Volume 7, Issue 3, 2024 (pp. 99-116)



# ACCOUNTING INFORMATION SYSTEM AND FINANCIAL REPORTING QUALITY OF QUOTED SERVICE COMPANIES IN NIGERIA

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#### Cite this article:

Onaolapo A. R., Fasina H. T., Olayemi O. O. (2024), Accounting Information System and Financial Reporting Quality of Quoted Service Companies in Nigeria. African Journal of Accounting and Financial Research 7(3), 99-116. DOI: 10.52589/AJAFR-5ZC6OSZS

#### **Manuscript History**

Received: 12 May 2024 Accepted: 5 Jul 2024 Published: 24 Jul 2024

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**ABSTRACT:** AIS is seen as a significant organizational mechanism but it can only be of benefit to organizational operations, including the Quality of Financial Reporting (QFR) produced if the right factors are well integrated and operated harmoniously. Therefore, the study examined AIS and QFR of listed service companies in Nigeria. The study adopted crosssectional survey research design. Primary data was employed through a questionnaire which was administered on 256 respondents. Variables used included Information Quality (IQ), Service Quality (SERVQ), faithful representation, relevance, understandability and timeliness. The study adopted the use of structural equation modeling for data analysis. The findings revealed that IQ has a significant effect on QFR while SERVQ has no significant and negative effect on QFR. It is therefore recommended that organizations should ensure that they maintain good information quality which should start from the point of data collection from different sources to the point of final preparation of the financial reports.

**KEYWORDS:** Accounting information system, DeLone and McLean Model, Financial reporting, Information quality, Service quality.

Article DOI: 10.52589/AJAFR-5ZC6OSZS DOI URL: https://doi.org/10.52589/AJAFR-5ZC6OSZS

Volume 7, Issue 3, 2024 (pp. 99-116)



## INTRODUCTION

# **Background to the Study**

Continuous evolution and integration of information technology have led to progressive changes in different sections of organizations, including the accounting section. One of the major technologies being used to leverage processes in an organization is an Accounting Information System (AIS). AIS is a system that uses information technology to collect, process, and convert financial data to financial information used for decision-making. According to Al-Dalaien and Dalayeen (2018), AIS is a system that identifies, measures, analyzes, prepares, interprets, and communicates accounting information of an entity to its users.

The use of AIS is to simplify the processes of gathering data, processing it into various information, and seamless dissemination of information to different groups of users for decision-making. It is likewise asserted by Teru, Idoku and Ndeyati (2017) that the key function of an accounting information system is to give the quantitative worth of the previous, present, and future economic activities. The system processes and transforms data into accounting information that is used by different users according to their various information needs. It is asserted by McLeod and Schell (2007) that the integration of AIS is not limited to components of hardware, software, Brainware, communication networks, databases and procedures but also involves the information quality and service quality of the system. A high-quality financial reporting becomes achievable when these factors are successfully combined.

Financial reporting is the presentation of the information about the financial performance and position of an entity to the users, shareholders, potential investors, and other interested stakeholders. According to Nwaobia, Kwarbai and Ajibade (2016), the major qualities of corporate financial reporting in line with accounting standards are relevance and faithful representation including enhancing qualities such as timeliness and understandability. The relevance quality of the financial reporting relates to the ability of the information in the reporting to influence users in their decision-making based on past and present events. Faithful representation is the ability of financial reporting to provide information that is true, fair, free from error and can be depended upon by the users. It is submitted by Hall (2011), that how useful the accounting information is to the user depends on the extent of the reliability and relevance of the information, and such information is said to possess those qualities when it has the attributes of completeness, confirmatory, accuracy, and conciseness.

It is asserted by Adebayo and Adebiyi (2016) that the timeliness of financial reporting means presenting financial accounting information to its users when they need it. This is because the information loses its benefit if it is not available when it is needed. The accounting information will be more beneficial to its users if the time between the end of the accounting year and the publication date is shorter. Understandability means that the information in the financial reporting should be easily comprehensible for users in a way that would help them to make informed decisions. It is asserted by Salehi, Rostami and Mogadam (2010) that AIS is a key factor that affects the quality of financial reporting in an organization. The extent that listed companies in Nigeria have been able to integrate AIS towards improving the quality of their financial reporting has not been exhaustively examined in current academic literature. The service sector in Nigeria is identified as a very important sector that has the tendency to stimulate economic growth and contributes largely to the employment rate. This study therefore examines AIS and quality of financial reporting of quoted service companies in Nigeria.

Article DOI: 10.52589/AJAFR-5ZC6OSZS

Volume 7, Issue 3, 2024 (pp. 99-116)



#### **Statement of the Problem**

According to extant literature, AIS is seen as a significant organizational mechanism but it can only be of benefit to organizational operations if the right factors are well integrated and operated harmoniously. These factors include information quality in terms of completeness, accuracy and correctness of data and service quality, that is, the level of excellence in rendering services to users (Wilkin & Tayan, 2013). These aforementioned factors in turn have effect on and determine Quality of Financial Reporting (QFR) produced by the AIS. It is opined by Adeyemi and Ashaolu (2013) that financial reporting is expected to remove the information asymmetry between the organization and potential investors as well as regulatory organizations. However, in spite of the significance of these factors, Mahboub (2017) observed that financial reporting made available by service companies has remained insufficient.

Poor information quality would reduce the quality of financial reporting produced by AIS and this, according to Xu (2009), may be in the form of data that are not complete, inaccurate and not correct which could have adverse effects on the competitiveness of a firm. In the same vein, Emeka-Nwokeji (2012) posited that the failure of many organizations is due to wrong and misleading information from the AIS. Likewise, Ogah (2013) claimed that information that lacks the requisite qualities could as well lead to wrong decision-making. This is also affirmed by Lee and Strong (2003) that information production processes, which is a synchronization of data collection, storage and utilization, must work properly to achieve high information quality. Furthermore, service quality has a bearing on financial reporting quality and evidence from literature such as Lam, Than and Pharm (2014), Shatat *et al.* (2013) and DeLone and McLean (2016) who suggested that service quality is a key element of AIS which must be properly maintained to ensure the effectiveness and efficient functioning of the AIS, thus leading to producing quality financial reporting.

Previous studies (Grande, Estebanez & Colomina 2011; Onaolapo & Adetayo, 2012; Ramdany, 2015; Sutriani & Jumaidi, 2019; Rosa Purfini, 2019) emphasized the use of AIS for organizational control and performance, decision-making and profitability, and their focus was on the financial sector and the Small and Medium Enterprise (SMEs). Paucity of academic literature on the connectivity between AIS and QFR in the Nigerian service sector makes it imperative to undertake the current study. Specifically, the study postulates two hypotheses;

**Ho1:** Information quality has no effect on the quality of financial reporting of listed service companies in Nigeria

**Ho2:** Service quality has no effect on the quality of financial reporting of listed service companies in Nigeria.

## Significance and Scope of the Study

Different researches have been concluded on Accounting Information Systems (AIS) and Quality of Financial Reporting (QFR) within the Nigerian industrial sector. However, most of the studies have their focus on the nexus between these variables: profitability, internal decision-making and organizational performance. Besides, most studies in the foreign climes emphasized connection between the variables within the financial sector and the SMEs, the service sector has not been greatly explored. The present study will contribute to the existing body of knowledge on AIS and QFR and serve as a reference for more studies on this topic. The work is limited to listed service companies on the Nigerian Exchange Group (NGX). A

Article DOI: 10.52589/AJAFR-5ZC6OSZS

Volume 7, Issue 3, 2024 (pp. 99-116)



carefully designed questionnaire administered on randomly sampled respondents for the study drawn from among the sampled service companies and auditors from the sampled audit firms. The independent variable is AIS, proxied by information quality and service quality. The dependent variable is QFR, proxied by faithful representation, relevance, understandability and timeliness.

This section is an introduction to the study, while the section two is on literature review. Section three is on the methodology employed for the study. Section four is on results and discussion of findings while section five focuses on conclusion, and recommendations based on findings of the study.

## LITERATURE REVIEW

# Accounting Information System, Information Quality and Service Quality

Accounting Information System (AIS) is a system which collects and records data from their environments, processes and analyzes it into information. AIS is designed and developed to operate in synchronization with the situations that are relevant to the organization, (Kieso, Weygandt & Terry, 2011). According to Laudon and Laudon (2012) and Hall (2011), AIS helps management to plan and control processes, and provide information that is relevant and reliable for decision making. Zariyawati and Annuar (2010) posited that AIS assists in analyzing and monitoring the financial condition of organizations, preparing documents necessary for tax purposes, and providing information that will support other organizational functions such as production, marketing, human resource management, and strategic planning.

However, most of these definitions and assertions from literature about AIS are centered around the integration, functioning and use of AIS to improve the internal operations of an organization. That is, to enhance the quality of the information generated by the systems to assist in the planning, controlling, monitoring, and overall management of the organization. In this study, AIS is defined as the combination of technologies, accounting standards and human resources to process and prepare various information, including the financial reporting for use by internal and external users. This definition encapsulates the use of financial reporting produced, as well as the AIS put in place to ensure perfection toward making informed decisions by external users.

Romney and Steinbart (2015) opined that information is the data that has been organized and processed to give meaning to the user; and as a major resource in organizations, quality information is believed to be a critical success factor (Wang, 2006). DeLone and Mclean (1992; 2003) submitted that information quality is the quality of the output produced by the system and by implication measured based on completeness, timeliness, accuracy, and relevance. As submitted by McLeod and Shell (2007) and Romney and Steinberg (2012), the criteria of quality information is the information being appropriate for the user and has a distinctive feature that meets or even exceeds the expectations of the users and that the information should be timely, accurate, complete and relevant. According to Clikeman (1999), information should be relevant, reliable, timely and not costly, while Nelson, Todd and Wixom (2005) claimed information attributes are completeness, accuracy, currency and format. Hong (2016) considered relevance and faithful representation are considered as primary while consistency and comparability are secondary.

Article DOI: 10.52589/AJAFR-5ZC6OSZS

Volume 7, Issue 3, 2024 (pp. 99-116)



Service quality is the level of excellence and satisfaction users experience about a service they used. It is also their expectations or their perceptions about the service after using it. The service quality dimension is a common construct in information system research and it is a key determinant of AIS effectiveness together with other constructs like the information quality and system quality (DeLone & McLean, 2003). DeLone and McLean (2003) further opined that service quality can be measured with assurance, responsiveness, reliability, empathy, and tangibility. However, Kwan (2006) claimed that service quality is a reflective construct and measured it with three first-order dimensions, which are responsiveness, assurance, and empathy. Responsiveness is the promptness with which the system responds to user(s)' demands. Assurance is the ability of the employees of the IT to inspire trust and confidence in system user(s). Empathy refers to the individualized attention that the service unit staff offers to the system user(s). Many of these constructs are also adopted by the study, based on previous literature findings.

# **Quality of Financial Reporting**

Financial reporting refers to presenting the financial status of an organization to its different users. The quality of financial reporting is the extent to which it contains useful information needed by its various users and this is predicated on the fact that the information presented must be reliable, relevant, free from material error and complete. A high-quality financial reporting helps to reduce or remove information asymmetries and enhance investors and stakeholders' confidence in the financial assessment of an organization. Financial reporting has been defined differently according to scholars. Beest *et al.* (2009) defined quality of financial reporting as a broader concept th04at not only refers to financial information but also disclosure and other non-financial information useful for decision-making. According to Cheung, Evans and Wright (2010, p.160) quality depends on "for whom the information is prepared" and "for what purpose" while Alwardat (2019) posited that quality of financial reporting constitutes an important attribute of financial reporting.

Investors' confidence in the credibility of these reports and whether they present the truth about the performance of publicly held companies will influence their perceptions and direct their investment decisions. Quality of financial reporting has been viewed differently and has been defined in various ways, such as adequate, comprehensiveness (Wallace *et al.*, 1994), depth (Naser, Nuseibeh, & Al-Hussaini, 2003, p.604), 'the degree of compliance with mandatory disclosure where "high degree of compliance and more disclosure is viewed as better quality" (Naser *et al.*, 2003) and the extent of the number of items disclosed' (Palmer, 2008). This study adopts the perception that quality of financial reporting refers to the extent of its faithful representation, relevance, understandability and timeliness from the viewpoint of the users.

## **Theoretical Framework**

Different theories have been related to Accounting Information System (AIS), including technology acceptance model, signaling theory, contingent theory and DeLone and McLean model. However, contingency theory and DeLone and McLean model have become prominent in AIS literature because of their applicability in its measurement and this study is anchored on the two theories. The contingency theory was propounded by Otley in 1980 and expanded by Tiessen and Waterhouse in 1983 with the assertion that how an organization is structured is based on its technology and environment. Contingency theory submitted that organizations are managed differently and that accounting information systems need to be structured within the

Article DOI: 10.52589/AJAFR-5ZC6OSZS

Volume 7, Issue 3, 2024 (pp. 99-116)



adaptive framework that synchronizes with the environment and structure of the organization. The theory applicable to AIS is because there is no universally acceptable AIS, each organization integrates its own AIS according to its needs and strategy. DeLone and McLean have been applied by different studies to measure the effectiveness of AIS. The model was adopted for the study because two variables from the model which are information quality and service quality were adopted from it. Information quality is one of the important quality dimensions of DeLone and McLean model while service quality is used when the AIS is considered as a whole and not as a single unit.

## **Empirical Review**

Anuruddha and Mahanamahewa (2020) studied the effectiveness of the Accounting Information System and Public Financial Reporting Quality. The research used data from primary sources which were collected from ministries and departments in the central government, Sri Lanka. Multiple linear regression models were used to analyze the data. The study discovered that the scope, timeliness, and aggregation of AIS significantly influence the quality of public financial reporting. However, the limitation of this study is that the respondents are staff of the ministries, therefore their sincerity in responding to the questionnaire cannot be totally guaranteed.

Ahmed (2019) worked on the impact of accounting information systems quality on accounting information quality. Variables examined for accounting information systems included flexibility, ease of use, integration, fast response time while the variables examined for accounting information quality included comparability, accuracy, consistency, and clarity. A sample size of 40 employees was selected from Asia Cell Telecommunication company. The results revealed that the accounting information system has a significant impact on accounting information quality. However, the outcome of this research cannot be relied on as only one company is used for the study which is not enough to make a bold generalization of the effect of accounting information systems on accounting information quality.

Elsharif (2019) focused on the impact of AIS elements on the relevance of financial information in Banks in Libya. Findings from the correlation and regression analyses of the study revealed that three AIS elements; people, data and internal controls have positive impact on the relevance of financial information. However, the study used only one variable to measure quality of financial reports which is not enough. Ogundajo, Osinowo, Adeoye and Olagunju (2022) studied the effect of digitalized accounting system on the understandability quality of the financial reports of manufacturing firms in Nigeria. Primary data were used and were collected from 365 respondents. Multiple regression was used for the analysis. The result showed that a digitized accounting system has a significant effect on the quality of financial reporting of manufacturing firms in Nigeria.

Itang (2021) worked on computerized accounting systems and financial reporting quality of Small and Medium Enterprises (SMEs) in Nigeria. The independent variable is computerized accounting systems and it is proxied by internal controls, automated data-processing, relational database, automated reporting, and enhancing technologies while the dependent variable is financial reporting quality and was measured by faithful representation, relevance, understandability, comparability, and verifiability. The study's findings from data collected from 370 SMEs showed that computerized accounting system usage has a positive and significant relationship with financial reporting quality.

Article DOI: 10.52589/AJAFR-5ZC6OSZS

Volume 7, Issue 3, 2024 (pp. 99-116)



Kanakriyah (2016) examined the effect of using accounting information systems on the quality of accounting information. The study used primary data through structured questionnaires. The result indicated that the accounting information system has a significant influence on companies' profitability. Ironkwe and Nwaiwu (2018) studied the effect of accounting information systems on financial and non-financial measures of companies in Nigeria. Their work used 10 companies on which 150 questionnaires were administered. Variables used in the study included sales growth, return on capital employed, internal control mechanism and timely financial transaction process. Their findings showed that accounting information has a significant positive effect on financial and non-financial performance of companies in Nigeria.

# **Conceptual Framework**

Accounting information system (AIS) is the independent variable and its proxies are information quality and service quality. Information quality and service quality are adopted from the updated DeLone and McLean model (2003) on information system success. These constructs are selected because they are important quality dimensions in evaluating the effectiveness of AIS (DeLone *et al.*, 2003; Shagari *et al.*, 2017). Quality of Financial Reporting (QFR) is the dependent variable and it is proxied by relevance, faithful representation, timeliness and understandability. The variables are derived from the qualitative characteristics of the financial reporting as stated in the International Accounting Standard Board (2018). Relevance and faithful representation are the fundamental qualitative characteristics while timeliness and understandability are the enhancing qualitative characteristics of financial reporting. Figure 1 depicts the conceptual framework for the work.

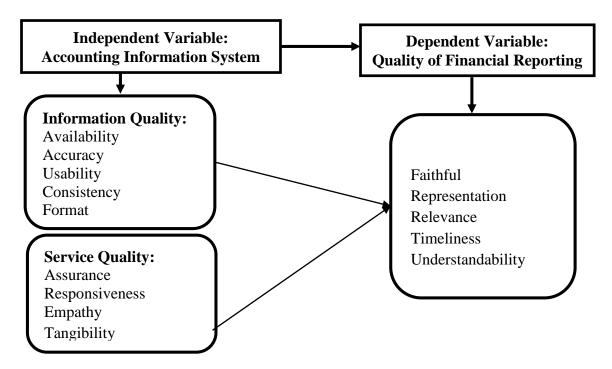


Figure 1: Conceptual Framework for the Study

Source: Authors' Compilation, 2024.

Volume 7, Issue 3, 2024 (pp. 99-116)



## **METHODOLOGY**

# **Area of Study**

The study area consisted of companies that are in the service sector which are quoted on the Nigeria Exchange Group (NGX). The service sector comprises twenty-five companies (NGX Website, 2021). The service sector is considered for this study because the focus of most research has been on the financial sector and the manufacturing sector of the non-financial sector.

# **Research Design**

This study made use of a cross-sectional survey research design. The design is adopted for the study because it involves collection of information from a sample size once at different locations though at the same period (Al-Okaily, 2020; Olaniyan, Ojo & Taiwo, 2018).

## **Study Population, Sampling Technique and Sample Size**

The population of the study consisted of companies in the service sector that are quoted on the Nigerian Exchange Group (NGX) which is made up of twenty-five companies (NGX, 2021). Auditors from large audit firms also constituted the population from where a sample was selected. The size and the workforce of the audit firms were considered before selecting them. Purposive sampling techniques were used to select 15 service companies which constituted the sample size for the study. The 15 companies selected are those that have been consistently listed on NGX from five years upward, after the introduction of International Financial Reporting Standards (IFRS) in 2012 in Nigeria. Respondents are drawn from the staff of the finance/accounting department of the selected firms. The staff of this department were selected because they prepare financial reports and make use of AIS. 10 copies of questionnaires were administered to each of the fifteen service companies, giving a total number of 150 respondents. Furthermore, a convenience sampling technique was employed to select 35 auditors from each of the audit firms used for study; this gave a total number of 140 auditors. This gave a total number of 290 respondents used for the study.

## Sources of Data and Method of Data Collection

Primary data was adopted for the study. The use of primary data is consistent with the work of Elsharif (2019) and Mardi *et al.* (2020). The decision to use primary data was to elicit information from the respondents on AIS and quality of financial reporting. The questionnaire used for the study was administered to respondents from the selected firms. The structure of the questionnaire was premised on a 5-point Likert scale and designed in alignment with related studies to ensure their validity and reliability. The questionnaire was divided into two sections; section A was on the demographic information of the respondents while section B was developed to address a specific objective of the study. The first part was on Accounting Information System (AIS) while the second part was on the Quality of Financial Reporting (QFR). The questionnaire was administered through the use of Google form and research assistants.

Article DOI: 10.52589/AJAFR-5ZC6OSZS

Volume 7, Issue 3, 2024 (pp. 99-116)



## **Reliability and Validity Tests**

Both the reliability and validity of the research instrument were checked. The validity test was carried out to ascertain whether the instrument which is the questionnaire measures what they are expected to measure. The reliability test was to check the accuracy and the consistency of the instrument. The tests that were done included Cronbach alpha testing, consistency review, and pilot testing.

# **Description and Measurement of Constructs**

Table 1 shows the measurement of constructs used for the study. The table shows how each of the constructs was measured and their sources.

Table 1: Constructs, Measurement Items and Sources

Independent Variable: Accounting Information System					
Constructs	Measurement Items	Sources			
Information Quality	Availability, accuracy, consistency, usability, format	DeLone <i>et al.</i> , (2003), Gable <i>et al.</i> , (2008), Iivari (2005)			
Service Quality	Assurance, Responsiveness, Empathy, Tangibility	DeLone <i>et al.</i> , 2003; Shagari <i>et al.</i> , 2017			
Dependent Variable	e: Quality of Financial Reporting				
Faithful	Freedom from material error, completeness.	Beest et al., 2013; Agienohuwa			
Representation		& Ilaboya, 2018; Mbobo <i>et al.</i> , 2016.			
Relevance	Confirmatory value, Predictive value,	Beest <i>et al.</i> , 2013; Agienohuwa & Ilaboya, 2018; Mbobo <i>et al.</i> , 2016.			
Timeliness	Audit lag, Total lag.	Beest <i>et al.</i> , 2013; Agienohuwa & Ilaboya, 2018; Mbobo <i>et al.</i> , 2016.			
Understandability	Format, Clarity	Beest <i>et al.</i> , 2013; Agienohuwa & Ilaboya, 2018; Mbobo <i>et al.</i> , 2016.			

Source: Authors' Compilation, 2024.

# **Method of Data Analysis**

To test the hypotheses and analyze data, both descriptive and inferential statistics were used. Descriptive statistics used included percentage frequency and standard deviation while inferential statistics was Structural Equation Modeling (SEM) which was used to examine the effect of Information Quality (IQ) on QFR and the effect of Service Quality (SERVQ) on QFR. The model was carried out at two stages which are the measurement model and the structural model.

Volume 7, Issue 3, 2024 (pp. 99-116)



## **RESULTS**

The study made use of two different sets of questionnaires and of respondents respectively. Questionnaires on AIS were administered on the first set of respondents and they were only for staff using the AIS in the selected companies. The second set of respondents were the auditors and they were administered a questionnaire on Quality of Financial Reporting (QFR). The reason for this is to ensure that right respondents filled the questionnaires. 290 copies of questionnaires (150 for service companies and 140 for auditors) were administered, however, two hundred and fifty-six could be used.

# Socio-Demographic Information of the Respondents

Table 2 gave an insight into the socio-demographic detail of the respondents. The result reveals that the respondents are well educated with certificates in M.Sc./M.Tech/MBA and are certified members of ICAN/ACCA. This indicated that the respondents have knowledge of accounting information systems and financial reporting.

**Table 2: Socio-Demographics of the Respondents** 

Catego	Frequency	Percentage	
	M.Sc./M.Tech/MBA	174	68.0
Education	Ph.D	82	32.0
	Total	256	100
	1 To 10 Years	118	46.1
Experience	11 To 20 Years	138	53.9
_	Total	256	100
	ICAN/ACCA	221	86.3
<b>Professional Qualification</b>	ANAN	35	13.7
	Total	256	100
Working with AIS	Yes	128	100
	No	0	0
	Total	128	128

Source: Authors' Compilation, 2024.

## Test of the Reliability of the Questionnaire

Cronbach's alpha was used to test the reliability of the questionnaire. The test was conducted to check the internal consistency of the questionnaire. A satisfactory Cronbach's alpha value should be at least 0.7. The results of the Cronbach Alpha for each of the constructs used for the study are shown in Table 3 The values range from 0.828 for Faithful Representation (FP) to 0.955 for Timeliness (TN), and are considered acceptable because they are above 0.70.

**Table 3: Reliability Test of Questionnaire** 

Factors	Items Number	Cronbach's Alpha Value
Information quality	5	0.925
Service quality	4	0.875

Article DOI: 10.52589/AJAFR-5ZC6OSZS

Volume 7, Issue 3, 2024 (pp. 99-116)



Faithful representation	2	0.828
Relevance	2	0.892
Timeliness	2	0.955
Understandability	2	0.942

Source: Authors' Compilation, 2024.

# **Test for Multicollinearity**

The exogenous variables were tested for multicollinearity using both tolerance and Variance Inflation Factor (VIF). The results which are presented in Table 4 showed there is no multicollinearity among the variables as the tolerance values were above 0.20, and the VIF values were below 5 which are in line with the recommendations of Hair, Hult, Ringle and Sarstedt, (2013). This means that there is no high correlation among the exogenous variables.

**Table 4: Multicollinearity Test** 

	Collinearity Statistics		
Constructs	Tolerance	VIF	
Consistency	.986	1.014	
Usability	.450	2.221	
Availability	.636	1.570	
Format	.583	1.715	
Accuracy	.493	2.028	
Assurance	.642	1.557	
Tangibility	.591	1.692	
Empathy	.365	2.737	
Responsiveness	.624	1.602	

Source: Authors' Compilation, 2024.

## **Measurement Model**

Partial Least Square-Structural Equation Modeling (PLS-SEM) was used to examine the relationship among the different constructs and their corresponding indicators. The items and their meanings are: Information Quality (IQ) construct; CON= Consistency, USA= Usability, AVA= Availability, ACC= Accuracy, FOT= Format. For Service Quality (SERVQ) construct;



ASSR= Assurance, EMPHY= Empathy, TANG= Tangible, REPS= Responsiveness. For Faithful Representation (FP) construct; FP1 = Freedom from material error, FP2= Completeness. For Relevance (RL) construct; RL1= Confirmatory Value, RL2= Predictive Value. For Timeliness (TN) construct; TN1= Audit Lag, TN2= Total Lag. For Understandability (US) construct; US1= Format, US2= Clarity.

Different criteria were used to ascertain if the measurement model is fit for the study. These included the goodness of fit indices such as chi-square which is 4.822<5, NFI is 0.91>0.90 and SRMR is 0.071<0.10, the factor loadings whose values are above the acceptable value of 0.7. Table 5 showed the values of the factor loadings.

**Table 5: Factor Loadings for the Latent Variables and their Indicators** 

Latent '	Varia	ble and Indicators	Factor Loadings
AVA	<	IQ	0.952
USA	<	IQ	0.961
CON	<	IQ	0.961
ACC	<	IQ	0.943
FOR	<	IQ	0.972
TANG	<	SERVQ	0.666
REPS	<	SERVQ	0.960
ЕМРНҮ	<	SERVQ	0.972
ASSR	<	SERVQ	0.857
RL1	<	RL	0.616
RL2	<	RL	0.812
FP1	<	FP	0.945
FP2	<	FP	0.844
TN1	<	TN	0.952
TN2	<	TN	0.958
US1	<	US	0.881

Volume 7, Issue 3, 2024 (pp. 99-116)



Latent	Variable and Indicators	Factor Loadings
US2	< US	0.901

Source: Authors' Compilation, 2024.

# **Constructs Reliability and Validity**

The internal consistency of the constructs and their indicators was ascertained through composite reliability and only values above 0.7 are acceptable. Convergent and divergent validity were used to test for the validity of the constructs. The Average Variance Extracted (AVE) presents values for the convergent validity which are all above the acceptable value of 0.5. The discriminant validity is also ascertained as the AVE square root of each construct is greater than its correlation with other constructs. Table 6 presented the composite reliability, convergent validity and discriminant validity for the study.

Table 6: Composite Reliability, Convergent Validity and Discriminant Validity

CONSTRUCTS	CR	AVE	IQ	SERVQ	R	FR	TL	UD
Information Quality	0.907	0.767	0.876					
Service Quality	0.722	0.566	0.317	0.752				
Relevance	0.918	0.745	0.613	0.689	0.863			
Faithful Representation	0.813	0.779	0.341	0.219	0.605	0.882		
Timeliness	0.891	0.713	0.813	0.656	0.758	0.507	0.844	
Understandability	0.860	0.784	0.440	0.388	0.691	0.715	0.641	0.885

Note: Values for the discriminant validity are bolded.

Source: Authors' Compilation, 2024.

## **Structural Model Analysis**

Analysis of the structural model was to show the relationship between the latent variables and their effects as well. Three results were produced from the analysis; the paths coefficient, the Coefficient of Determinant (R<sup>2</sup>), and the Effect Size (F<sup>2</sup>). The result of the R<sup>2</sup> showed that IQ, and SERVQ combined to explain 72 percent (0.718) variations in quality of financial reporting, which means that AIS has a strong effect on QFR, since Hair *et al.* (2013) asserted that R<sup>2</sup> values of 0.25 and below are weak, 0.26 and 0.50 are moderate while 0.51 and 0.75 are strong. Also, the effect sizes (F<sup>2</sup>) of each of the independent variables on the dependent variable were calculated. According to literature, values below 0.15 are considered weak, 0.15 to 0.35 values are considered moderate and values greater than 0.35 are considered strong. The F<sup>2</sup> values showed that IQ has 0.513 while SERVQ has 0.027, which indicates that IQ has a strong effect on QFR while SERVQ has a weak effect on QFR.

Article DOI: 10.52589/AJAFR-5ZC6OSZS DOI URL: https://doi.org/10.52589/AJAFR-5ZC6OSZS Volume 7, Issue 3, 2024 (pp. 99-116)



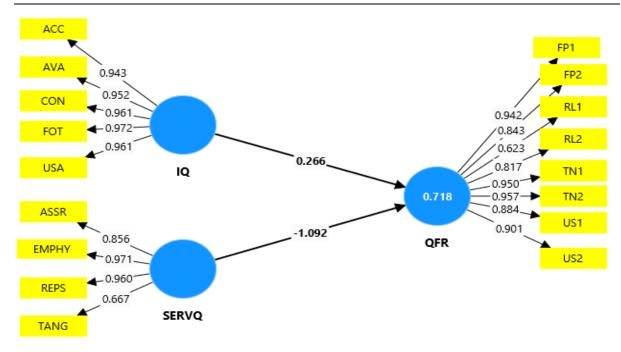


Figure 2: Structural Model of the Study

Source: Authors' Compilation, 2024.

# **Testing of Hypotheses**

# The Effect of Information Quality on the Quality of Financial Reporting

The results of the effect of Information Quality (IQ) on Quality of Financial Reports (QFR) is presented in Table 8. The paths coefficients results revealed that Accuracy (ACC) at ( $\beta$  = 0.198, p=0.000<0.001, t=9.753>1.96), Availability (AVA) at ( $\beta$  = 0.214, p=0.000<0.001, t=3.165>196), Format (FOT) at ( $\beta$  = 0.208, p=0.000<0.001, t=2.256>1.96) Usability (USA) at ( $\beta$  = 0.214, p=0.000<0.001, t=8.085>1.96) and Consistency (CON) at ( $\beta$  = 0.210, p=0.000<0.001, t=6.659>1.96) were significant and positively related with IQ. Also, result revealed that IQ has a positive and significant effect on QFR at ( $\beta$  = 0.249, p=0.000<0.001, t=4.224>1.96).

Table 8: Path Coefficients of Information Quality and Quality of Financial Reporting

Relationships	Paths Coefficients	t-Value	p-Value
ACC → IQ	0.198	9.753	***
AVA → IQ	0.214	3.165	***
FOT → IQ	0.208	2.256	***
USA → IQ	0.214	8.085	***
CON → IQ	0.210	6.659	***
$IQ \longrightarrow QFR$	0.249	4.224	***

Note: \*\*\* Significant at statistical level p<0.05, p<0.01, and p<0.1. t>1.96

Source: Authors' Compilation, 2024.

Volume 7, Issue 3, 2024 (pp. 99-116)



# The Effect of Service Quality on the Quality of Financial Reporting

The result of the effect of Service Quality (SERVQ) on Quality of Financial Reporting (QFR) is presented in Table 9. The paths coefficients results revealed that Assurance (ASSR) at ( $\beta$  = 0.238, p=0.000<0.001, t=8.605>1.96) Responsiveness (REPS) at ( $\beta$  =0.330, p=0.000<0.001, t=7.228>1.96), Empathy (EMPHY) at ( $\beta$  = 0.336, p=0.000<0.001, t = 5.374>1.96), and Tangibility (TANG) at ( $\beta$  = 0.246, p=0.000<0.001, t = 5.973>1.96), were significant and positively related with SERVQ. Also, results revealed that SERVQ has negative and insignificant effects on QFR at ( $\beta$  = -0.1080, p=0.062>0.001, t=--19.872<1.96).

Table 9: Path Coefficients of Service Quality and Quality of Financial Reporting

Relationships	<b>Paths Coefficients</b>	t-Value	p-Value
ASSR→ SERVQ	0.238	8.605	
REPS → SERVQ	0.330	7.228	***
EMPHY → SERVQ	0.336	5.374	***
TANG→ SERVQ	0.246	5.973	
SERVQ	-0.1080	-19.872	0.062

Note: \*\*\* Significant at statistical level p<0.05, p<0.01, and p<0.1. t>1.96

Source: Researchers' Compilation, 2024.

# **DISCUSSION**

This study examined the accounting information system and quality of financial reporting. The analysis presents various results, including the degree of variation, relationship between the latent variables and their indicators, and their effects. The exogenous variables explained significantly 72% of the variation in the endogenous variation while the remaining 28% are factors that are not considered by this study. This implies that information quality and service quality determine to a large extent the quality of financial reporting, heightening the need for organizations to ensure that the two quality dimensions are put in the right perspective among the employees.

Furthermore, there are positive and significant relationships between information quality and its indicators ACC, AVA, CON, FOT, and USA. This means the indicators determine the information quality provided by the AIS. This indicates that quality of information is premised on it containing right and complete contents, be provided in real-time for the users, be consistent with its input and out patterns and maintain a regular format of disseminating the contents and be usable for the users to make informed decisions. Thus, this suggests that the quality of information produced by the AIS is of paramount importance if financial reports are to be of standard that is usable to make the right decisions. Also, IQ has a positive and significant relationship with QFR. This indicated that information quality is about the relevance of the financial reports through its predictive and confirmatory values, its faithful representation (neutrality and freedom from material error), its understandability (clarity and format of presentation) as well as its timeliness (timely availability) for the users when needed.

Volume 7, Issue 3, 2024 (pp. 99-116)



The result agreed with the work of Sumaryati *et al.* (2020) and Shagari *et al.* (2017) that IQ has an effect on QFR. This result is also supported by DeLone and McLean's model (2003) that information quality is one of the most important constructs for measuring the success of the AIS.

Moreover, there exists positive and significant relationships between service quality and its indicators ASSR, REPS, EMPHY and TANG. This means the quality of services rendered to the users of AIS to ensure the proper functioning of the system is determined by instilling confidence in the system's users (ASSR), individualized services (EMPHY) rendered and the promptness of the services rendered (REPS). Furthermore, service quality has a negative and insignificant relationship with financial reporting quality. This indicated that service quality in terms of assurance, responsiveness, empathy and tangibility - is not a factor that can affect the quality of financial reporting, suggesting that the construct cannot be used to measure the success of the AIS and its effect on QFR. The result agreed with the work of Shagari *et al.* (2017) that service quality is not substantial in determining AIS effectiveness. The result also has the support of DeLone and McLean's model (2003) that service quality will have different weight depending on the level of analysis.

## IMPLICATIONS TO RESEARCH AND PRACTICE

This study explored the service subsector of the non-financial sector and this is a departure from the financial services sector which had dominated research of this nature. As a result, it has helped to expand the body of knowledge. The variables used for the study are those that are germane to the accounting information system and quality of financial reporting in practice. The results on information quality are positive and significant. Thus, in practice, the accuracy of the information produced should be ascertained to be of a high level, and measures such as automation of certain processes to save time and minimize human errors should be put in place to ensure information is available in real-time. There should be consistency with dissemination format and processes to ensure its usability by taking into consideration all the aforementioned factors. Likewise, for service quality, there should be a high level of response from the personnel of the information system to AIS users to avoid delay in information availability, accuracy, and usability.

## **CONCLUSION**

This study examined Accounting Information Systems (AIS) and Quality of Financial Reporting (QFR) of listed firms in Nigeria non-financial service sector. It specifically examined the effect of Information Quality (IQ) on QFR and the effect of Service Quality (SERVQ) on QFR. The study used primary data through the administration of questionnaires. Respondents were selected from audit firms and service companies. Descriptive and inferential statistics which included percentage frequency, and Structural Equation Modeling (SEM) were used to analyze the data. Findings of the study showed that accuracy, availability, consistency, format, and usability of information quality have significant effects on QFR. Furthermore, it was revealed that service quality in terms of assurance, tangibility, responsiveness, and empathy have insignificant effects on QFR. Generally, the conclusion of the study is that constructs from the DeLone and McLean model can be used to measure accounting information

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Volume 7, Issue 3, 2024 (pp. 99-116)



systems, which is a subset of information systems. Arising from the findings and conclusions of this study, it is therefore recommended that firms should ensure they keep high-quality information which should start the point of data collection from different sources to the point of final preparation of the financial reports.

## SUGGESTIONS FOR FURTHER STUDIES

This research is on the accounting information system and quality of financial reporting of listed non-financial service companies in Nigeria. The work used constructs from DeLone and McLean Model for AIS, and qualitative characteristics (faithful representation, relevance, understandability, and timeliness) to measure the quality of financial reporting. This study suggested that more research can be done to explore DeLone and McLean Model in the financial service sector, especially the banking sector since most of the studies did not employ the use of the model for their AIS measurement. Likewise, other qualitative characteristics of financial reporting can be explored.

## **REFERENCES**

- Adebayo, P. A. and Adebiyi, W. K. (2016). Effect of Firm Characteristics on the Timeliness of Corporate Finance Reporting: Evidence from Nigerian Deposit Money Banks. *International Journal of Economics, Commerce and Management*, **4** (3), 369 381.
- Adeyemi, A. A. and Asaolu, T. (2013). An Empirical Investigation of the Financial Reporting Practices and Banks' Stability in Nigeria. *Kuwait Chapter of Arabian Journal of Business and Management Review*, **2** (5), 157-180.
- Al-Dalaien, B. O. A and Dalayeem, B. O. A. (2018). Investigating the Impact of Accounting Information System on the Profitability of Jordanian Banks. *Research Journal of Finance and Accounting*, **9** (18), 110 118.
- Al-Okaily, A., Al-Okaily, M., Shiyyab, F. and Masadah W. (2020). Accounting Information System Effectiveness from an Organization Perspective. *Management Science Letters*, **10**, 3991 4000.
- Alwardat, Y. (2019). Disclosure Quality and its Impact on Financial Reporting Quality, Audit Quality, and Investors' Perceptions of the Quality of Financial Reporting: A Literature Review. *Accounting and Finance Research*, **8** (3) 201 218.
- Anuruddha, M. S. and Mahanamahewa, P. (2020). Effectiveness of Accounting Information Systems (AIS) on Public Financial Reporting Quality; An Empirical Study in Sri Lanka. Global Scientific Journals, **8** (12), 1449 1466.
- Basel, J. A., Baker, R., and Omar, W. A. (2016). The Critical Success Factor of Accounting Information Systems and its Impact on Organizational Performance of Jordanian Commercial Banks. *International Journal of Economic, Commerce, and Management,* **4** (4), 658-676.
- Cheung, E., Evans, E., and Wright, S. (2010), An Historical Review of Quality in Financial Reporting in Australia. *Pacific Accounting Review*. **22** (2), 147 169.
- Elsharif, T. A. (2019). The Elements of Accounting Information Systems and the Impact of their Use on the Relevance of Financial Information in Wahda Bank—Benghazi, Libya. *Open Journal of Business and Management*, **7**, 1429 1450.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2022). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) 3<sup>rd</sup> (ed.) Sage.



- Hair, J., Black, W.C., Babib, B. J. and Anderson, R. E. (2010). *Multivariate Data Analysis*. Pearson Education International.
- Hall, J. A. (2011). Accounting Information System. South-Western Cengage Learning.
- Ironkwe, U. I. and Nwaiwu, J. N. (2018). Accounting Information System on Financial and Non-Financial Measures of Companies in Nigeria. *International Journal of Advanced Academic Research | Business Development & Management.* **4** (2), 39 55.
- Kanakriyah, R. (2016). The Effect of Using Accounting Information Systems on the Quality of Accounting Information According to Users Perspective in Jordan. *European Centre for Research Training and Development.* **4** (11) 58 75
- Lam, T. H., Than, L. N., and Pham, H. C. (2014). Key Determinants of Information System Effectiveness: An Empirical Case in Lac Hong University. *International Journal of Information Technology and Business Management*, **32** (1), 1-14
- Mahboub, R. (2017). Main Determinants of Financial Reporting Quality in the Lebanese Banking Sector. *European Research Studies Journal*, **20** (4), 706-726.
- Mardi, M., Perdana, P. N., Suprano, S. and Munandar, I. A. (2020). Effect of Accounting Information Systems, Teamwork, and Internal Control on Financial Reporting Timeliness. *Journal of Asian Finance, Economics and Business*, **7** (12), 809 818.
- McLeod, J. R. and Schell, G. P. Management Information System. Prentice-Hall.
- Naser, K., Nuseibeh, R., & Al-Hussaini, A. (2003). Users' Perceptions of Various Aspects of Kuwaiti Corporate Reporting. *Managerial Auditing Journal*, 599-617.
- Nwaobia, A.N., Kwarbai, J.D., Kwarbai, J.D. and Ajibade, A.T. (2016). Financial Reporting Quality of Investors Decisions. *International Journal of Economics and Financial Research*, **2** (7), 140-147.
- Olaniyan, T. S., Ojo, O. and Taiwo, O. O. (2018). Effect of Strategic Entrepreneurial Orientation on Sales Growth of SMEs in Lagos State. *International Journal of Business Administration*, **2** (2), 118-135.
- Onaolapo, A. A. and Odetayo, T. A., (2012). Effect of Accounting Information System on Organizational Effectiveness: A Case Study of Selected Construction Companies in Ibadan, Nigeria. *American Journal of Business and Management*, **1** (4), 183-189.
- Otley, D. T. (1980). The Contingency Theory of Management Accounting: Achievement and Prognosis. *Accounting, Organizations and Society*, **5** (4) 413-428.
- Salehi, M., Rostami, V., and Mogadamet, A. (2010). Usefulness of Accounting Information System in Emerging Economy: Empirical Evidence of Iran. *International Journal of Economics and Finance*, **2** (2) 186 195.
- Shagari, S. L., Abdullah, A. and Saat, R. M. (2017). Accounting Information Systems Effectiveness: Evidence from the Nigerian Banking Sector. *Interdisciplinary Journal of Information, Knowledge and Management.* **12** 309 335.
- Sujud, H. and Hachem, B. (2019). Effect of the Quality of the Accounting Information System Outputs on Customer Satisfaction in Lebanese Commercial Banks. *International Research Journal of Finance and Economics*, **176** 26 40.
- Teru, S. P., Idoku, I. and Ndeyati, T. J. (2017). A Review of the Impact of Accounting Information System for Effective Internal Control on Firm Performance. *Indian Journal of Finance and Banking*, **1** (2). 52 59.
- XU, H. (2009). Data Quality Issues for Accounting Information System Implementation: Systems Stakeholders, and Organizational Factors, *Journal of Technology Research*, 1, 1-11
- Wilkin, C., and Tanya, L. (2003). Development of An Interment to Evaluate the Quality of Delivered Information System, Proceedings of the 36th Hawaii international conference on system sciences, Deakin University
- Zare, I., Nekounam, J., Pirzad, A. and Sedaghatjoo, F. and Mosavimotahar, S. (2013). Role of Accounting Information System on Relevance of Accounting Information. *Life Science Journal*, **10** (3) 589 592.