Computerised Accounting System: A Catalyst for Improved Operating Performance of Listed Industrial Goods Firms in Nigeria

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Abstract

The study examined computerised accounting system as a catalyst for improved operating performance of listed industrial goods firms in Nigeria. The specific objective was to examine the extent to which computerised accounting system intensity (CASI) affects the operating expenses of listed industrial goods firms. The study adopted ex-post facto research design on a population of thirteen listed industrial goods firms in Nigeria. However, purposive sampling was applied in choosing the sample size on the basis of availability of annual reports from 2012 to 2021. Secondary data were gleaned from the annual reports of the sampled firms over a period of ten years which spanned from 2012 to 2021. The Ordinary Least Square regression analysis was used in estimating the regression estimates for the purpose of hypothesis testing. It was found that the use of CASI significantly reduces operating expenses for listed industrial goods firms (p-value = 0.0057). The study concludes that CASI brings about significant cost savings for listed industrial goods firms through a combination of process automation, improved supply chain efficiency, and data-driven decision-making. The researchers recommend that industrial goods firms that have already implemented CASI should evaluate the effectiveness of their existing systems by determining if their current systems are optimized for maximum efficiency, or if they can be improved to further reduce operating expenses.

Key words: Computerised Accounting System, Operating Performance, Operating Expense, Computerised Accounting System Intensity.

Introduction

The advancement of computer technology sparked a surge in the development of information storage and processing. As a result, the topic of computerized accounting systems has garnered attention from researchers worldwide (Al-Dalaien & Dalayeen, 2018; Khan, 2017). This interest can be attributed to the significant role that accounting information plays in the success of any business. Adequate and timely accounting information that is reliable, accurate, and relevant is essential for corporate enterprises to function effectively. Therefore, a manager's ability to efficiently and effectively use available resources depends largely on the quality of accounting information at their disposal and the use of computerized accounting systems particularly enhances this quality of accounting information (Johnson & Adegbie, 2021).

Corporate organizations today - in addition to being focused on profit maximization (Nworie, Okafor & Mba, 2023) – have broadened their objectives to include gaining competitive sustainability, surviving turbulent environments, customer satisfaction, effective decision-making (Nworie & Oguejiofor, 2023). Technology plays an indispensable role in achieving these objectives, with Computerised Accounting Systems (CAS) being one of the most crucial technology systems in financial institutions. The advancements in information technology have led to the introduction of CAS in corporate reporting, enabling the production of relevant and accurate financial reports for both management and external users to aid decision-making. CAS automates and integrates all business operations, making it easy and cost-effective for companies to handle their processes. It provides greater visibility into day-to-day business operations and access to vital information automatically, while being capable of handling huge volumes of transactions with speed and efficiency. The many advantages of using CAS have led many to conclude that it is the 'engine of growth' in business organizations. It is required for processing business goods and services, payments, and facilitates cash transfers for business activities. However, the fact that most businesses have not integrated better CAS in their day-to-day transactions has resulted in a number of issues that need to be addressed (Chude & Chude, 2022; Aziz, Zamri & Ariffin, 2022).

Computerised Accounting System plays a crucial role in providing vital information for planning, organizing, directing, leading, and controlling the activities of an organization, thereby enabling administrators to make better strategic decisions (Al-Dalaien & Dalayeen, 2018). With its integrated set of physical and human elements, it promotes worker efficiency and enhances accuracy across the organization, thereby determining the effectiveness of the organization. A well-designed and operating accounting system enables an organization to manage its most valuable resource, which is information. Additionally, many companies use CAS to lower their operating costs, as sharing information across functional areas eliminates redundant efforts and helps businesses to grow (Okafor, 2017). Ultimately, the adoption of CAS to improve technological infrastructure is meant to improve the corporate performance of the firm and give it a competitive edge. However, the study conducted by Nworie, Okafor and John-Akamelu (2022); Aziz, Zamri and Ariffin (2022) and Nworie and Okafor (2023) argued that one of the reasons CAS is lowly adopted could be because of the high cost of acquisition and maintenance, which may be too much for firms to bear.

Thus, the above highlights a potential issue where firms that heavily rely on CAS may also have higher operating costs, which could be due to the expenses associated with implementing and maintaining the system. This raises the question of whether the benefits of using CAS, such as increased efficiency and accuracy, outweigh the costs associated with it, and whether it has any significant impact on a company's operating performance by minimizing the firms' administrative and selling expenses. Existing empirical researches conducted by other studies have neglected to determine whether the intensity of CAS affects operating expenses of firms. Hence, this study is carried out to address this gap in the literature.

1.1 Objective of the Study

The study examines the extent to which computerised accounting system intensity (CASI) affects the operating expenses of listed industrial goods firms.

1.2 Hypothesis

Use of computerised accounting system intensity (CASI) significantly reduces the operating expenses of listed industrial goods firms.

2.0 Literature Review

2.1 Conceptual Review

2.1.1 Computerised Accounting System

Computerised accounting systems (CAS) are software programs designed to automate various accounting tasks such as recording financial transactions, generating financial statements, and tracking inventory. While the use of CAS can provide many benefits, such as increased accuracy and efficiency, it can also come with significant costs, such as purchasing and maintaining the software, training employees, and upgrading hardware. The term Computerised Accounting System (CAS) is used to describe the process of utilizing a computer to aid in accounting. This includes dedicated accounting software and digital spreadsheets to record and track financial transactions for a business or clients (Nworie, Okafor & John-Akamelu, 2022). The goal is to overcome the limitations of manual accounting, increase speed, efficiency and accuracy, resulting in quality and reliable work. Through CAS, financial and accounting information on business transactions are recorded, organized, summarized, analyzed, interpreted and communicated to stakeholders with the aid of computers and computer-based systems such as accounting packages. The integration of different component systems in CAS produces computer books of accounts and computergenerated accounting records and documents, as noted by Nworie and Okafor (2023).

2.1.2 Computerized Accounting System Intensity

Computerized Accounting System Intensity refers to the degree to which a business relies on computerized accounting software to manage its financial transactions and accounting processes. The intensity can vary from business to business depending on their size, complexity, and industry (Azim, 2022). Generally, a higher intensity of computerized accounting systems means that a business heavily relies on software to perform various accounting functions such as recording financial transactions, generating financial reports, managing inventory, and processing payroll. In contrast, a lower intensity of computerized accounting systems indicates that a business may still rely on manual accounting processes, such as paper-based ledgers or spreadsheets.

Computerized Accounting System Intensity (CASI) plays a critical role in modern-day business accounting practices. The extent to which a business relies on computerized accounting systems can vary depending on the size, complexity, and industry of the organization. Small businesses with fewer financial transactions and limited resources may opt for a lower CASI, relying on manual accounting processes, such as paper-based ledgers or spreadsheets (Habiba, Azhar, Annuar & Mastora, 2019). In contrast, larger businesses with more financial transactions, complex inventory systems, and numerous employees are likely to have a higher CASI. They require robust accounting software to handle the sheer volume of transactions and maintain financial records accurately (Tilahun, 2019).

A high CASI typically involves the use of accounting software that can perform various functions such as recording financial transactions, tracking expenses, generating invoices, and preparing financial reports. With a higher CASI, businesses can streamline their accounting processes, reduce manual errors, and ensure greater accuracy in financial

reporting. On the other hand, businesses with a lower CASI may experience challenges in terms of data accuracy, time management, and increased risk of errors. They may spend more time on accounting tasks, which can detract from other essential business functions. Additionally, manual accounting processes may make it harder to identify potential issues, and the lack of automation could lead to the loss of critical financial data. The measure of CASI in this study is the value of accounting software as a percentage of total assets of the firm.

2.1.3 Operating Performance

The operating performance of a firm is its ability to generate returns that exceed the cost of financing its operations (Naoum, Ntounis & Vlismas, 2023). Simply put, the goal of operational efficiency is to generate enough revenue to cover the expenses incurred in generating that revenue, ensuring the survival and profitability of the firm (Nworie & Nwoye, 2023). Essentially, operating performance refers to a firm's ability to generate profits from its core business activities. It also serves as a measure of how effectively a company can use its assets and resources to generate income.

The operating performance of a firm is a valuable metric for stakeholders to evaluate both its current position and past performance. As Austin and Dunham (2022) notes, it provides a basis for assessing how well a company has utilized its resources to generate revenues. Ultimately, a company's ability to maintain strong operating performance is critical to its long-term success and viability in the market. Creditors, investors, management, and other stakeholders are all interested in a firm's operating performance. A high operating performance ratio is desirable for firms as it can lead to better returns for owners, improved staff welfare, higher quality services, and increased customer goodwill. Being operationally efficient also opens up future opportunities for firms since investors prefer to invest in those with favorable financial prospects. Operating performance is an indication that a firm has achieved its financial objectives using the available resources (Al-Shattarat, Hussainey & Al-Shattarat, 2022). Therefore, a company with strong operating performance can create more wealth for investors and attract more investment opportunities compared to firms with poor operating performance. In summary, a firm's operating performance is a critical metric for stakeholders to assess a company's financial prospects, future opportunities, and potential for growth. Operating performance in this study is measured using operating expenses incurred by the firm.

2.2 Theoretical Framework

2.2.1 Developer-based theory

The Developer-based theory was postulated by Everett Roger and Gabriel Trade in 1962. The Developer-based theory which is alternatively termed Innovation Diffusion Theory states that some factors interact to influence the diffusion of an innovation (Makuku, 2020). The four major determinants of the diffusion process are the innovation itself, how information about the innovation is communicated, time, and the nature of the social system into which the innovation is being introduced (Thuan, Khuong, Anh, Hanh, Thi, Tram & Han, 2022; Sastararuji, Hoonsopon, Pitchayadol & Chiwamit, 2022; Olaoye & Dada, 2021). These processes encompasses how, why and at what rate new ideas and technology spread through cultures or societies (Ogundajo, Ogunode, Awoniyi and Iwala, 2022). In the theory of diffusion of innovation, culture plays a tremendously vital role in determining how individuals living in a community, state or a nation accepts or rejects any technological innovations.

Innovation, in this theory, refers to an idea or practice which is perceived as new for adoption by an individual while diffusion entails the process with which innovation is passed on through channels over a period of time between the participants in a social system. The theory postulates that reception of a technological innovation is brought about by cooperation between people through relational systems (Thennakoon & Rajeshwaran, 2022). People adopt to a technological innovation only if it yields improved and advantageous exchange (Mutie, 2020; Mutula, 2018), while organizations look for new profit openings. The outcomes of diffusion theory depends on how rapidly the network or society is happy to receive the innovation.

The relevance of Developer-based theory to the study is that the theory explained motives behind the adoption of technological innovations across cultures and society. Manufacturing firms adapt to technological innovation such as CAS because it provides them with a competitive edge. The study is also related to the Innovation Diffusion Theory based on the criteria of relative advantage which reveals the extent to which an innovation is deemed better than the technology or idea before it; it requires the adopter to analyze the costs and benefits of adopting a technological change, which can be expressed economically or socially. Thus, CAS is adopted because they help firms in producing high quality, reliable, accurate and timely accounting information which enhance managerial decision-making. Finally, the criterion of relative advantage supposes that CAS is adopted for the reason that it reduces operating cost of the adopting firm which helps to improve the firm's competitive position in the industry.

2.3 Empirical Review

Burgos, Namoc, Padilla and Flores (2022) determined the effect of accounting information systems on the performance of SMEs in Tagum City, Philippines. The sample size of 240 respondents were used to generate primary data for the study by means of questionnaire instrument. The correlational analysis carried out in the study revealed that there is a very strong relationship between the accounting information system and the performance of SMEs in Tagum.

Khan, Afridi, Mumtaz, Shad and Iqbal (2022) examined the roles of accounting information system on the performance of SMEs in Pakistan. The primary data collected from a sample size of 100 respondents were analysed with the aid of structural equation modelling. The results showed that the adoption of accounting information system positively enhance cost-cutting, quality improvements and management productivity in SMEs in Pakistan.

Thennakoon and Rajeshwaran (2022) examined how the quality of accounting information system affects the financial performance of listed companies in Sri Lanka. The sample size was constituted by 165 companies from which primary data were sourced using questionnaire and financial statements. The correlational test conducted showed that the quality of accounting information system significantly affects the ROA of listed companies in Sri Lanka.

Ogundajo, Ogunode, Awoniyi and Iwala (2022) examined how the usage of accounting software enhances cost control in listed deposit money banks in Nigeria. 120 copies of questionnaire were administered on the sampled. The regression analysis carried out showed that the usage of accounting software have a positive effect on cost control carried out in listed deposit money banks in Nigeria.

Chude and Chude (2022) conducted a study examining the effect of computerised accounting system on the performance of oil and gas firms in Port-Harcourt, Nigeria. Questionnaire was used to obtain data from a sample of 100 participants. The simple linear regression carried out in the study indicated that accounting software usage significantly affects the productivity, and cost control in oil and gas firms.

Bello, Muhammad and Sulaiman (2022) determined how accounting information system quality affects the profitability of GT Bank Plc in Kano state, Nigeria. Primary data were sourced from the 23 copies of questionnaires administered on the respondents. The multiple regression analysis used in the study indicated that the quality of accounting information system significantly improves the profitability of the bank.

Oduro, Enyan, Acquah and Quarm (2022) ascertained the effect of the adoption of computerised accounting information system on financial performance in the public sector. Primary data were collected from 227 local governments in Ghana via questionnaire while structural equation modelling was deployed in the data analysis. The study found that readiness to adopt CAIS and cost of adopting CAIS have significant effect on financial performance while the effects of CAIS complexities and data security threat are not significant.

Yunusa (2021) examined the effect of computerised accounting system on the performance of the Nigerian banking sector. Primary data collected from a sample of 319 respondents were analysed using regression model which indicated that computerised accounting system positively influences the performance of the Nigerian banking sector.

Chong and Nizam (2018) determined the effect of accounting software on business performance among firms in Malaysia. Primary data were collected from a sample size of 150 respondents. Multiple regression was used in hypotheses testing and found that software efficiency and ease of use significantly affect business performance.

3.0 Methodology

The study adopted ex-post facto research design on a population of thirteen listed industrial goods firms in Nigeria. The constituents of the population are: Austin Laz & Company Plc., Berger Paints Plc., Beta Glass Plc., BUA Cement, Cap Plc., Cutix Plc., Dangote Cement Plc., Greif Nigeria Plc., Lafarge Africa Plc., Meyer Plc., Notore Chemical Ind Plc., Premier Paints Plc. and Tripple Gee & Company Plc. However, purposive sampling was applied in choosing the sample size on the basis of availability of annual reports from 2012 to 2021. The following seven (7) companies made up the sample size of the study: Berger Paints Plc., Beta Glass Plc., Cap Plc., Cutix Plc., Dangote Cement Plc., Greif Nigeria Plc., Lafarge Africa Plc. Secondary data were gleaned from the annual reports of the sampled firms over a period of ten years which spanned from 2012 to 2021. The Ordinary Least Square regression analysis was used in estimating the regression estimates for the purpose of hypothesis testing. In the hypothesis, the researchers conjectured that computerised accounting system intensity significantly reduces the operating expenses of listed industrial goods firms in Nigeria. The natural log of Computerised Accounting System was used as a control variable. Thus, the linear regression model estimated is expressed below:

$$OPEX_{it} = \alpha_0 + \beta_1 CASI_{it} + \beta_2 LogCAS_{it} + \mu_{it}.....eq 1$$

Where, CASI = Computerised Accounting System Intensity measured as Value of Accounting Software as a percentage of firm's total assets

LogCAS = Natural log of Computerised Accounting System measured as Log10(Value of Accounting Software divided by total assets)

OPEX = Operating Expense

 α = Constant

 β = Coefficient of the independent variable

 $\mu = error term$

i = the firm in question

t = the time in question.

4.0 Result and Discussion

4.1 Descriptive Analysis

Table 1 Descriptive Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
Operating Expense	70	18288832	42210825	44056	245204000
Computerised Accounting System Intensity	70	.3022703	.5544061	0	3.071524
Log(CAS)	70	3.526333	1.839808	0	6.505761

Source: Analysis Output Using Eviews 10

Operating Expense represents the total operating expenses of a company. The mean value of 18,288,832 suggests that this company has a relatively high level of expenses, although this can be influenced by outliers on the high end (as evidenced by the large standard deviation of 42,210,825). The minimum value of 44,056 indicates that there are some low-cost items in the company's expenses, while the maximum value of 245,204,000 suggests that there are also some very high-cost items.

Computerised Accounting System Intensity represents the extent to which the company uses computerised accounting systems. The mean value of 0.3022703 suggests that, on average, the companies use these systems to a moderate extent as about .3% of the firms' total assets is made up of CAS. The standard deviation of 0.5544061 indicates that there is some variability in the extent to which different companies use these systems. The minimum value of 0 indicates that some companies do not use these systems at all, while the maximum value of 3.071524 suggests that there are some companies that rely heavily on these systems.

Log (Computerised Accounting System) is a logarithmic transformation of the Computerised Accounting System Intensity variable. The mean value of 3.526333 suggests that, on average, the company's use of these systems is moderately high (since this is the exponentiated value of the mean of the original variable). The standard deviation of 1.839808 indicates that there is a wide range of use of these systems across different companies. The minimum value of 0 suggests that some companies do not use these systems at all, while the maximum value of 6.505761 indicates that there are some companies that rely very heavily on these systems.

4.1.1 Test of Heteroskedasticity

Table 2 Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	2.186850	Prob. F(2,67)	0.1202
Obs*R-squared	4.289521	Prob. Chi-Square(2)	0.1171
Scaled explained SS	26.04715	Prob. Chi-Square(2)	0.0000

Source: Analysis Output Using Eviews 10

Table 2 shows the results of a Breusch-Pagan-Godfrey (BPG) test for heteroskedasticity. This statistical test was used to determine whether the variance of the errors in the regression model is constant across different levels of the independent variables. The test results show that the F-statistic for the BPG test is 2.186850, and the associated probability (Prob. F) is 0.1202. The null hypothesis that the variance of the errors in the regression model is constant across different levels of the independent variables was accepted since the Prob. F = 0.1202 exceeded 0.05.

4.1.2 Test of Multicollinearity Table 3 Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
CASI	7.79E+13	1.459660	1.121464
LOGCAS	7.08E+12	5.301074	1.121464
C	9.97E+13	4.735256	NA

Source: Analysis Output Using Eviews 10

Table 3 shows the results of a variance inflation factor (VIF) analysis. VIF is a measure of how much the variance of the estimated regression coefficient for a given independent variable is increased due to correlation with other independent variables in the model. A high VIF indicates that the corresponding variable may be causing multicollinearity (high correlation) among the independent variables, which can lead to unstable and unreliable coefficient estimates. Both variables have a VIF of 1.121464, which is relatively low and suggests that there is not much evidence of multicollinearity between these variables.

4.2 Hypothesis Testing

4.2.1 Model Estimation

Table 4 Ordinary Least Square Estimation

Dependent Variable: Operating Expense

Method: Least Squares Date: 04/07/23 Time: 02:42

Sample: 170

Included observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CASI	-25240467	8828059.	-2.859119	0.0057

LOGCAS	9714447.	2660240.	3.651718	0.0005
C	-8338097.	9984996.	-0.835063	0.4067
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.172815 38390627 9.87E+16 -1320.225	Mean dependent var S.D. dependent var Akaike info criterion Schwarz criterion Hannan-Quinn criter. Durbin-Watson stat		18288832 42210825 37.80644 37.90280 37.84471 0.717324

Source: Analysis Output Using Eviews 10

Table 4 shows the results of an ordinary least squares (OLS) regression analysis that investigates the relationship between the use of computerised accounting system intensity (CASI) and the operating expenses of listed industrial goods firms. The regression results provide information on the overall fit of the model. The R-squared value of 0.196791 indicates that the model explains about 19.7% of the variation in operating expenses. The adjusted R-squared value of 0.172815 accounts for the number of independent variables in the model, and is slightly lower than the R-squared value. The F-statistic of 8.207712 and the associated probability of 0.000648 suggest that the overall regression model is statistically significant at the 1% level of significance. This means that there is strong evidence to support the claim that the independent variables in the model (CASI and LOGCAS) are jointly related to the dependent variable (operating expenses). The regression model includes the natural logarithm of CASI (LOGCAS) as a control variable. With a coefficient of 9714447, the variable LOGCAS shows a positive impact, and the probability of 0.0005 suggests a statistically significant correlation. This positive effect is due to the fact that CAS reflects a cost incurred by the firm.

4.2.2 Test of Hypothesis I

1) Use of computerised accounting system intensity (CASI) significantly reduces the operating expenses of listed industrial goods firms.

The regression results show that CASI has a negative coefficient of -25240467, which indicates that an increase in CASI is associated with a decrease in operating expenses. The associated probability (Prob.) of 0.0057 suggests that the relationship between CASI and operating expenses is statistically significant at the 5% level of significance. The researchers therefore rejected the null hypothesis that the coefficient for CASI is zero, and concluded that the use of CASI significantly reduces operating expenses for listed industrial goods firms (*p*-value = 0.0057). This finding is in line with study by Ogundajo, Ogunode, Awoniyi and Iwala (2022); Chude and Chude (2022). Ogundajo, Ogunode, Awoniyi and Iwala (2022) found that the use of accounting software has a positive effect on cost control in listed deposit money banks in Nigeria, based on a study using 120 questionnaires. Chude and Chude (2022) also found that the usage of computerized accounting systems significantly affects cost control in oil and gas firms in Port-Harcourt, Nigeria, based on a study using a sample of 100 participants and simple linear regression analysis.

5.0 Conclusion and Recommendation

The study found that the use of CASI significantly reduces operating expenses for listed industrial goods firms. That is, the use of CASI can bring about significant cost savings for listed industrial goods firms through a combination of process automation, improved supply

chain efficiency, and data-driven decision-making. This is because CASI can streamline and automate various business processes, reducing the need for manual labor and hence saving on labor costs. This automation can be seen in areas such as inventory management, production planning, and order processing, among others. By eliminating the need for manual input, errors can also be reduced, resulting in cost savings.

In addition, CASI can improve supply chain efficiency by enhancing communication and collaboration between suppliers, manufacturers, and customers. With better coordination, there could be a reduction in inventory costs, as suppliers are better able to anticipate demand and avoid stockpiling. This can also reduce the cost of stockouts and backorders, leading to improved customer satisfaction and a better reputation for the company.

Finally, CASI can provide real-time data and analysis, enabling firms to identify inefficiencies and areas for improvement in their operations. This can lead to the identification of cost-saving opportunities that may not have been visible before, such as reducing energy consumption or optimizing the use of production resources. Based on this, the study recommends the following:

- 1. Evaluate the effectiveness of existing CASI systems: Industrial goods firms that have already implemented CASI should evaluate the effectiveness of their existing systems. They should determine if their current systems are optimized for maximum efficiency, or if they can be improved to further reduce operating expenses. This evaluation could involve a review of the data and metrics associated with the use of the technology, as well as feedback from employees who use the system.
- 2. Monitor the industry for new developments: As with any technology, there may be new developments or updates to CASI that could enhance its effectiveness in reducing operating expenses for industrial goods firms. Therefore, firms should keep abreast of industry developments and advances in the technology, and evaluate the potential benefits of incorporating any new features or capabilities into their existing systems. This could involve attending industry events, participating in forums or webinars, or collaborating with technology providers or consultants.

References

- Al-Dalaien, B. & Dalayeen, O. (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-Shattarat, B., Hussainey, K., & Al-Shattarat, W. (2022). The impact of abnormal real earnings management to meet earnings benchmarks on future operating performance. *International Review of Financial Analysis*, 81, 101264.
- Austin, R. E., & Dunham, L. M. (2022). Do FinTech acquisitions improve the operating performance or risk profiles of acquiring firms?. *Journal of Economics and Business*, 121, 106078.
- Azim, M. R. (2022). E-Accounting practices of manufacturing firms in Bangladesh. *International Journal of Multidisciplinary Research and Analysis*, 5(9), 2331-2338.
- Aziz, A., Zamri, S. M. M., & Ariffin, S. A. (2022). The challenges in implementation of accounting software system in Malaysia. *Quantum Journal of Social Sciences and Humanities*, 3(5), 94-106.

- Bello, M. M., Muhammad, U. A., & Sulaiman, S. M. (2022). Effects of quality of accounting information system on profitability of guaranty trust bank PLC. *International Journal of Multidisciplinary Research and Growth Evaluation*, *3*(5), 476-481.
- Burgos, C. P., Namoc, I. S., Padilla, J. P., & Flores, J. M. N. (2022). The influence of accounting information system on the organizational performance among SMEs in Tagum city. *International Journal of Multidisciplinary: Applied Business and Education Research*. *3*(5), 781 790.
- Chong, Y. & Nizam, I. (2018). The impact of accounting software on business performance. *International Journal of Information System and Engineering*, 6(1), 1-25.
- Chude D.I. & Chude N.P. (2022). Effect of computerised accounting system on organisational performance of oil and gas firms in Port Harcourt, Nigeria. *British Journal of Management and Marketing Studies*, 5(3), 66-88.
- Habiba, Y., Azhar, M. N., Annuar, B. M.N. & Mastora, Y. (2019). Computerised accounting information system adoption among small and medium enterprises in Addis Ababa, Ethiopia. *International Journal of Accounting, Finance and Business (IJAFB)*, 4(19), 44-60.
- Johnson, E., & Adegbie, F. F. (2021). Accounting software in a computerised business environment and quality of corporate reporting. *Journal of Business and Management*, 23(4, 10), 43-49.
- Khan, A. (2017). Impact of accounting information system on the organizational performance: a case study of Procter and Gamble. *Star Research: An International Online Journal*, 5(12), 26-32.
- Khan, Y., Afridi, F., Mumtaz, M., Shad, F. & Iqbal, A. (2022). The sophisticated role of accounting information system (AIS) on the performance of Small and medium-sized enterprises (SMEs): Evidence from an emerging economy. *Competitive Social Science Research Journal*, 3(2), 199-214.
- Makuku, A. (2020). Determinants of accounting information systems adoption among state owned corporations in Kenya (Doctoral dissertation, KCA University).
- Naoum, V. C., Ntounis, D., & Vlismas, O. (2023). Strategy, intellectual capital and operating performance. *International Journal of Managerial and Financial Accounting*, 15(1), 50-87.
- Nworie, G. O. & Oguejiofor, B. C. (2023). Management Information System and Performance of Cement Firms in Southeast Nigeria. *International Journal of Accounting and Management Information Systems*, *I*(1), 1–15. https://doi.org/10.35912/ijamis.v1i1.1366
- Nworie, G. O., & Nwoye, U. J. (2023). Drivers of Operating Profit: A Focus on Selected Firms' Costs. *CECCAR Business Review*, 4(2), 62-72. dx.doi.org/10.37945/cbr.2023.02.07
- Nworie, G. O., Okafor, T. G. & Mba, IC. (2023). Financial Performance of Public Companies in Anambra State Amidst the Scourges of Covid-19 Pandemic Outbreak. *International Journal of Research and Innovation in Social Science*, 7(1), 1215 –

- 1228. https://www.rsisinternational.org/journals/ijriss/Digital-Library/volume-7-issue-1/1215-1228.pdf
- Nworie, G.O. & Okafor, T.G. (2023). Nigeria Public Manufacturing Firms adoption of Computerised Accounting System: The Firm Size and Firm Capital Turnover Effect, *Journal of Global Accounting*, 8(3), 320 341.
- Nworie, G.O., Okafor, T.G. & John-Akamelu, C.R. (2022). Firm-level traits and the adoption of computerised accounting information system among listed manufacturing firms in Nigeria. *Journal of Global Accounting*, 8(3), 128-148. Retrieved from https://journals.unizik.edu.ng/index.php/joga/article/view/1858
- Oduro, R., Enyan, E. K., Acquah, A. A., & Quarm, R. S. (2022). Linking computerised accounting information system adoption to financial performance in the public sector: the influence of internal control systems. *European Journal of Business and Management Research*, 7(2), 227-239.
- Ogundajo, G., Ogunode, O., Awoniyi, O., & Iwala, A. (2022). Usage of accounting software on cost control of listed deposit money banks in Nigeria. *International Journal of Management Studies and Social Science Research*, DOI: https://doi.org/10.56293/IJMSSSR.2022.4521
- Okafor, M. U. (2017). A comparative analysis of computerized and manual accounting system: a study of Forte Oil Plc Presidential Road, Enugu Branch. MSc. Thesis submitted to OSISATECH Poly, Enugu.
- Olaoye, C. O. & Dada, D. O. (2021). Computerised accounting system and performance of universities in southwest, Nigeria. *International Journal of Management (IJM)*, 12(5), 72-85.
- Sastararuji, D., Hoonsopon, D., Pitchayadol, P., & Chiwamit, P. (2022). Cloud accounting adoption in Thai SMEs amid the COVID-19 pandemic: an explanatory case study. *Journal of Innovation and Entrepreneurship*, 11(1), 1-25.
- Thennakoon, S. T. M. M., & Rajeshwaran, N. (2022). Accounting information system and financial performance: Empirical evidence on Sri Lankan firms. *International Journal of Accounting & Business Finance*, 8(1), 15-32.
- Thuan, P. Q., Khuong, N. V., Anh, N. D. C., Hanh, N. T. X., Thi, V. H. A., Tram, T. N. B., & Han, C. G. (2022). The determinants of the usage of accounting information systems toward operational efficiency in industrial revolution 4.0: evidence from an emerging economy. *Economies*, 10(4), 83-101.
- Tilahun, M. (2019). Determinants of computerised accounting information system adoption by hospitals in Addis Ababa, Ethiopia. *The Strategic Journal of Business & Change Management*, 6 (1), 189 199.