Caldeira and Ward, 2011). Capability refers to how firms manage their resources; competence, refers to how well those resources are managed, and skills are associated with ranges of skills such as technical, managerial and general management skills. Accounting information systems also form part of resources available to firms. Inclining the resource-based view theory with accounting information systems and performance will imply that firms properly and adequately manage accounting information systems to utilize its capability competence and skill sets for

improved organizational performance. The resource-based view theory has faced several criticisms. One of such criticism is that the theory lacks substantial managerial implications or operational validity (Priem & Butler, 2001). It seems to tell managers to develop and obtain valuable, rare, inimitable, and non-substitutable resources and develop an appropriate organization, but it is silent on how this should be done (Connor, 2002; Miller, 2003). (Lado, Boyd, Wright and Kroll, 2006) also argues the resource-based view theory suffers a tension between descriptive and prescriptive theorizing. However, Barney and Clark (2007) posits that the resource-based view theory is a theory aspiring to explain the sustained competitive advantage of some firms over others and, as such, was never intended to provide managerial prescriptions. In concurrence with this assertion, any explanations the resource-based view theory might provide may not be indicative, yet still of value to managers, so there may be no reason to oblige the resource-based view theory to generate theoretically compelling prescriptions.

Agency Theory

The agency theory was championed by Jensen and Meckling in 1976. The agency theory describes the owners' (principals') delegated authority to manager (the agent) to run the firm on his or her behalf with the owners' welfare depending on the manager accordingly (Jensen and Meckling, 1976). The agency theory seeks to address the potential conflict of interests between owners and managers, because the interests of managers may opportunistically utilize firm resources to satisfy their personal interests (Brammer and Millington, 2008). Basically, firms aim to maximize the wealth of shareholders, and it might be different with personal interest of managers. The agent (managers) might have more relevant information compared with shareholders, the information asymmetry occurs, and this would raise the possibilities that agent can behave in ways to pursue their own interests.

METHODOLOGY

This study employed the longitudinal research design since the research work assesses the impact of the explanatory variables on the dependent variable. The population of the study is all the fourteen (14) oil and gas companies quoted on the Nigerian Stock Exchange before 1st January, 2011 and had been trading till 31st December, 2020. The period covered by the study is ten years from 2011-2020. The study employed census sampling approach, sample of eight (8) oil and gas companies listed on the Nigerian Stock Exchange as at the beginning of 2011 and had traded till 31st December, 2020 and whose annual reports were available during the period under study was adopted as the statistical sample for the study. This includes (Conoil Plc, Eternal Oil Plc, Forte Oil Plc, Japaul Oil and Maritime Services Plc., Mobile Oil Nigeria Plc., MRS Oil Plc, Oando Oil Plc and Total Nigeria Plc. The study used secondary source of data and the data required on the independent and control variables for the study was obtained from the annual reports of the studied oil and gas companies while the data on the dependent variable was obtained from the price list on the Nigerian Stock Exchange respectively. This study used descriptive and panel regression technique in analyzing the data obtained for the research with the help of Stata-13 package.

The proxies that have been used by the study for the output of accounting information system are total assets (TA), working capital (WC), operating assets (OA) and earnings after tax (EAT) while performance management is proxied by the return on equity (ROE). The model is specified based on empirical framework using the variables to be studied as explained.

$$ROE_{it} = \beta_0 + \beta_1 LNTA + \beta_2 LNWC + \beta_3 LNOA + \beta_4 LNEAT + e_{it} \dots \dots \dots (i)$$

Where;

i = Company

t = time period

LNTA = Log of total assets

LNWC = Log of working capital

LNOA = Log of operating assets

LNEAT = Log of earnings after tax

ROE = Return on Equity

RESULT AND DISCUSSION

Table 1: Descriptive Analysis Result

. summarize TA WC OA EAT ROE

Variable	Obs	Mean	Std. Dev.	Min	Max
TA	80	3580.432	10238.55	3.525	50520.55
WC	80	685.9885	1919.708	.173	8279.7
OA	80	2404.194	7143.092	.111	41736.3
EAT	80	.7989375	1.475737	-4.543	4.567
ROE	80	.09767	.5210958	-3.6471	1.001

Source: Stata-13

Table 1 depicts the result of the dependent and independent variables used in the study during the period of the research. The above statistics is obtained using STATA version 13 statistical package. The mean values of TA, WC, OA, EAT and ROE are 3580.4, 685.9, 2404.2, 0.8 and 0.09 respectively. The common feature of these variables is that they all have positive mean values. This means that each of the variables display increasing tendency throughout the sampling period.

Table 2: Panel Regressions Analysis

. regress LNROE LNTA LNWC LNOA LNEAT

Source	SS	df	MS			
Model	1.71821234	4	.429553085	Number of obs =	80	
Residual	19.7335143	75	.263113524	F(4, 75) =	1.63	
Total	21.4517266	79	.271540843	Prob > F =	0.1749	
				R-squared =	0.0801	
				Adj R-squared =	0.0310	
				Root MSE =	.51295	

LNROE	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
LNTA	9.01e-06	.000026	0.35	0.729	-.0000427	.0000607
LNWC	-.0000556	.0001543	-0.36	0.720	-.0003629	.0002518
LNOA	.0000142	.0000176	0.81	0.423	-.0000209	.0000492
LNEAT	.0901355	.0397126	2.27	0.026	.011024	.169247
_cons	-.002573	.0705173	-0.04	0.971	-.1430508	.1379047

Source: Stata-13

Discussion of Findings

The results indicate that the value of the coefficient of determination (R^2) is 0.08. The R-square value is 0.08; and it means that the model has not successfully predicted the variables. This therefore means that other determinants of AIS not considered in this study contribute 92% to the variation of performance of the quoted oil and gas companies in Nigeria during the period under review. The adjusted R-Square is the coefficient of determination which explains the variation in the dependent variable as a result of changes in the independent variables. Therefore, from the result in table 2, the adjusted R^2 was 0.3 implying that there was variation of 3% on the performance of the oil and gas companies quoted on the Nigerian Stock Exchange caused by changes in total assets, working capital, operating assets, earning after tax and return on equity during the period under consideration. The Root MSE value of 0.51295 and the P-Value of 0.1749 as indicated in the table also show that the model is not fit for policy formulation.

Coefficient of earning after tax of 0.09 indicates a positive correlation between earning after tax and performance indicator. Also, the p-value of 0.026 indicates that relationship is significant at 5% significance level. These findings are the same as the output of the Ali et al. (2016) who also found a positive link among the AIS and performance management of the organization. Moreover, the results of the present study are also the same as the results of the Ahmad and Al-Shbiel (2019) who also examined the positive association among the performance management and AIS of the organization. These outputs are also matched with the output of Napatupulu (2018) who also found that the effective organizational culture is necessary for better performance management in the presence of AIS in the organization. Furthermore, these results are also same as the results of Ameen, Ahmed, and Abd

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Hafez (2018) who also found that organizational culture plays a supportive role in the attaining the high-performance management with the help of AIS. Other accounting information system variables (total assets, working capital and operating assets) are found not to be significant.

CONCLUSION AND RECOMMENDATIONS

This study concluded that the oil and gas industry in Nigeria doesn't implemented the effective AIS in their organization that is the reason for the low performance of the management in the oil and gas industries under study. In addition, the organizational culture in the oil and gas industry in Nigeria is not effective and supportive to enhance the impact of AIS on the performance management of the organization. The study further recommends that the organizations should follow the AIS that enhance the performance management along with the focus on the organizational culture that should be effective and supportive to improve the AIS in the organization and enhance the firm performance. This study recommended to the management that they should provide their focus on the accounting information system implementation for the better performance of the organization. This research recommends that management of oil and gas companies in Nigeria should make use of automated Accounting Information System (AIS) known as 'Contract Plus – Financial & Project Accounting' package in their Finance Department. This software will generate financial data to be analysed by the accountants and subsequently used by top level of management for strategic decision making, thus, these managers could identify future opportunities and limitations face by the company and industry. In addition, management of the companies should engage those that are computer literate and highly experienced, they should also be trained with latest information technology ascertained competitive effectiveness of the organization.

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