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## Accounting Information System and Financial Performance of Deposit Money Banks in Nigeria

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### **Abstract:**

*The need for businesses to ensure achievement of set performance objectives and survive the complex, dynamic and highly competitive business environment are among the factors that made Accounting Information System (AIS) relevant in financial performance and business management. Question on the capability of accounting information generated to improve financial performance has been raised in past studies. This study examined the effect of AIS on the financial performance of Deposit Money Banks (DMBs) in Nigeria. The study adopted a survey research design with the employees of all licensed commercial DMBs in Nigeria totaling 100,590 as the study population. The sample size comprised 420 randomly selected staff of 21 commercial DMBs in the operations, information technology, finance and control functions. The data collected through the use of questionnaire were analysed using descriptive and inferential statistics using the ordered logistic regressions. The study established that there was a significant positive effect of AIS on financial performance ( $\beta=1.946, 1.815, 2.596$  and  $4.310$ ;  $W(402) = 5.195, 4.756, 12.872$  and  $26.303$ ;  $p= 0.023, 0.029, 0.000$  and  $0.000$ ;  $R^2 = 0.464$ ). The study concluded that accounting information system contributed significantly to financial performance across all DMBs in Nigeria and that AIS practices are similar in DMBs in Nigeria. The study recommended that management of DMBs should consider improvement of AIS an ongoing process and carry out periodic evaluation of investment in technology relating to accounting information. It also recommended that regulators should improve on policy guidelines on the processing of accounting information that will ensure faithfully represented output.*

**Keywords:** Accounting information system, financial performance, Deposit money banks, Faithful representation, Relevance

### **1. Introduction**

The global economic trends and different economic scenarios emerging all over the world as a result of developments in the adoption of information technology have made Accounting Information System (AIS) relevant as an indispensable tool of performance management. The need by businesses to ensure achievement of set performance objectives and survive the complex, dynamic and highly competitive business environment are other factors that made AIS vital in business management. All over the world, there is increasing reliance on information technology as a result of the needs to improve performance, specifically financial performance of business (Lallo & Selamat, 2013) with this assertion being emphasized by Pathak (2014), Salehi, Rostami and Mogadam (2014), and Al-Jalily and Taha (2010). Financial performance is a vital strategic initiative that can ensure sustainability of an organisation or dwindle the fortune of a business organisation.

According to Ikhide (2008), financial performance of banks has become an important issue in African economies for many reasons ranging from the fact that banks' financial performance has a positive correlation with the growth of the economy in which they operate. The assets of the banking system are very significant and constitute a high percentage of total output in many African economies. The adoption of a sound accounting information system by banks in African economies might lead to a better performance management through an effective and timely use of accounting information provided for managements' use and could translate into improved profitability (Claessens & Laeven, 2004). Coleman (2009), as cited by Eboh, Eke and Agu (2017), opined that managing performance by Deposit Money Banks (DMBs) in Nigeria has been a very important issue for a long time and has gained more attention recently due to high competitive business environment.

According to Modum (1995), Accounting Information System (AIS) refers to "complete collection of business components that comprises entire inputs, gathering and reporting of financial transactions information". Organisations with a well-designed and operating accounting system have the tendency to manage their information, which is one of their most valuable resources. The reason for this is that professionals in managing business have come to term that availability of effective information can be a critical success factor that will enable organisations to have competitive advantage in today's business environment (Esmeray, 2016).

### 1.1. Statement of Research Problem

Accounting information system can be regarded as one of the most vital platforms for financial performance. Managing financial performance plays a key role in enhancing the value of a firm or improving the overall value of an organisation (Chen & Hirschheim, 2004). This is one of the objectives of businesses or goal of management in whose hands the day-to-day running of the business is placed. Achieving this goal or objective often depend on the information relating to the business and its environment. Anyanwu (2010) is of the view that technological developments, particularly in the area of information and communication technology (ICT), are revolutionalising the modalities of conducting banking business in Nigeria. Information technology improves business operations by way of provision of quick search, access and retrieval of information, platform of teamwork and group interaction (Wong, 2005). The adoption of various forms of innovation in accounting information system has significantly affected the efficiency and quality of banking operations provided, leading to improved financial performance.

The problem of not having or enjoying the full benefits of qualitative accounting information system by business organisations is associated with the inability to process accounting information based on best practices with high quality as a focal point to improve financial performance. Hence, there is a need to assess the accounting information system and the accounting information being generated from the system whether they satisfy the qualitative characteristics of accounting information system in such a way that it will improve financial performance.

#### 1.1.1. Research Objective and Hypothesis

The objective of this paper is to examine the effect of Accounting Information System (AIS) on financial performance of DMBs in Nigeria. Arising from this objective, the study hypothesis stated in its null form was tested.

- $H_0$ : There is no significant effect of accounting information system on financial performance of DMBs in Nigeria

## 2. Review of Literature

### 2.1. Conceptual Issues

Several definitions have been made about accounting information system with all bringing out a common objective. Accounting information, according to Borthick and Clark (1990), is a system responsible for the provision of past and future financial information that relates to budgeting for resources and activities, accounting for cost, responsibility assignment/accounting, assets and liabilities, capital and operating expenses, and different income streams of an organisation. According to Hla and Teru (2015), AIS is a combination of all the components that make the entire process of accounting. These components are the procedures, data, software, hardware, personnel, security control and internal control procedures.

Classification of the system gives the users the option and understanding of the type to use in addition with the merits and demerits. In general terms AIS types can be classified using four criteria (Hla & Teru, 2015) which are:

- By Processing Mode – These consist of online real-time systems, online batch systems and batch processing systems,
- By System Objectives - System classification by objectives are three types which are transaction processing systems, decision support systems and expert systems,
- By Interaction with Environment – This can be either open system which allows interactions between its internal elements and the environment or closed system where interaction is shielded from the outside environment and interactions only happened within the specific system, and
- IS by Age - Accounting information system under age classification are manual systems, legacy systems and integrated system. Such systems are built on a source and a turnaround documents.

#### 2.1.1. AIS Characteristics

If accounting information is to achieve its anticipated objectives, reflects its importance and meets its functions, it should have some basic attributes, qualities and properties. These attributes, generally referred to as characteristics, should be outstanding parameters to measure the effectiveness and quality of accounting information. According to Srinivas and Gopiseti (2012), these characteristics have the aim of guiding the accounting administrators in developing accounting standards and also guide the accountants in assessing the accounting information by way of distinguishing between what is necessary and what is not in satisfying the broad users of accounting information. Citing the work of Stambaugh, and Carpenter, (1992) in their book "The roles of Accounting and Accountants in Executive Information Systems", Curtis and Cobham (2008) stated that good and quality information must possess some set of minimum characteristics which are as follows:

- Be provided on timely basis.
- Be presented in an appealing format.
- Be relevant to the decision under consideration.
- Be brief and sufficient in scope to allow "what-if" analysis.
- Be flexible and adaptable with information from other departments.

Researchers (Kanakriyah, 2016; Kanakriyah, 2017; Harash, 2017) on the subject of accounting information system have used different words to explain the characteristics of accounting information system. Kanakriyah (2016), in the research on quality of accounting information, measured accounting information system using three variables to describe the characteristics. These variables are:

- Flexibility: This prescribes the adaptation of accounting information system to the dynamic environment of an organisation.
- Simplicity of Use: It is important to guarantee the provision of a simple system with user-friendly interface and operation.
- Reliability: Accounting information system need to be dependable and reliable in relation to the information extracted from the system.

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". Concepts statement No. 8 clearly makes distinction between the fundamental qualitative characteristics considered to be critical to accounting information and those characteristics that can enhanced the accounting information qualities. Although these enhanced characteristics are less critical, they are still considered vital.

SFAC No. 8 (FASB, 2010) stated that "if financial information is to be useful, it must be relevant and faithfully represents what it purports to represent. The usefulness of financial information is enhanced if it is comparable, verifiable, timely, and understandable".

SFAC No. 8 classified the qualitative characteristics into two broad main categories of Fundamental and Enhanced as follows:

#### 2.1.1.1. Fundamental Qualitative Characteristics

- Relevance –Relevant financial information must be capable of making a difference in the decisions made by users and must have both predictive and confirmatory quality. Materiality is another quality considered under relevancy of information. However, this was not given much emphasis because materiality is subjective and it is user or entity specific.
- Faithful Representation - Faithful representation means that information must faithfully represents what it purports to represent. It is not sufficient for financial or accounting information to be represent certain relevant occurrence in words and number for an entity, it must represent faithfully the relevant occurrence in words and monetary terms. For an accounting or financial information to be a perfect faithful representation, it must be complete, neutral, and free from error.

#### 2.1.1.2. Enhanced Qualitative Characteristics

- Comparability –Comparability is a quality that enhances accounting information by enabling users to understand and identify similarities in, and differences among, items of accounting information.
- Verifiability – Verifiability connotes the ability of users to confirm that accounting information represents faithfully the financial occurrence it purports to represent. It means that different knowledgeable and independent observers or users of the item purported to have been faithfully represented must be able to reach consensus on the representation of the item.
- Timeliness – Timeliness of accounting information is to make it available to decision makers when it will be capable of influencing their decisions.
- Understandability - While some accounting information are naturally complex and difficult to understand, attempt to exclude such information from financial reports to make the financial report easier to understand would make the financial report incomplete and potentially misleading.

However, FASB (2010) stated that information provided by financial reporting may be constrained by the cost of the information. It is important that these costs, which can come in various forms, must be justified by the benefits of reporting or disclosing that information. Although cost is not a qualitative characteristic of information, it is a characteristic of the process used to provide the information.

#### 2.1.2. Financial Performance Concept

Performance can be defined as the achievement of a pre-agreed task measured against pre-set standards of accuracy, completeness, cost, and speed. The pre-agreed task and the pre-set standards must be related in such a way that comparison will be meaningful and motivating. It is the efforts extended to achieve the targets efficiently and effectively which involve the use of human, financial and natural resources. According to Devina and Gupta (2012), performance is a universal term that relates to the conduct of activities of an organisation over a period of time; often with reference to past or projected cost efficiency, management responsibility or accountability. It considers the accomplishment of objectives as well as goals setting for an organisation comparing the present progress with the past in context of the present.

Financial performance is a critical study of various measures observed in the operation of business organisation towards achieving its financial goals. The concept of a business organisation is similar to that of the concept of human body which requires periodic examination to ensure fitness of the body. The financial performance of an organisation has to be assessed periodically. Financial performance refers to the act of performing financial activity in an organisation which may be profit oriented or a non-profit oriented. It is a degree to which financial objectives is being achieved. It is a process that involves an evaluation of actual against desired performance. It also helps in reviewing various factors which influence performance.

It involves establishing processes to assess the results of organisation's policies and operations in monetary terms. Financial performance is used to assess the financial health of an organisation over a period of time, compare similar organisations within the same industry or general comparison of industries or sector, i.e. horizontal or vertical analysis (Eboh, *et al.*,2017). The analysis of financial performance discovers the financial strengths and weaknesses of an organisation by accurately establishing relationships between similar items of the financial statements. Financial analysts often evaluate organisation's financial performance using production and productivity performance, profitability performance, liquidity performance, working capital performance, fixed assets performance, fund flow performance, financial structure or gearing performance and social performance.

## 2.2. Theoretical Framework

The study is anchored on the Socio-Technical theory. This theory was developed by Trist, Bamforth and Emery (1946) and is based on the principle of ETHICS, an acronym for "Effective Technical and Human Implementation of Computer-based System". The theorist argued that the starting point in technology introduction and implementation is work design rather than system design with emphasis on communication between people and technologies. A system should be designed to be effective and meet both the users and organisation's need and this requires a balance between the technical sub-system and social sub-system which are vital components of the organisation.

## 2.3. Empirical Review

Zare and Shahsavari (2012) carried out a study on the ability of accounting information to anticipate risk and concluded that the use of accounting information system had improved the productivity and delivery of many organisations through anticipatory risk management. Awosejo, Ajala and Agunbiade (2014) assessed the level of perception of social and organisational factors and the extent to which accounting information system is adopted by accounting firms in South Africa. It was inferred that usage of accounting information system is accepted fairly within accounting firm in South Africa and the firm were propagating adoption by their clients. Chenhall (2003), while looking at management control design within an organisational context discovered that most organisations failed due to their non-adoption and implementation of accounting information system. Raymond and Magnenat-Thalmann (2011) asserted in their study that accounting reports and information by some companies fall short of minimum standard due to their failure to adopt AIS. They further stated that standardised accounting reports including the financial statements are computerised by accounting information system and where banks failed to adopt this technology, they will have to produce the reports manually. In addition to non-availability of expertise in accounting and timeliness of producing the report results in shoddy accounting reports.

A study by Muhindo, Mzuza and Zhou (2014) examined the effect of accounting information system on profitability level of some companies in Kampala city of Uganda identified that most small-scale companies experienced low level performance and profitability because they lack accounting information system to drive their businesses. Further revelation from the study was that positive relationship exists between accounting information system and level of profit achieved by small scale companies. The research conducted by Akanbi, Fashina and Aruwaji (2017) examining the importance of accounting information system adoption revealed that AIS has a positive correlation with long-term strategic goals, competitive strength and market expansion. The study concluded that the importance of AIS adoption cannot be over emphasised in any business setup as it is evidenced that it will improve non-financial performance like longer-term strategic goals, market expansion and competitive strength. The study by Al-dmour, Al-Fawaz, Al-dmour, and Allozi, (2017) discussed generally on business performance with no reference to financial institution, it confirmed that implementing a proper AIS is an enabler to competitive advantage and causal links were found to exist between AIS and firm performance. Sajady, Dastgir and Nejad (2008), however emphasised that AIS adoption will only be valuable where the benefits outweighed the cost of adoption and ascertained that non-adoption of AIS will not be of negative consequences where the adoption and implementation costs of AIS is in excess of the perceived benefits.

## 3. Methodology

The study employed descriptive survey research design which is predicated on the use of primary source of information. The population of the study was the staff of Commercial Deposit Money Banks in Nigeria. The Central Bank of Nigeria licensed 21 Commercial Deposit Money Banks as at May, 2018 and their staff of 100,590 (as at June, 2018) were considered and a sample size of 420 employees were purposively and randomly selected with minimum of 14 and maximum of 23 employees selected from each bank. In collecting the primary data, a structured questionnaire, on a 5-point Likert scale, which passed the reliability and validity test, was used and administered on the sampled employees. Descriptive and inferential statistics were used to analyse collected data. The descriptive statistics use the means, standard deviation and simple percentages of the variables while inferential statistics use the ordinal logistic regression.

### 3.1. Model Specification

The following constructs were applied:

Dependent Variable (Y) = Financial Performance (FPER)

Independent Variable (X) = Accounting Information System (AIS)

The above is expressed mathematically as  $Y = f(X)$

Where  $x_1 = \text{AISR} = \text{AIS Relevance}$

$x_2 = \text{AISF} = \text{AIS Faithful Representation}$

$x_3 = \text{AISV} = \text{AIS Verifiability}$

$X_4 = \text{AIST} = \text{AIS Timeliness}$

$\text{FPER} = f(\text{AISR}, \text{AISF}, \text{AISV}, \text{AIST}) \dots \dots \dots \text{Functional Relationship}$

Hence,  $\text{FPER} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_{it} \dots \dots \dots \text{Equation}$

Where:

$\beta_0 = \text{Constant}$

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

$\epsilon_{it} = \text{Error term}$

#### 4. Result and Discussion

S/N	Test Items		SA 5	A 4	UD 3	D2	SD 1	Mean	SDE
1	Accounting information system in the bank provides additional analytical and statistical data and trend charts.	Freq %	240 59.7	151 37.6	10 2.5	1 0.2	0	4.57	0.55
2	The bank management considers the observed trends in accounting information as an important means and instruments in planning and assessing the financial performance of the bank.	Freq %	109 27.2	283 70.6	7 1.7	2 0.5	0	4.24	0.50
3	Accounting information provides reports about different administrative levels performance at appropriate time.	Freq %	214 53.2	163 40.5	22 5.5	1 0.2	2 0.5	4.46	0.66
4	Reliance on and usage of the accounting information by the bank managers and management enhances financial performance, planning and execution in the bank.	Freq %	117 29.1	273 67.9	9 2.2	3 0.7	0	4.25	0.53
5	Financial planning of the bank is processed on the basis of information provided by the accounting information system.	Freq %	227 56.6	161 40.1	11 2.7	1 0.2	1 0.2	4.52	0.59
6	The accounting information system of the bank provides predictable financial information which assist the management in their financial performance planning.	Freq %	190 47.3	206 51.2	6 1.5	0	0	4.46	0.53
	Average Mean							4.42	0.56

Table 1: Responses on Accounting Information System and Financial Performance

Source: Field Survey, 2018 (SPSS Output)

Note: SDE = Standard Deviation, SD = Strongly Disagree, D = Disagree, U = Undecided,

A = Agree, SA = Strongly Agree.

Table 1 presents the responses of respondents on financial performance in deposit money banks in Nigeria. On the whole, the average mean of 4.42 implies that the level of dependency of financial performance of the deposit money banks in Nigeria on accounting information is high and that the standard deviation of 0.56 further suggests that the responses of the respondents to the test items on financial performance were not likely to change over time.

Twenty (20) test items were used to assess the four (4) proxies of AIS, the independent variable, and the summary of the responses are as stated in Table 2.

AIS Proxy	No. of Test Items	Overall Mean Score	Standard Deviation
Relevance	6	4.35	0.61
Faithful Representation	5	4.35	0.62
Verifiable	4	4.33	0.62
Timeliness	5	4.33	0.62

Table 2: Summary of Responses on 4 Proxies of the Independent Variable

Source: Field Survey, 2018 (SPSS Output Summary)

The overall mean score, out of possible 5 point, of each proxy indicates that there is a high-level assurance that accounting information generated by DMBs in Nigeria can stand the fundamental and enhanced characteristics of relevance, faithful representation, verifiability and timeliness of AIS. Furthermore, the standard deviations which are between 0.61 and 0.62 indicate that there is no material variation in the responses on each of the proxies, a confirmation that that respondents' responses are less likely to change over time. It also suggests that the AIS practice in DMBs in Nigeria are similar.

#### 4.1. Model Evaluation and Hypothesis Testing

Dependent Variable: Financial Performance –FPER

Model:  $FPER = \beta_0 + \beta_1 AISR + \beta_2 AISF + \beta_3 AISV + \beta_4 AIST + \epsilon_{it}$

- Hypothesis:  $H_0$ : There is no significant effect of accounting information system on financial performance of DMBs in Nigeria

Panel A				
Variable	Coefficient	Exponent of Coefficient	S.E	Wald- Test
Constant: Threshold				
[FPER= 3.00]	9.828		1.526	41.473***
[FPER= 4.00]	16.069		1.554	106.914***
Coefficients: Location				
AISR	0.666	1.946	0.292	5.195**
AISF	0.596	1.815	0.273	4.756**
AISV	0.954	2.596	0.266	12.872***
AIST	1.461	4.310	0.285	26.303***
<b>Panel B</b>				
Diagnostic Tests			Statistic	Prob
Model Fitting Information			171.125	0.000
Goodness of Fit				
Pearson			54.937	0.216
Deviance			77.198	0.208
Pseudo R-Square			0.464	
Test of Parallel Lines			7.682	0.104

Table 3: Model Evaluation - Effects of Accounting Information System (AIS) on Financial Performance of Dmbms In Nigeria

Notes: FPER is financial performance and it represents the dependent variable, the independent variables are AISR is accounting information system of relevance, AISF represents faithful representation of accounting information system, AISV denotes accounting information system of verifiability and AIST stands for accounting information system on timeliness. \*, \*\* and \*\*\* indicates statistical significance at 10, 5 and 1 per cent respectively.

##### 4.1.1. Interpretation

Panel A of Table 3 shows the estimated parameters, and it was discovered that all the four measures of accounting information systems of relevance, faithful representation, verifiability and timeliness coefficients (0.666, 0.596, 0.954, and 1.461) were positive. This implies that accounting information system of relevance, faithful representation, verifiability and timeliness have a direct relationship with financial performance of deposit money banks in Nigeria. The exponents of the estimated parameters for relevance, faithful representation, verifiability and timeliness are given as 1.946, 1.815, 2.596 and 4.310 respectively. This implies a unit increase in accounting information system of relevance, faithful representation, verifiability and timeliness will lead to 1.946, 1.815, 2.596 and 4.310 increases in financial performance of deposit money banks, respectively.

In addition, concerning the statistical significance of the estimated parameter, using the *Wald*-statistic, it was found that accounting information system of relevance, faithful representation, verifiability and timeliness have significant relationship with financial performance of deposit money banks at 1 and 5 per cent level of significance. This implies that accounting information systems of relevance, faithful representation, verifiability and timeliness ( $p = 0.023, 0.029, 0.000$  and  $0.000$ ) are significant factors influencing changes in financial performance of money deposit banks in Nigeria.

The Pseudo  $R^2$  which measure the proportion of the changes in financial performance as a result of changes in accounting information system of relevance, faithful representation, verifiability and timeliness, shows that accounting information systems of relevance, faithful representation, verifiability and timeliness explain about 46 per cent changes in financial performance, while the remaining 54 per cent were other factors explaining changes in financial performance but were not captured in the model.

In Panel B of Table 3, the model fitting information of 171.13 is significant at 1 per cent level; this implies that the final model gives a significant improvement over the baseline constant model. The two goodness of fit statistic of 54.937 and 77.198 are not significant at any level, thus the non-rejection of the null hypothesis is that the fit is good. This implies that the data and the model predictions are similar and that it is a good model. The statistics for the test of parallel lines is given as 7.682. This value is not significant, which implies that the null hypothesis assumption that the slope coefficients are the same across response categories cannot be rejected. Thus, the proportional odds assumption holds for general model.

##### 4.1.2. Test of Hypothesis

The hypothesis was tested based on the *Wald*-statistics (Coefficient sign and statistical magnitude) in Table 3 from the estimated ordered logistic regression model. The results presented in table 3 are used to test the hypothesis and this was summarised in Table 4.

	Evaluation Results
Sign	+
Prob. Values	0.000
Null Hypothesis	Reject

Table 4: Summary of Testing Results

#### 4.1.3. Decision

The summary of results in table 4 shows that accounting information characteristics of relevance, faithful representation, verifiability and timeliness have a combined positive and significant relationship with the financial performance of deposit money banks in Nigeria.

From the analysis, at 1 percent significant level, the model fitting information is 171.125 while the p-value is 0.000 which is less than 0.01. Thus, the study rejects the null hypothesis that there is no significant effect of accounting information system on financial performance of DMBs in Nigeria and the alternative hypothesis that there is significant effect of accounting information system on financial performance of DMBs in Nigeria is accepted.

#### 4.2. Discussion of Findings

The result of this study confirmed that AIS has positive and significant effect on financial performance of DMBs in Nigeria. The study is in conformity with Akanbi, *et al.* (2017), and Al-dmour, *et al.* (2017) which concluded that AIS has a positive correlation with long-term strategic goals, competitive strength and market expansion; and that implementing a proper AIS is an enabler to competitive advantage and a causal link exist between AIS and firm performance, respectively.

### 5. Conclusion and Recommendations

#### 5.1. Conclusion

This study investigated the effect of accounting information system on financial performance of deposit money banks in Nigeria with reference to the commercial banks which control the larger proportion of the banking activities in Nigeria. The study model, evaluated using the Ordered Logistic Regression (OLR), revealed positive relationship between the dependent variable and the explanatory variables. There is a strong positive agreement that the level of dependency of financial performance on accounting information system is high.

The findings also provide insight that the two fundamental accounting information characteristics of relevance and faithful representation together with the two of the enhanced characteristics of verifiability and timeliness are of high importance and are entrenched in the practice of accounting information system in the DMBs in Nigeria. There is similarity in the adoption and application of accounting information system across the DMBs in Nigeria as depicted by the standard deviation of the responses to the test items.

The probability value (p-value) of the study model is 0.000 and less than the alpha value –  $\alpha$  (significant value) of 0.01. This study concluded that accounting information system, as measured by its qualitative characteristics have positive and significant relationship with financial performance of DMBs and as such the null hypothesis was rejected while the alternative hypothesis was accepted.

#### 5.2. Recommendations

Management of DMBs should consider improvement of accounting information system as an ongoing process and should not be stopped after achievement of success at a specific phase. It is important to constantly update the accounting information system to be at par with the accelerating developments in the modern business environment. A periodic evaluation of investment in technology, specifically those relating to accounting information, should be carried out and ensure that adequate mechanisms are in place for storage and archiving of accounting information. Regulators should improve on policy guidelines on the processing of accounting information that will ensure output of information that will faithfully represents the reality about the operations of the DMBs.

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## Appendix

## SPSS Output of Ordinal Regression for Test of Hypothesis

Notes		
Output Created		19-NOV-2018 11:17:57
Comments		
Input	Data	C:\Users\USER\Desktop\akinrinola\Workfile.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	402
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		PLUM finperf WITH relevance faithrep verifiable timeliness /CRITERIA=CIN (95) DELTA (0) LCONVERGE (0) MXITER (100) MXSTEP (5) PCONVERGE (1.0E-6) SINGULAR (1.0E- 8) /LINK=LOGIT /PRINT=FIT PARAMETER SUMMARY TPARALLEL.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

Table 5: Hypothesis 1 PLUM - Ordinal Regression  
[DataSet1] C:\Users\USER\Desktop\akinrinola\Workfile.sav

Warnings
There are 56 (50.5%) cells (i.e., dependent variable levels by combinations of predictor variable values) with zero frequencies.

Table 6

Case Processing Summary			
		N	Marginal Percentage
finpe rf	3.00	2	0.5%
	4.00	167	42.4%
	5.00	225	57.1%
Valid		394	100.0%
Missing		8	
Total		402	

Table 7: Case Processing Summary

<b>Model Fitting Information</b>				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	293.490			
Final	122.364	171.125	4	.000
Link function: Logit.				

Table 8: Model Fitting Information

<b>Goodness-of-Fit</b>			
	Chi-Square	df	Sig.
Pearson	54.937	68	.216
Deviance	77.198	68	.208

Table 9: Goodness-of-Fit

Link Function: Logit

<b>Pseudo R-Square</b>	
Cox and Snell	.352
Nagelkerke	.464
McFadden	.306
Link function: Logit.	

Table 10: Pseudo R-Square

<b>Parameter Estimates</b>									
		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval		Exponent of Estimated Parameter
							Lower Bound	Upper Bound	
Threshold	[finperf = 3.00]	9.828	1.526	41.473	1	.000	6.837	12.819	
	[finperf = 4.00]	16.069	1.554	106.914	1	.000	13.023	19.115	
Location	relevance	.666	.292	5.195	1	.023	.093	1.238	1.946
	faithrep	.596	.273	4.756	1	.029	.060	1.132	1.815
	verifiable	.954	.266	12.872	1	.000	.433	1.476	2.596
	timeliness	1.461	.285	26.303	1	.000	.903	2.020	4.310
Link function: Logit.									

Table 11: Parameter Estimates

<b>Test of Parallel Lines<sup>a</sup></b>				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	122.364			
General	114.682	7.682	4	.104

Table 12: The Null Hypothesis States That the Location Parameters (Slope Coefficients) Are the Same across Response Categories  
a. Link Function: Logit.