

Digitalized Accounting System: Revamping Small and Medium Enterprises Financial Reporting System

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ABSTRACT

Purpose: The growing resentment of the users of SMEs' financial statements and the reported financial scandals have been traced to errors and material misstatements arising from manual financial reporting systems. Some prior studies had revealed that digitalized accounting systems could significantly revamp SMEs' financial reporting systems, however, the extent digitalized accounting systems could affect SMEs' financial reporting systems remained uncertain. Consequently, this study examined the effect of digitalized accounting systems on SMEs' financial reporting systems.

Methodology/Design/Approach: The study employed a filed survey research design method was employed, using primary data sourced from structured questionnaires soliciting responses from respondents from practicing accountants as well as from entrepreneurs in SMEs. Yaro Yamane Formula was adopted in determining a suitable the sample size, while pilot testing and Cronbach Alpha were explored in determining the reliability and validity of the instruments used. The study employed a 5-pont scale measuring and estimation of a total number of 356 that were retrieved and validated questionnaires from the respondents.

Findings: Descriptive and inferential statistics were used. The descriptive result revealed that Big Data when used can revamp SMEs financial reporting system in Nigeria and this was the highest and most supported by the respondent (Average Score = 4.67; SD = 0.53). The inferential revealed that digitalized accounting system had a positive effect on the qualitative and enhancing financial reporting, and concluded that digitalized accounting system positively affected the revamping SMEs financial reporting system ($Adj.R^2 = 0.499$; $F-Stat. (4, 360) = 46.624$; $p < 0.05$).

Implications: The study showed that digitalized accounting systems will enhance quality of financial reporting. Suggesting that the application of disruptive technologies like Big Data, artificial intelligence and robotics by SMEs have the ability to revamp SMEs financial reporting system.

Originality: Originally, it was found that digitalized accounting systems are positive attempt towards revamping SMEs financial reporting system.

KEYWORDS: Comparability, Digitalized accounting system, Faithful representation, Relevance, Timeliness, Verifiability.

1. INTRODUCTION

The significant roles of the small and medium enterprises (SMEs) in the economic growth of nations have been widely acknowledged in the literature, suggesting that globally, SMEs are the major drivers of global micro and macroeconomic indices, contributing to the economic growth and highest employment labour force. In paying this significant role, it become imperative that reconsider the financial reporting system of the SMEs. According to Gusc et al. (2022), the formal sector tends to derive majority of its financial data and non-financial data from the informal sector predominately occupied by SMEs, hence the need for effective revamping the SMEs financial reporting system for accurate data generation and reliable financial reporting. Chemma (2021) opined that the financial reporting of the SMEs is characterized with incomplete records, unconventional and unverified data as many of the SMEs are not officially registered and not subjected to statutory audit, especially within the emerging and developing.

The globalization of business activities had widened the scope of business transactions, making digital financial reporting imperative to handle volumes of data process, improve quality of financial reporting and enhance relevance of financial information as contained in the financial statements. This ultimately would enhance timeliness and cost reduction of financial reporting for the SMEs in Lagos State and elsewhere. Alawaqleh and Almasrial (2021) reported that revamping SMEs financial reporting system is significant as the SMEs would reduce human labour drastically, while delivering financial reports vastly more efficiently. Batila-Ngouala-Kombo (2021) stated that digitalized accounting system by the SMEs enhances increased value creation that arises from improved financial reporting as reliable and credible reports tend to assist SMEs' businesses uncover more insights. According to Ekong and Mboobo (2021), traditional and manual reporting could slow transactions as the SMEs operation could be bogged down with spreadsheet farming, recording and reconciling data between systems.

Azeez and Akhtar (2021) posited that digitalized accounting system undoubtedly had significantly and consistently influenced reliable and quality of investment decisions of the SMEs. Badawy (2021) reported that digitalized accounting system had a close relationship with revamping small and medium enterprises' financial reporting system. Similar to this views, Bhiman (2020) argued that the use of disruptive technologies like Internet of Things (IoTs), Clouding accounting, Big Data, artificial intelligence and robotics have gradually changing face of financial reporting and the way accountants and other users of financial statements now perceive timely delivery of financial reporting system. Nobody wants to be left behind the trend and move of information technologies and new innovation in improve and revamping the face of financial reporting not even the least of the SMEs.

The problem of SMEs' financial reporting system had degenerated to such extent that the users of financial statements level of discontentment and dissatisfaction resulting for low quality and errors is quite disturbing (Wu & Wang, 2020; Wolf et al., 2021). The problem of the study steams from complexities associated with manual financial reporting which has become problematic and challenging (Yao et al., 2018). According to Wilson (2017), traditional manual financial reporting system require delay processes of data collected manual data processing and reporting hence the reports are prone to harbour errors and misstatements. Unavoidably, digitalization of accounting system has changed the narratives, as the significance of revamping the SMEs; financial reporting system as the main trajectory to economic growth, quality reporting and contributing to the economic development of countries as well as changing the financial reporting landscape completely, in raising financial reporting standards (Williamson et al., 2020; Agugoom et al., 2021).

In resolving and attempting the problem of revamping SMEs financial reporting system, aforementioned, digitalized accounting system is a ready tool in this direction exhibiting pathways to improve qualitative and enhancing qualitative financial reporting system of the SMEs. Digitalized accounting system is having insightful effects on how SMEs financial reporting system increasing the values, productivity, effective performance and quality of financial reporting of the SMEs in Nigeria, justifying the need for this study. Furthermore, the implications of digitalized accounting system on revamping small and medium enterprise financial reporting system is quite under researched in the emerging and developing countries, and there are scanty of empirical studies in Nigeria that have researched the revamping SMEs financial reporting system in Nigeria, creating gaps in the literature for further studies since this is palpable as the rises of the use of Internet, mobile technologies have become economic realities in digital economy that need accurate and timely financial information.

In contributing to the existing scanty studies and filling gaps in the literature, tend to further justify this need for this study as the revamping of SMEs financial reporting is obviously under researched despite the desirability of SMEs quality financial reporting. Also, this study is motivated to extend the frontiers and adds to knowledge that considers the problem of revamping SMEs financial reporting system by investigating the effect of digitalized accounting systems on revamping small and medium enterprises financial reporting system in Nigeria. Consequently, this study is proposed the following research objective, question and hypothesis as follows:

Research Objective: Examined the effect of digitalized accounting systems on revamping SMEs financial reporting system.

Research Question: How does digitalized accounting system effect revamping SMEs financial reporting system?

Research Hypothesis (Ho1): Digitalized accounting systems do not positively affect revamping SMEs financial reporting system.

The diagrammatical presentation of the hypothesized objective (conceptual framework) is shown as Figure 1.

Conceptual Model

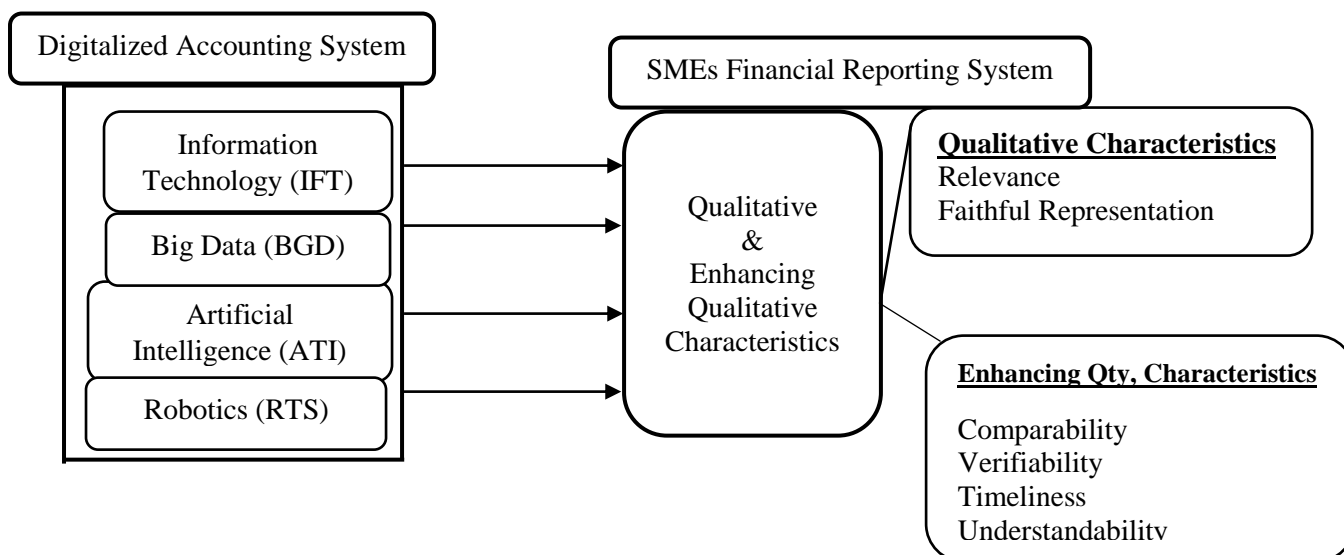


Figure 1: The relationship between digitalized accounting system and SMEs financial reporting system

Subsequently, the study considered literature review of literature/ theoretical framework in section 2. The study considered the methodology in section 3 and the data analysis, outcome of the analysis and discussions. Lastly, the conclusion, recommendations, contribution and limitations were presented in section 5 of the study.

2. REVIEW OF LITERATURE

Financial Reporting System: Financial reporting system entails the application of an accounting system and standard practices to ensure the accurate and true position of the financial health condition of companies in terms of revenue, expenses, profits, capital bases and the profile of cash flow in a given period (Badway, 2021; Ekong & Mboobo, 2021). The ethical standards and principles applied in financial reporting tend to determine the quality of the financial statement that will be produced (Skordoulis et al., 2020). Financial statements are expected to pose some specific qSMEs'ties of relevance, faithful representation, comparability,

Qualitative and Characteristics: The qualitative and enhancing characteristics of financial reporting are essentially significant. While the qualitative considers the relevance of accounting information, and the ability of the accounting information to serve the purpose, and influence the users in making desired useful decisions, faithful representation tends to narrow the value relevance in time and space of credibility and true and fairness reflecting the underlying realities.

Enhancing financial reporting systems: Stakeholders expect that SMEs financial statement should possess such qualities that can enhance the relevance and faithful representations of the financial statements I relation to comparability, timeliness, verifiability and understandability of the financial statements.

Digitalized Accounting System: Digitalized accounting system entails application of various digital accounting system that ensure creation and representation and transfer of financial information in an electronic format. Digitalized accounting system required the application of one of more disruptive technologies like cloud accounting, Bid Data, artificial intelligence, robotically analytics, machine learning with the Internet of things in enhancing the accuracy and quality of financial reporting (Shree et al., 2021). The application of this accounting system will improve the timely and cost savings for the SMEs' financial reporting.

Information Technology: Information technology otherwise called Fintech is the integration of technology into the financial data processes in order to improve the timely and accuracy of financial reporting and quality of financial statements. The digitalization of global business processes, the volume of transactions has increased to such extent that on the application information technology in data process will guarantee accuracy and timely reporting (Subramaniam & Jeyaraj, 2018). The accelerated pace of new information technology and innovation

in that afford analysts better access to effective and faster data processes capable of producing reliable financial statements.

Big Data: Big Data as one of the disruptive technologies enhances the process of data collection, data identification cause and effect relationships between data, integration of data, and translation of raw data into useful and meaningful information (Sen, 2020; Thottoli & Ahmed, 2021). The significance of Big Data in enhancing financial reporting quality allow the representation of data on a manageable and accessible scale more appropriately (Uyi, 2019; Vanberg, 2018). With the application of Big Data disruptive, the SMEs can carry out the automating the financial reporting process of identifying cost drivers, forecasting future cost savings, enhancing the estimation effects and reduction of cost of data analysis.

Artificial Intelligence: Artificial intelligence is one of the digital systems employed in to collect and process data using machine learning and natural language tools that can read and write as well as data mining tool to enhance logic behind various financial data uses algorithms to executive predictive analysis for the future as well as identify patterns in allocating effects to the desired activities in financial reporting system (Zang et al., 2017).

Robotics: In enhancing and revamping SMEs financial reporting system, robotics is considered as one of the disruptive technologies that have changed the face of financial reporting to enhance credible financial information in adding economic value for the stakeholders and other users of the financial statements. According to Yao, et al. (2018), robotics process automation shortens the time SMEs could spend on data and avoid unnecessary manipulation of data by automating the reporting system to handle routine tasks in processing financial reports. Bhiman (2020) revealed that the application of robotics had a positive effect on the quality of the financial report.

2.2 Theoretical Review

2.2 Theoretical Consideration

Information Asymmetry: Information asymmetry was proposed by Akerlof Michard Spencer and Joseph Stiglitz in the year 1970. The study was concerned with the privileged information in the possession of an individual or group of individuals in a transaction which is used for economic gains (El-Hewety, 2019). According to Seyed (2014), the information asymmetry in a typical market setting, it is the seller that has more information of the products or services than the buyer, hence the seller can take advantage of the seller in hiking the price. In another development, Shai and Shai (2014) posited that managers of companies possess asymmetric information of the company more than the shareholders; hence they take their privileged information to pursue self-interest. The presence of information symmetry, led the shareholders to engage the services of the auditors to certify the true and fair position of the financial statements prepared by the manager, to enhance the reliability and quality of the financial statements.

Some of the assumptions of information asymmetry include the fact that the party with privileged information could use it for economic gains. It is assumed that information asymmetry could cause adverse effects and moral hazards against the shareholders. In addition, some studies have supported information asymmetry, suggesting that it is normal that in a market situation, all the market participants would not have the same level of information, as those with superior information could use it for economic benefits. On the contrary, the critics of information asymmetry had faulted the philosophy behind information asymmetry (Small et al., 2014; Stergios & Michallis, 2012). Sun and Zheng (2010) questioned the ethical morality when some people hide vital information for personal gains, that it is rather unethical and deceit.

The Diffusion of Innovation Theory: The diffusion of innovation theory was propounded by Rogers in the year 1962 in an effort to explain the rationale behind the migration of people from methods of doing things to new innovations (Smith et al., 2012). The diffusion of innovation seeks to offer an explanation of why, how and at what extent new technologies are being popular and accepted in business operations and speed of trending in the social system and the essence of new technologies replacing the traditional and manual methods of transacting businesses as well as in financial reporting of business transactions. The theory further suggested that diffusion is the manner by which an innovation is communicated through certain channels over a period of time among the community in the social system, while an innovation reflects an idea, practice or object that is perceived to be new by an individual or group of individuals (Suominen et al., 2018).

The diffusion of innovation theory assumes that change is constant by nature and that new ideas and innovation keep revolving, bringing new ways of doing business and reporting business activities (Tulsian, 2013). Other assumptions of diffusion of innovation theory include the fact that the extent of new innovation acceptance in the society is aligned with the level of economic development and that the acceptability of new innovation is in agreement with the outcome of the insatiability of human nature. Some of the supporters of the theory suggested man by nature is associated with innovations and never satisfied with repetitiveness, rather in the habit of seeking new ways of doing things, new better ways of running and reporting business transactions (Sheikh et al., 2012; Sun & Zheng, 2010). Some critics have also found flaws in the diffusion of innovation theory (Brink & Stoel, 2018; Esmeray & Esmeray, 2020; Risman et al., 2021). Salawu and Moloji (2021) argued that new innovations come with vices and crimes. Suominen et al. (2016) faulted the innovation theory that the proponents failed to explain how the new innovation could tame crimes and risks associated with new technologies.

Lending Credibility Theory: The credibility theory was proposed by Limperg in the year 1920 in an effort to address the rationale behind the demand and supply of audits (Tysiac & Drew, 2018). The lending credibility theory is concerned with the general belief that the primary responsibility of auditors is to add credibility to the financial statements prepared by the management for the stakeholders. According to Valerie et al. (2019), the lending credibility situates on the premise that financial statements prepared by the management are unreliable and cannot be trusted unless it has been verified and certified by the auditors considered as the third party, considering the information asymmetry and privileged information at the disposal of the management. The prevalence of and existence of conflicts of interest subsisting between the managers and the shareholders demand that a third umpire be engaged to certify the books contain a true and fair financial position of the companies for the period under consideration.

Some of the assumptions of the lending credibility theory are that managers are biased and would prepare financial statements to protect their own interests. The theory assumes that the demand for auditors is to add credibility to the financial statements based on their certification that the financial statement is free from errors and misstatements and can be trusted for useful decisions. The supports theory believe that auditors are an impartial professional who will exercise their professional duties and exercise professional independence (Vanberg, 2018; Warren et al., 2015). Vanberg (2018) submitted that the general public tends to rely on the reliability of the financial statement, believing that the auditors had added credibility to the information continent through professional audit exercises and expression of opinion. However, the critics suggest that in most cases the auditors cannot be trusted with the reliability of the financial statement as the majority of the auditors are culpable and cannot be trusted as many of them do compromise integrity to compromises and connivances with the managers to the auditors.

Entrepreneurial Theory: The entrepreneurial theory was proposed by Schumpeter in the year 191, and posited that man naturally is wired to work in order to achieve the desired goal (Venkatesh et al., 2003). The entrepreneurial theory is concerned efforts and ingenuity of people is always been rewarded with benefits regardless of the risks involved. According to Tulsian (2013), an entrepreneurial theory posited that artisans and individuals act as catalysts in the economic growth and development of nations. Zhang et al. (2017) noted that entrepreneurship is full of risks and the ability to handle risks and constraints in business is the spirit of entrepreneurial theory. The ability of the countries to embrace the spirit of entrepreneurship and handle risks as the risks emerge is the bane of economic rewards and growth.

The assumptions of the theory include the fact that entrepreneurs despite meagre resources are driven to adventures and take risks by the desire for rewards and benefits. The theory assumes that people leverage self-motivations and a strong will for success. Supporters of the entrepreneurial theory suggested that entrepreneurs are self-made and highly self-motivated people who believe in themselves for greater heights (Yongkui, 2013). The critics of the theory questioned the scientific proof of the ideologies of entrepreneurial theory, suggesting that the postulations have no bases rather they are mere perceptions and very subjective.

2.3 Empirical Review

Badawy (2021) carried out an investigation of the impact of descriptive technology on financial reporting information used in investment decisions. The study considered value relevance and faithful representation as measures of financial reporting quality. The study employed ex-post facto using 95 listed companies in the Egyptian Stock Exchange for an unspecified period of time. The analysis carried out revealed that timeliness of financial reporting quality had a positive impact on the quality of financial reporting quality. This result is consistent with the report documented in the studies of Thottoli and Ahmed (2021) who revealed that

information technology had an apposite significant effect on quality of financial reporting. On the contrary, Alawaqleh and Almasrial (2021) reported negative effects.

Alawaqleh and Almasrial (2021) investigated the effect of information technology using audit committee performance on financial reporting quality of companies listed in Jordan. The study measures information technology through committees' using audit committees and internal audits managers' experience. The regression analysis conducted revealed that while information technology enhances financial reporting quality, the audit committee and internal managers' experience had a negative effect on the quality of financial reporting quality for the period investigated. The study of Alawaqleh and Almasrial (2021) is similar to the study of Thottoli and Ahmed (2021) investigated the effect of information technology and e-accounting on the financial reporting quality of small and medium enterprises in Oman. The study employed survey research approach using structured questionnaire in obtaining responses from the respondents. The study employed descriptive statistics in analyzing the effect of information technology and e-accounting on financial reporting quality. Based on the regression analysis, the study found that informational technology despite its cost had a positive significant effect on the quality of financial reporting quality among the tested small and medium scale enterprise in Oman.

Kroon et al., (2021) examined the effect of new technologies and disruptive technologies on quality of financial reporting quality. The study employed expo facto research design using data obtained from the secondary sources especially data from articles published in Scopus database. The study collected 157 of such articles were collected and were analyzed using analytical tools. The analysis result revealed that accounting information technology and skills had a positive significant effect on quality of accounting reports. The study adds to the existing literature in recent disruptive technologies in timely and reliable financial reporting.

Seiyaibo and Okoye (2021) carried an investigation to determine the relationship between financial reporting quality using information technologies on performance of corporate companies in the non-financial sector. The study employed survey research design using self-structured questionnaire administered to a total of 239 respondents from an unspecified population. The study selected professional who are knowledgeable in information technologies as the sample size from 5 high capitalized companies listed in Nigeria. The study results revealed that faithful representation and relevance of financial reporting quality had negative association with performance of corporate companies.

Habiba (2021) investigated the effect of disruptive technologies sustainability reporting quality on financial reporting quality. Data for the study was sourced from selected 30 companies for a period of 12 years spanning from 2007 to 2018. The study carried out regression analysis and the result of the analysis revealed that disruptive technologies had a positive effect on financial reporting quality among the selected 30 companies. The study recommended that companies should embrace technological assisted accounting information since they tend to be reliable and timely.

Oke et al., (2021) examined the effect of modeling the robotics implementation as a disruptive technology on quality of project construction in developing economies. The study employed survey research design, using documented data from construction, using questionnaire administered to stakeholders in the construction sector and analyzed using partial least square structural equation modeling method. The study found that robotics modelling and cloud accounting of disruptive technologies had a positive effect on quality of project construction in Nigeria.

Chemma (2021) studied the effect of disruptive technological strategies on stable environment for financial reporting in yoghurt industry in Algeria. The study employed exploratory research design using questionnaire administered to selected new entrants in yoghurt and incumbent business operators in the yoghurt industry in Algeria. The study regression analysis revealed that disruptive technologies strategies had a positive effect on financial reporting quality of the companies investigated for the period.

Esmeray and Esmeray (2020) carried out an empirical analysis of the effect of digitalization in accounting through diverse technological innovations on accounting quality and accounting reporting. Data were sourced from the primary sources and the personal interviews were carried out. The respondents' responses were analyzed and the result showed that digitalization had a positive effect on accounting quality Ghaffar et al., (2019) investigated the effect of information technology and Expo facto research was employed, while e-accounting application on the quality of financial reports in selected companies in Malaysia. The results of the

regression analysis revealed that information technology and e-accounting had a positive significant effect of selected small and medium scale enterprises in Malaysia.

Elewa and El-Haddad (2019), investigated the impact of information technology of audit quality on financial performance reporting quality of companies within the non-financial sector. The study population consisted of 30 companies within this category, using a period of 5 years ranging from 2010 to 2014. The study employed return on investment, return on assets and return on equity as measures of the financial performance, while using the big-4 and audit rotation as measures of the financial reporting quality. The study revealed that audit rotation and big-4 had negative and insignificant effect on performance reporting.

Bataineh (2018) examined the influence of computerized accounting information and usage of cloud accounting in financial reporting in Jordan Pharmaceutical companies. The study considered use of primary data and questionnaire. The analysis found that that computerized accounting system and cloud accounting had a strong positive effect on financial reporting quality among the pharmaceutical companies in Jordan.

El-Hewety (2019) examined the effect of descriptive technologies and information technology on quality of accounting. Using secondary data, and data from the financial records of selected companies, the analysis showed that descriptive technologies had a positive effect on quality of accounting and financial reporting in the selected companies Brink and Stoel (2018) investigated the influence of analytics knowledge and abilities on financial reporting quality and accounting education. Survey research design was adopted and regression analysis revealed that analytical knowledge and abilities had a positive effect on financial reporting quality.

Afrietiara and Utama (2018) studied the effect of financial statements quality on corporate governance and its mechanism. The study employed secondary data measuring corporate governance with board size, ownership concentration and board independence, while financial reporting quality was measured using timelines of financial reporting quality. Adopting linear regression analysis and a sample of all the manufacturing companies listed in Indonesia for a period of one-year 2015, the study reported mixed results. The study found that timeliness of financial reporting quality had a positive significant influence on board size, while the board independence had a negative effect.

3. METHODOLOGY

Design: Survey research design method was employed, using primary data sourced from a structured questionnaires soliciting responses from respondents from the practicing accountants as well as from entrepreneurs in the small and medium enterprise (SMEs)

Population & Sample Size: At least a total of 3,250 questionnaires formed the population of the study. These number were expected from the respondents from the questionnaires that were administered through both a physical and online systems, using the SMEs in Lagos State of Nigeria as the target audience. Monkey-survey was adopted for the perceptual opinions and responses from the targeted audience.

Sample Size: Yaro Yamane Formula was adopted in determining a suitable the sample size, while pilot testing and Cronbach Alpha were explored in determining the reliability and validity of the instruments used. The study employed a 5-pont scale measuring and estimation of a total number of 356 that were retrieved and validated questionnaires from the respondents.

Data Analysis: The study employed descriptive statistics for the data as well as inferential regression for data analysis. A robust diagnostics tests were conducted for pre and post-estimations.

Decision Criteria: Acceptance or rejection of the null hypothesis was based on the probability of F-Statistics of a 5% level of significance for the main variables while the probability of t-statistics was used for the individual statistics.

A priori Expectation: The study expected that the independent variable and its proxies would have a positive effect on the dependent variable and its measures. In other words, the study expected that all the results would be positively signed $(\beta1-\beta4) > 0$, and positive signed (+tive).

Yaro Yamana' formula as adopted was based on 0.05 significance level (0.95 confidence level): $n = N/1+N(\alpha)^2$

Where n= Sample size, N = Population size of sample area; α = significant level (0.05)

$$n = 500/1+3.250(0.05)^2$$

$$n = 3,250/9.125$$

n = 356

Model Specifications

$$Y_i = \alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \mu_i \text{----- (1)}$$

$$Q\text{-EFRS}_i = \alpha_0 + \beta_1 IFT_i + \beta_2 BGD_i + \beta_3 ATI_i + \beta_4 ATI_i + \mu_i \text{----- (2)}$$

3.6 Pilot Study: The study carried out a pre-test (pilot testing) of the study. A total of about 20 % of the sample size were covered in the pre-testing exercise. This translate to 35 copies of the sample size (10% of 356) = 35 copies were used. The study considered the pilot testing necessary because it was enabling the study assist in foreknowledge of the reactions of the respondents and to ascertain the dependability of the questionnaires used in the population of the study.

3.6.1 Validity of Research Instrument: In this study, the validity of the instruments of the effect of digitalized accounting system on SMEs financial reporting system in Nigeria was established through face validity. The instrument of structure questionnaires was given to the researchers in the field of Finance and Accounting to certify and correct the wordings and questions in the questionnaire. The certification was ensured before usage as all corrections and expertise input were incorporate to the questionnaire as advised In Table 1, the computed KMO values range from 0.765 to 0.902: these KMO values are above 0.7 {> 0.7} and Bartlett tests results obtained are all significant at 5% significance level {Sig. < 0.05} affirming the adequacy of the data.

Table 1: KMO and Bartlett tests

Variables	No of Items	KMO	Bartlett Test: Chi ² (Sig.)
Relevance	5	0.765	93.372 (0.000)
Faithful Representation	5	0.755	94.112 (0.000)
Comparability	5	0.745	121.142 (0.000)
Verifiability	5	0.810	125.331 (0.000)
Timeliness	5	0.833	108.004 (0.000)
Understandability	5	0.773	122.420 (0.000)
Information technology	5	0.760	146.546 (0.000)
Big data	5	0.802	113.315 (0.000)
Artificial intelligence	5	0.812	101.492 (0.000)
Robotics	5	0.778	67.258 (0.000)

Source: Researcher’s Computation, 2022

3.6.2 Reliability of the Research Instrument

In this study, Cronbach alpha testing was used to establish the reliability of the instrument. According Obadara (2007), an instrument with a Cronbach alpha above 0.70 and above is considered good and reliable for a research study. A pretest study was carried out using online administered copies of questionnaire which are thirty-five in number. The collected data was coded into the IBM Statistical Package for Service Solution (IBM SPSS) and Cronbach’s Alpha coefficient obtained for all the variables was found to be above the acceptable limit of 0.7. Note that, 0.7 was confirmed by Warithaka (2012) to be an acceptable reliability coefficient. The results of the pilot testing indicated that the instrument is reliable since each of the variables Cronbach’s Alpha obtained is above 0.70. The summary of the result is given in Table 2.

Table 2: Reliability Test

Variables	No of Items	Cronbach’s Alphas
Relevance	5	0.811
Faithful Representation	5	0.825
Comparability	5	0.891
Verifiability	5	0.854
Timeliness	5	0.837
Understandability	5	0.894
Big data	5	0.909
Artificial intelligence	5	0.901
Robotics	5	0.800

Source: Researcher’s Study, 2022.

4. PRESENTATION AND DISCUSSIONS OF RESULTS

4.1 Descriptive Statistics

Table 3: Digitalized Accounting System and SMEs Financial Reporting System

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	% of Total Agree	Mean (Std.)	Rank
Information technology accessible to an average SMEs could enhance financial reporting and improve the understandability of Financial reporting system of SMEs in Nigeria.	0 [0.0]	0 [0.0]	12 [3.4]	171 [48.0]	173 [48.6]	356 [100]	344 [96.63]	4.45 (0.56)	5
Big Data when used can revamp SMEs financial reporting system in Nigeria. This could improve faithful representation of SMEs financial reporting system.	0 [0.0]	0 [0.0]	10 [2.8]	96 [27.0]	250 [70.2]	356 [100]	346 [97.19]	4.67 (0.53)	1
Use of artificial intelligence when applied could improve the relevance of reporting of SMEs financial reporting system,	1 [0.3]	1 [0.3]	12 [3.4]	91 [25.6]	251 [70.5]	356 [100]	342 [96.07]	4.66 (0.59)	2
Robotics application improves timely financial reporting of SMEs in Nigeria.	1 [0.3]	2 [0.6]	22 [6.2]	82 [23.0]	249 [69.9]	356 [100]	331 [92.98]	4.62 (0.65)	3
Verifiability of the SMEs financial reporting is likely to improve with the used of digitalized accounting reporting system.	2 [0.6]	3 [0.8]	14 [3.9]	111 [31.2]	226 [63.5]	356 [100]	337 [94.66]	4.56 (0.67)	4

Source: Field survey, 2022

From Table 3, it's obvious that the statement with the percentage of total agree equal 97.19% "Big Data when used can revamp SMEs financial reporting system in Nigeria. This could improve faithful representation of SMEs financial reporting system" {Average Score = 4.67; SD = 0.53} and it stands to be the most supported statement, follow by the statement that says "Use of artificial intelligence when applied could improve the reliability and timely reporting of SMEs financial reporting system" {Average Score = 4.66; SD = 0.59} with 96.07% of percentage of Agree. "Use of artificial intelligence when applied could improve the relevance of reporting of SMEs financial reporting system," {Average Score = 4.62; SD = 0.65} has 92.98% of total percentage of Agree while that of "Robotics application improves timely financial reporting of SMEs in Nigeria." {Average Score = 4.56; SD = 0.67} with 94.66% percentage of total Agree. The least supported statement reads as "Information technology accessible to an average SMEs could enhance financial reporting and improve the understandability of financial reporting system of SMEs in Nigeria." {Average Score = 4.45; SD = 0.56} is 96.63% percentage of total Agree.

Table 4: Digitalized Accounting System & Qualitative and enhancing financial reporting systems (SMEs Financial Reporting System).

	N	Minimum	Maximum	Mean	Std. Deviation
Q-EFRS	356	3.2	5.0	4.3620	0.40498
IFT	356	2.4	5.0	4.3217	0.5061
BGD	356	1.2	5.0	4.2054	0.68343
ATI	356	1.6	5.0	3.9804	0.78458
RTS	356	3.0	5.0	4.3207	0.51767

Source: Field Survey 2022; **Note:** Q-EFRS = Qualitative and enhancing financial reporting systems, IFT = Information technology, BGD = Big data, ATI = Artificial intelligence, RTS = Robotics

From the descriptive results in Table 4 show that the average values and the corresponding statistics for qualitative and enhancing financial reporting system (Q-EFRS), Information technology (IFT), Big data (BGD), Artificial intelligence (ATI), Robotics (RTS) are gained from 356 observations. Besides, it is obvious that the scores hover around 1 and 5 signifying that the scores are composite score of a 5-point rating scale category. Again, the standard deviations indicate that the response widely varies among the sampled respondents. Overall, all the indicators have average values that range between take value between 3.98 and 4.36. Also, the standard deviation ranges between 0.40 and 0.78.

Correlation Analysis

The correlation coefficients that inspect the potential correlational relationships among the selected variables of interest are presented in Table 5. As stated earlier, these results show the continuous strength of the various associations among the variables under study.

Table 5: Correlation Matrix

	Q-EFRS	IFT	BGD	ATI	RTS
Q-EFRS	1				
IFT	0.105	1			
BGD	0.229	0.524	1		
ATI	0.168	0.468	0.625	1	
RTS	0.499	0.207	0.248	0.077	1

Source: Field Survey 2022; **Note:** Q-EFRS = Qualitative and enhancing financial reporting systems, IFT = Information technology, BGD = Big data, ATI = Artificial intelligence, RTS = Robotics

From the results in Table 5, it can be seen that the correlation coefficients are 1 for each variable and itself. This means that the variables have perfect relationship (correlation coefficient = 1) with self. However, the potential correlational relationships among all the variables are positive. Besides, the potential correlational relationships among the explanatory variables range between 0.077 and 0.625. However, these do not mean multicollinearity until the collinearity result proved so. For this reason, we proceed to the regression analysis as discussed earlier in Table 6.

4.2 Regression Analysis

Digitalized accounting system and Qualitative financial reporting: From the results in Table 6, this subsection reported the regression results that search the relationship between qualitative and enhancing financial reporting

Table 6: Digitalized accounting system, Qualitative and Enhancing Qualitative Financial Reporting System

Regression Model					Collinearity Statistics	
	Coeff.	Std. Error	t-Stat.	P-value	Tolerance	VIF
(Constant)	1.513**	0.248	6.091	0.000		
IFT	0.072	0.055	1.315	0.190	0.643	1.556
BGD	0.277**	0.044	6.330	0.000	0.552	1.812
ATI	0.108**	0.036	2.984	0.003	0.617	1.622
RTS	0.181**	0.044	4.103	0.000	0.955	1.047
Observations	356	356	356	356	356	356
R-squared	0.510					
Adjusted R-squared	0.499					
F-stat.	46.624					
Prob. of F-stat.	0.000					
Breusch-Pagan/Cook-Weisberg (Het. Test)	28.13					
Prob > Het. Test	0.000					
Normality Test	1.967					
Prob > Het. Test	0.374					

Source: Field Survey 2022; **Note:** **Dependent Variable:** Q-EFRS = Qualitative and Enhancing Qualitative financial reporting, **Independent Variables:** IFT = Information technology, BGD = Big data, ATI = Artificial intelligence, RTS = Robotics. **Predictors:** RTS, ATI, IFT, BGD; **, * denote 1% and 5% alpha levels respectively

Other Diagnostics

Based on the result of Breusch-Pagan / Cook-Weisberg test for heteroskedasticity and Jarque-Bera normality test for normality, toward the bottom of Table 6, the P-value of Jarque-Bera normality test for normality is insignificant at 5% significant level (P – value = 0.374) depicting that the error term (residual) of the estimated regression model is normal as expected. Also, the P-value of Breusch-Pagan/Cook-Weisberg test for heteroskedasticity is 0.000 signifying statistically significant value at of 5% significance level. Consequently, the results suggest that the null hypotheses of homoscedasticity should not be taken. Because of this, the study concludes that the error term of the estimated regression model suffers from heteroskedasticity problem and heteroskedasticity robust Standard Error regression model is used.

Regression Estimation Result:

$$Q-EFRS = \beta_0 + \beta_1 IFT_i + \beta_2 BGD_i + \beta_3 ATI_i + \beta_4 RTS_i + \mu_i$$

$$Q-EFRS = 1.513 + 0.072 IFT_i + 0.277 BGD_i + 0.108 ATI_i + 0.181 RTS_i + \mu_i$$

In Table 6, Digitalized accounting system (DAS), positively affects qualitative and enhancing qualitative financial reporting (Q-EFRS) of SMEs. Based on the probability of t-statistics (1.315) of (P-value of 0.190) i.e. 19% which is higher than 5% level of the chosen level of significant of 5%, implies that information technology (IFT) do not significantly affect qualitative and enhancing qualitative financial reporting (Q-EFRS). The coefficient of information technology (IFT) (0.072) means that a unit change in information technology (IFT) would yield 0.072 decrease in quality of SMEs financial reporting system.

Furthermore, the Big Data (BGD) positively affected qualitative and enhancing qualitative financial reporting (Q-EFRS) of SMEs. The probability of t-statistics (6.330) is p-value 0.000 which is lower than the chosen level

of significant of 5%. This means that Big Data (BGD) significant affect qualitative and enhancing qualitative financial reporting (Q-EFRS). In addition, the coefficient of Big Data -BGD (0.277) means that a unit change in Big Data-BGD would yield 0.277 increase in qualitative and enhancing qualitative financial reporting (Q-EFRS) of SMEs. Also, artificial intelligence (ATI) positively affects qualitative and enhancing qualitative financial reporting (Q-EFRS) of SMEs. The probability of t-statistics (2.984) is p-value 0.003 i.e. 3% which is lower than the chosen level of significant of 5%. This means that artificial intelligence (ATI) significant affect qualitative and enhancing qualitative financial reporting (Q-EFRS). In addition, the coefficient of artificial intelligence-ATI (0.108) means that a unit change in inartificial intelligence-ATI would yield 0.108 increase in qualitative and enhancing qualitative financial reporting (Q-EFRS) of SMEs.

Also, the result revealed that Robotics (RTS) positively affects qualitative and enhancing qualitative financial reporting system (Q-EFRS) of the SMEs. This is so because the probability of t-statistics (0.4.103) is (p-value (0.000), which is lower than the chosen level of significant 5%, which implies that artificial intelligence- RTS significantly affects qualitative and enhancing qualitative financial reporting system of SMEs. Also the coefficient of RTS (0.181) means that a unit change increase in artificial intelligence-RTS would yield 0.181 increase in qualitative and enhancing qualitative financial reporting system of SMEs. In addition, Table 6, the F-statistics value computed from the regression analysis that investigates the relationship between digitalized accounting system and qualitative and enhancing qualitative of financial reporting system of SMEs is 46.624 [P - value = 0.000]. Which means that the Digitalized accounting system indicators which are; Information technology (IFT), Big data (BGD), Artificial intelligence (ATI), Robotics (RTS) jointly and significantly explains variants in Qualitative and enhancing qualitative financial reporting (Q-EFRS).

Adjusted R²: From the estimate, the adjusted R-square is 0.499 revealing that percentage of the variances in Q-EFRS explained by the combined explanatory variables of information technology (IFT), Big data (BGD), Artificial intelligence (ATI), and Robotics (RTS) is about 49.9%.

Variance Inflation Factor: The variance inflation factor (VIF) test is necessary to quantify the severity of multicollinearity in the regression analyses. The result in Table 6 equally revealed the variance inflation factor (VIF) of 1.556, 1.812, 1.622, and 1.047 for information technology-IFT, Big Data-BGD, artificial intelligence-ARI, and robotics-RTS respectively. From the result, it is evident that the VIFs scores are below 3.0 indicating that the model is free from multicollinearity problem.

Additionally, the coefficient of Big data (BGD), Artificial intelligence (ATI) and Robotics (RTS) are established to be positive and statistically significant at 1% alpha levels [$\beta = 0.277$; P - value = 0.000, $\beta = 0.108$; P - value = 0.003 and $\beta = 0.181$; P - value = 0.000]. The implications of these results are that Big data (BGD), Artificial intelligence (ATI) and Robotics (RTS) significant drivers of qualitative and enhancing qualitative financial reporting (Q-EFRS). These confirm the results obtained earlier when the components of Qualitative and enhancing qualitative financial reporting (Q-EFRS) were used. From the outcome of the regression results in Table 6, the computed Adjusted R - squared = 0.499; F-statistic = 46.624 (P - value = 0.000) and; the study failed to accept the null hypothesis: Based on the estimated parameters, at a level significance of 0.05, *F-Statistic* is 46.624, while the *P-value of the F-Statistics* is (0.000), which is less than 0.05. The study failed to accept the null hypothesis rather accepted the alternative, which implies that digitalized accounting system had a positive significant effect on qualitative and enhancing qualitative financial reporting of SMEs in Nigeria.

Discussion of Findings: The results were mixed. While information technology (IFT) exhibited positive insignificant, all others of Big Data (BGD), artificial intelligence (ATI) and robotics (RTS) exerted a positive significant effect. However, the combination of the explanatory variables using F-Statistics revealed a positive effect, suggesting that revamping SMEs financial reporting system was positively affected by digitalized accounting system. This was found in tandem with prior studies by Badawy (2021); Thottoli and Ahmed (2021); Kroom et al., (2021); Habiba (2021); Oke et al., (2021); Chemma (2021) and Ghaffar et al., (2021) among others who reported positive effects. However, the studies of Alawaqleh and Almasrial (2021); Seiyaibo and Okoye (2021); Elewa and El-Haddad (2019) reported negative effect which are inconsistent with the result obtained in this study.

5. CONCLUSION, RECOMMENDATIONS AND CONTRIBUTIONS

Conclusion: The study examined the effect of digitalized accounting system on revamping SMEs financial reporting system. The study explored filed survey method, using structured questionnaires administered to selected respondents. Cronbach Alapha was employed for the validity and reliability of instrument used. The study employed descriptive and inferential statistics for the data analysis. The descriptive result revealed that

Big Data when used can revamp SMEs financial reporting system in Nigeria and this was the highest and most supported by the respondent (Average Score = 4.67; SD = 0.53). The inferential revealed that digitalized accounting system had a positive effect on the qualitative and enhancing financial reporting. Consequently, the study concluded that digitalized accounting system positively affected the revamping SMEs financial reporting system.

Recommendations: The study recommended that the SMEs should embrace digitalized accounting system to improve quality of financial reporting. Insignificant effect of information technology in the study could suggest negative attitude towards digitalized accounting system. SMEs should adopt digitalized accounting system in revamping their financial systems to enhance relevance and faithful representation of their financial statements.

Contribution/Limitations: The study considered only SMEs and survey research was adopted, using only practicing accountants and SMEs in Lagos State alone. Further research could consider listed companies where secondary data can be sourced. The scope of the study could be expanded in future studies beyond more respondents beyond the practicing accountants and SMEs also extend beyond Lagos State alone.

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