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Strategic Management Accounting (SMA) and Financial Performance of Small And Medium Sized Nigerian Enterprises And Oroma King Wofuru-Nyenke

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Abstract: *This study investigated the relationship between strategic management accounting (SMA) and financial performance of small and medium sized enterprises (SMEs) in Nigeria. Activity based costing (ABC) and target costing (TC) were used to measure strategic management accounting as independent variables while return on assets (ROA) and return on investment (ROI) were used to measure financial performance as dependent variables in this study. The study adopted survey research design and relied on primary data sourced through a well-designed questionnaire. Pearson's Product Moment Correlation (PPMC) techniques was used to analyze the sourced data. The findings suggest that there is a positive and significant relationship between ABC and ROI in Nigerian SMEs. Also, the findings of this study revealed a positive and significant relationship between TC and ROI. Positive relationships were also found between ABC, TC and ROA but at an insignificant level in Nigerian SMEs. The study therefore recommends that Nigerian SMEs should enhance data collection for robust analysis, fostering adoption of ABC and target costing practices to potentially improve ROI and asset management. Furthermore, that government agencies should support research initiatives to aid in increasing awareness on strategic management accounting practices' impact on SMEs' financial performance.*

Keywords: Activity based costing, Target costing, Return on Assets, Return on investment

INTRODUCTION

The recent liberalization and internationalization of the business sector, as well as the acceleration of technological progress, has had an impact on the job of management accountants. (Dang et al. 2021) Companies have to contend with shifting consumer demands for personalized products, shorter product life cycles, dynamic international marketplaces, and a large number of competitors. Strategic management accounting (SMA) is a critical tool in the toolbox of businesses seeking to thrive in these dynamic circumstances. (Aaltola, 2021, Pasch, 2019). Chenhall (2003) emphasized the critical role management accountants play in using SMA practices and their expertise to provide information for strategic decision-making. According to Bromwich (1999) the analysis of financial information on a company's expenses, market share, and examination of competitors' cost structures, are all included in strategic management accounting.

Strategic management accounting provides a means of supplying invaluable data that guides the organizing, regulating, managing, and decision-making processes necessary for a company's operational performance. As a result, businesses that employ efficient SMA techniques frequently display improved business operations (Umelo et al. 2021, Adeniran and Obembe, 2020). In order to thrive in the current competitive business landscape, companies must consistently devise and implement strategies aimed at enhancing product quality and productivity, fostering product and process innovations while cutting and managing costs. An innovative strategy called Strategic Management Accounting (SMA) was developed to address the needs of contemporary, forward-thinking businesses. According to Guilding et al. (2000), SMA can add a great deal of value by giving managers access to more pertinent information that is needed to make choices. Wheelen and Hunger (2008) articulated that initially SMA was of most use to large firms operating in multiple industries. Increasing risks of error, costly mistakes, and even economic ruin now forced today's professional managers in all organizations to take strategic management seriously in order to keep their firms competitive in an increasingly volatile environment.

According to Bhunia et al. (2011), The entire financial well-being of a company over a specific time period is gauged by its financial performance. It is an essential indicator of an organization's profitability and financial health. A variety of measures, each of which highlights a different facet of financial health, are used to evaluate financial performance. With a focus on wealth creation and profit maximization, the area of financial management encompasses a broad variety of operations aimed at understanding and enhancing future financial performance. The aim of this endeavor is to optimize the efficiency of the accessible funds (Vohra and Dhillon, 2014).

Reliable and timely information are made available for business decision-making demands with the help of SMA practices (Odia 2019). Strategic costing and target costing, Activity based costing, competitive accounting, costumer accounting, strategic decision making, planning, control, performance management, and evaluation have been proven to be SMA practices or techniques (ThankGod, 2022, Idowo and Edgars, 2023). The convergence of these factors, in turn, helps businesses improve their financial performance. Strategic management accounting (SMA) was found to have a considerable favorable impact on a company's total business performance in a study by (Dang et al. 2021).

In developed countries as well as in developing ones, much has been written on strategic management accounting in form of academic research. However, in Nigeria particularly, there are scarce empirical studies conducted to investigate the relationship between SMA and financial performance in small and medium enterprises. This necessitated the study. In light of this, the goal of this study is to better understand the complex relationship between SMA methods and the financial performance of small and medium-sized businesses (SMEs) in Nigeria. By doing this, we hope to shed light on the precise methods by which SMEs can use strategic management accounting to improve their financial performance in the distinctive and difficult business climate of the Niger. The goal of this study is to offer insightful information that SMEs, decision-makers, and other stakeholders can use to improve SMA methods for long-term financial success. The purpose of the following parts is to explore the methodologies used, data gathering methods, data analysis procedures, findings, and implications. It is associated on these gaps that this study proposes to examine the relationship between strategic management accounting (SMA) and profitability of quoted small and medium scale enterprises in Nigeria.

Research Objectives

This study's primary goal is to objectively examine the connection between small and medium-sized businesses' financial performance in Nigeria and their use of strategic management accounting (SMA) techniques. Nonetheless, the precise objectives of the study are to:

(a) To determine relationship between activity-based costing and return on investment of SMEs in Nigeria
(b) To determine relationship between activity-based costing and return on asset of SMEs in Nigeria
(c) To determine relationship between target costing and return on investment of SMEs in Nigeria
(d) To determine relationship between target costing and return on asset of SMEs in Nigeria

Research Hypothesis:

The following null (Ho) hypotheses must be tested for the study to achieve its empirical conclusions

Ho_1**:** There is no significant relationship between activity-based costing and return on investment of SMEs in Nigeria

Ho_2**:** There is no significant relationship between activity-based costing and return on asset of SMEs in Nigeria

Ho_3**:** There is no significant relationship between target costing and return on investment of SMEs in Nigeria

Ho_4**:** There is no significant relationship between target costing and return on asset of SMEs in Nigeria

Review of Related Literature

Theoretical literature

This study is anchored on efficiency theory formulated by Demsetz (1973) and resource-Based Theory. This is due to the fact that these theories underpin and relate to the objectives of the study. Demsetz (1973) proposed the efficiency theory as an alternative to the market power theory. According to the efficiency theory, better management and scale efficiency leads to more concentration and higher profitability. As a result, management efficiency, according to the hypothesis, not only boosts profits, but also leads to higher market share gains and improved market concentration (Athanasoglou, et al. 2008). According to the hypothesis, a positive relationship between concentration and profit arises from decreased costs, which can be obtained through the use of SMA practices and increased managerial processes (Birhanu et al. 2018). Furthermore, the efficiency theory emphasizes that better profit margins are the result of efficiency which different SMA techniques bring about. These accounting tools enable organizations to achieve both good financial performance and market shares (Umelo et al. 2021).

Also, the resource-based theory emanates from the principle that the source of firm's competitive advantage lies in their internal resources, as opposed to their positioning in the external environment. That is rather than simply evaluating environmental opportunities and threats in conducting business, competitive advantage depends on the unique resources and capabilities that a firm possesses (Barney, 1995). The resource-based approach of the firm predicts that certain types of resources owned and controlled by firms have the potential to generate competitive advantage as well as superior firm performance. The resource-based approach, which states that the key components of a firm's competitive advantage and superior performance are its valuable and properly managed resources and capabilities, is used to explain the relationship between SMA techniques and financial performance. With SMA practices, resources are managed properly to reduce cost, manage capabilities, increase profitability and thereby preserve competitive advantages in the market. Firm resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive and implement strategies that improve its efficiency and effectiveness (Barney, 1995).

Conceptual Framework/Study Variables:

The diagram below shows the variables of the study. They include the independent and dependent variables. The independent variable in this study is strategic management accounting and its two dimensions of ABC costing and target costing. The dependent variable is measured by return on investment (ROI) and return on asset (ROA). The arrow on the diagram below signifies the movement of the relationships between the independent and dependent variables of the study.

Conceptual Framework

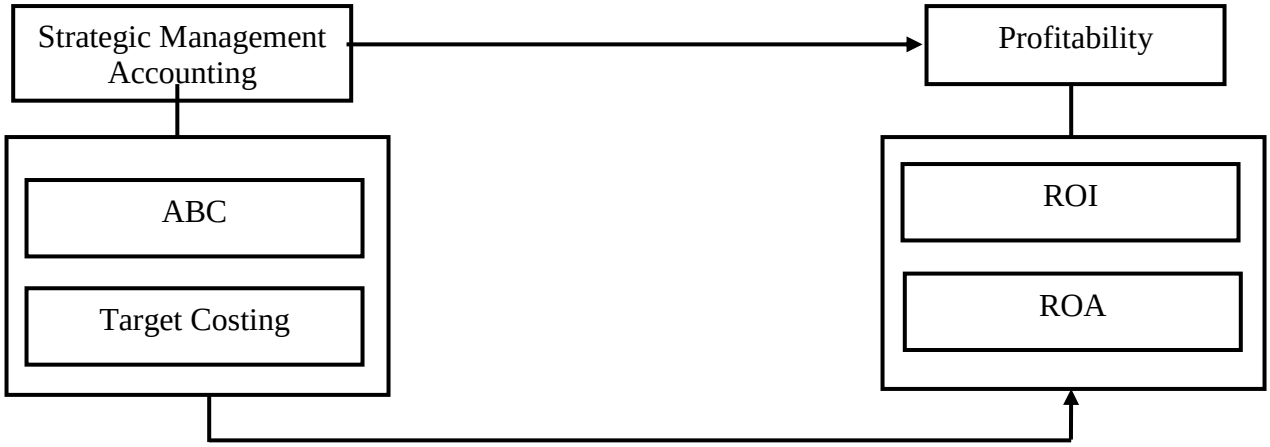

Figure 1.1: Conceptual framework showing the relationship between strategic management accounting and financial performance of small and medium scale enterprises in Nigeria.

Strategic Management Accounting

The process of identifying, gathering, choosing, and analyzing accounting data to support the management team in making strategic decisions and assessing the efficacy of the business is known as strategic management accounting (Hoque & James, 2016). Management accounting and strategic management are the two terms that make up strategic management accounting. The first word, management accounting, refers to the process of measuring and gathering financial data that is utilized by management. (Shahbahn, 2012). And the key term here is strategic management, which centers on the value chain. Simonds (2005) defineds SMA as the provision, preparation, and analysis of management accounting data regarding a business unit and its competitors for the business unit's strategy. The first concept of strategic management accounting is based on many attempts to integrate complex ideas from the strategy text into management accounting. In the 1980s, the concept of strategic management accounting was discussed in the specialized literature. In general, strategic management accounting is identified with the general accounting approach for strategic positioning. The strategic nature of management accounting is external orientation and futurism (Engouti, 2010). SMA techniques or practices includes Activity based costing and Target costing

Activity Based Costing

According to Egbunike et al. (2013), activity-based costing is a costing method that involves identifying the activities inside an organization and allocating the resources needed for each activity to all products and services based on the actual consumption by each. The fundamental concepts of ABC are: product consumption, operational expenses associated with consumption, and operating cost structure by product cost. Eliminating non-value-added roles will increase value-added operational effectiveness and efficiency. By overcoming the clear responsibilities under the indirect costs of defects in the traditional cost accounting system, the ABC method allows sufficient attribution to a wide range of products, thereby increasing the indirect costs of growing technology, which can significantly improve the authenticity of cost information. (Egbunike et al. 2015). In order to address the shortcomings in the area of overhead cost allocation to product resulting from the application of traditional costing technique, Activity Based Costing was created.

Target Costing

Target costing is a SMA strategy or techniques that is especially important for small and medium-sized organizations (SMEs) when it comes to their financial performance and competitiveness. Aligning a company's product or service costs with the intended market price while maintaining profitability is the main goal of this cost management strategy. Target costing basically aims to achieve a careful balance between controlling costs and satisfying consumer and market demands. Fundamentally, target costing is establishing a preset cost target for a good or service prior to its creation or launch. Numerous elements, such as market research, consumer expectations, competition, and the intended profit margin, are taken into account when determining this target cost. Making ensuring the product can be sold at a price that consumers are ready to pay while yet enabling the business to meet its profit targets is the main goal.

Financial performance

Various measures can be used to compute or evaluate financial performance. All measures, however, capture different aspects of financial performance. Financial management practices often aim to support the effectiveness of financial resources by taking a broad view to understand future financial performance and how to maximize benefit and translate it into wealth. (Vohra and Dhillon, 2014). An organization's overall financial health over a specified period of time is implied by its financial performance. The foundation of a business firm's performance concept is the notion that an organization is a freely chosen grouping of productive resources including human, material, and financial, with the aim of accomplishing a common goal. (Alchian and Demsetz, 1972, Barney, 1995). It is said that the essence of performance is the creation of value.

Return on Asset (ROA):

Return on assets is a ratio that has been used in prior research to measure financial performance (ThankGod 2021). Return on asset (ROA) indicates how profitable a company is relative to its total assets. The return on assets ratio illustrates how well management is employing the company’s total assets to make a profit (Okenwa et al. 2017). The more effectively management uses its asset base, the higher the return. The return on asset ratio, which is given as a percentage, is computed by dividing net income by the average total assets. This ratio assists management and investors in assessing the firm's ability to turn asset investments into earnings, as the primary objective of company assets is to generate revenue and profits (Suardana et al. 2018). Return on asset calculates the profitability of an organization's assets. An increased ratio indicates that the business is managing its assets more efficiently to generate larger levels of net income, which is better news for investors. Positive ROA ratios typically signify an increasing trend in profits (Rajindra et al 2021).

Return on Investment (ROI):

Return on investment (ROI) is the amount of net income returned as a percentage of shareholders investment. Return on investment is a ratio that provides investors with the insight into how efficiently a company (or more specifically, its management team) is managing the equity that shareholders have contributed to the company (Fuhrmann, 2017). Return on investment measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested (Amahalu et al. 2017). The denominator for ROI is, or return on investment specifically shareholders' investment. Shareholders’ investment is assets minus liabilities on a firm's balance sheet and is the accounting value that is left for shareholders should a company settle its liabilities with its reported assets.

Empirical Review

Prior research done in the study field of SMA and firm performance has resulted in different results. Some scholars have discovered a positive relationship between the variables (Ogundajo and Nyikyaa (2021, Idowo and Edgars (2023). While, some have discovered negative relationship between SMA and firm performance (Umelo et al. 2021, Odia 2019). However, most researchers agree that there is relationship between SMA and performance of businesses in different sectors. Idowo and Edgars (2023) researched into the relationship between strategic management accounting tools and organizational performance. Organizational performance was measured by return on investment, employee and product performance. While strategic management tools were proxied by strategic costing, strategic decision making, competitor accounting and customer accounting. The researchers found that positive relationship between the strategic management accounting tools and organizational performance. In the same line, Ogundajo and Nyikyaa (2021) investigated the effect of management accounting practices on the performance of manufacturing companies in Nigeria. Performance was measured in terms of market share in the study. The study adopted a survey research design. The study covered the population of 20 manufacturing companies in Nigeria. Data was obtained through structured questionnaires. The results of the regression analysis conducted, revealed that total quality management and budgeting have significant positive effect on market share, while cost analysis and performance evaluation have no significant effect on market share. The study concluded that a significant relationship exists between management accounting practice and market share of manufacturing companies in Nigeria. The study recommended that manufacturing companies should consider adopting effective costing technique, proper budgeting system as well as consistent performance evaluation process so as to increase level of performance.

Adeniran and Obembe (2020) investigated the role of strategic management accounting in realizing the better performance of transport businesses in Nigeria. The study generated data from 230 transport businesses in Nigeria through a cross-sectional questionnaire survey approach. The findings revealed that factors such as information, technology, people, and government policy are significant factors impacting the performance of the transport business. Also, their findings revealed a significant relationship between strategic management accounting and business performance. Similarly, Emiaso and Egbunike (2018) examined the relationship between the application of strategic management accounting practices and organizational performance of manufacturing companies in Delta State, Nigeria. The study adopts the survey research design. The sample comprised of fifteen manufacturing firms randomly selected from all manufacturing firms in Delta State. The study relied on primary data; obtained from a structured questionnaire administered to the respondents. The data were analyzed using t-test and regression analysis. The results showed that the use of strategic management accounting tools is positively related to organizational performance. ThankGod (2022) assessed the relationship between strategic management and financial performance of banks in the Niger Delta area in Nigeria. Quasi-experimental research design was used to structure the research study. Data was collected through a structured questionnaire. The findings of the research indicated a positive and significant relationship between Activity based costing with both return on assets and return on equity.

Furthermore, Oboh and Ajibolade (2017) examined the extent of application and contribution of strategic management accounting to strategic decision-making in banks. The sample consisted of twenty registered banks; and, the respondents comprised of seventy-one (71) bank managers from the studied banks. The study relied on primary data; obtained from a structured questionnaire. The data were analyzed using Pearson Chi-square test and simple regression technique. The results showed that strategic management accounting had a significant influence on strategic decision-making in the area of competitive advantage and increased market share. Also, Akenbor and Okoye (2012) investigated the application of strategic management accounting with a view to determining the extent to which it influences competitive advantage. The sample comprised of one hundred manufacturing firms; and, a total of three hundred respondents were selected. The study relied on primary data; which was obtained from a structured questionnaire. The data were analyzed using descriptive statistics. The result revealed that strategic management accounting enhances the competitive advantage of manufacturing firms.

On the opposing side of findings, Odia (2019) found a significantly negative effect of SMA practices or techniques on financial performance. The research study was based on financial institutions and questionnaires were used to obtain primary data. It was however noted in the study that strategic decision making positively influenced financial performance in the Nigerian banking sector. Further Umelo et al. (2021) evaluated the relationship between strategic management accounting practices and return on equity as a measure for financial performance. The study focused on Nigerian manufacturing companies. The research was carried with the use of questionnaires to deduct primary data. The research findings were arrived at with the use of fixed effects, random effects and ordinary least square regressions. a negative but insignificant relationship was found between target costing and return on equity. Also, the relationship between Activity based costing and return on equity proved to be negative and statistically significant. Their results only showed a positive and significant relationship between absorption costing and return on equity. Also, Ojua (2016) examined strategic management accounting practices among indigenous manufacturing firms in Nigeria. The study utilized the survey research design. The sample comprised of ten manufacturing firms in the Agbara Industrial Estate, Ogun Estate, Nigeria. The study relied on primary data; obtained from a structured questionnaire. The data were analyzed using Pearson Product Moment Correlation Coefficient and multiple regression techniques. The results revealed that there is no significant relationship between the adoption of SMA practices by Nigerian manufacturing enterprises and operational effectiveness. The differences in the findings of

prior studies gives room for this study to fill. Also, in reviewing past studies in this field of study, it was noted that SMEs have not been focused on in terms of how SMA techniques relates to their financial performance

Research Methodology

Research Design

The structure of the investigation is intended to identify the variables and their relationships to one another, and the research design is the framework or plan that is used as a guide in data collection and analysis to draw conclusions about causal relationships among the various variables under investigation (Asika and Awolusi 2013). This study adopts the descriptive survey research design. This method is considered appropriate as it is useful for the study of non-observable events such as opinions, attitudes, preferences or dispositions (Soyombo, 2023). The study is a correlation, non-contrived and cross-sectional survey having individuals (accounting officials of SMEs in Rivers State) as unit of analysis. The design was such as to discover vital predictive relationship and degrees of association among the variables. The SMEs in Rivers State were chosen as the target population, and five (5) companies including Ace Toys & Plastics Nigeria Ltd., Adamac Group of Companies, Adex Group of Companies, Cinjex Group of Companies, and West African Glass Industry Plc each containing fifty-six (56) elements were chosen to make up the accessible population.

Method of data Collection

The study used primary data acquired from a structured questionnaire administered to respondents. Information gathered from original sources, such as questionnaires and in-person interviews, serves as the primary technique. However, secondary sources for the study includes information gotten from journals, publications, textbooks, websites, and periodicals. Secondary data refers to material that has already been gathered and published, as stressed by (Johnston 2014). To learn more about a person's knowledge, motivation, attitude, beliefs, feelings, future goals, or previous behavior, questionnaires and interviews are frequently utilized.

Method of data Analysis

The goal of statistical analysis, according to Chen and Zhang (2014), is to condense a large amount of data into a manageable amount from which we may emphasize broad trends and the relationships between variables. With the use of SPSS, the statistical package for social sciences, the Pearson's Product Moment Correlation (PPMC) method quantifies the relationship between two variables in data analysis. It assesses how changes in one variable correlate with changes in another, indicating the strength and direction of their association. By calculating a correlation coefficient, typically ranging from -1 to 1, PPMC helps determine the extent of linear dependence between variables, aiding in understanding patterns and relationships within datasets.

Reliability of Research Instruments

Ascertaining the accuracy and consistency of the measurements used for the study is necessary to determine the reliability of the questionnaire. This is established by a pilot study in which the consistency and dependability of the instruments are examined. The results are determined with the use of the statistical program for social sciences (SPSS) utilizing the scored, coded, and imputed copies of the questionnaire that were retrieved.

As a result, only the items that have an alpha value of 0.7 or above are taken into consideration. The coefficient is based on Cronbach's alpha.

Data Presentation and Analysis

Data from field survey are presented, analyzed and discussed. Answers on the research questions are tested to validate the true position of the theoretical framework. The hypothesis will be either accepted or rejected depending on the outcome of the result.

Data Presentation

A total of thirty-three (33) copies of questionnaires were distributed five quoted small and medium scale businesses in Nigeria which forms the scope of the study (18) copies were returned and are usable. The companies, questionnaire distributed, returned and unreturned are presented below.

Table 1: Departments, Questionnaire distributed, returned and unreturned.

Companies	Questionnaires Distributed	Questionnaires Returned	Questionnaires Unreturned
Adamac Group of Companies	7	5	2
Adex Group of Companies	7	4	
Cinjex Group of Companies	7	3	4

Ace Toys & Plastics Nigeria Ltd	6	3	3
West African Glass Industry Plc	6	3	3
Total	33	18	15

Source: Authors computation based on field survey 2023.

Data Analysis & Results

The data is analyzed using sample percentages through Microsoft excel package to avoid errors and misrepresentation of the data. The data used for this work is presented below:

Table 2: Tabulated data for Activity Based Costing:

Description/Scale	**SA**	**A**	**UN**	**D**	**SD**	**Total**
ABC Costing	**(5)**	**(4)**	**(3)**	**(2)**	**(1)**	
ABC assigns costs accurately to activities, revealing actual expenses and aiding in informed decision-making in small businesses.	3	4	1	5	5	18
It Streamlines cost allocation, identifying profitable activities, and eliminating wasteful spending in medium-scale enterprises.	4	3	4	4	3	18
It Adapts to changing business needs, offering a scalable approach to track and manage costs effectively in various operations.	6	1	3	4	4	18
Total Responses	**13**	**8**	**8**	**13**	**12**	**54**
Percentage of Response	**24.07**	**14.81**	**14.81**	**24.07**	**22.22**	**100**

Source: Author's Computation from Field Survey (2023)

The analysis on table 2 portrays perceptions of Activity Based Costing (ABC) across different scales: strongly agree (SA), agree (A), undecided (UN), disagree (D), and strongly disagree (SD). The data indicates a varied reception: while 24.07% strongly agree and 14.81% agree adding up to 38.88% with ABC's accuracy in cost allocation, while a larger proportion (46.29%) falls within the disagree and strongly disagree categories. Interestingly, it's perceived positively in the extremes (SA and SD) but also receives notable criticism (A and D), suggesting a polarized response. The scales show a higher inclination toward adaptability and accuracy, reflecting a recognition of its scalability and precision in cost management. However, on average the figures highlight ambiguity in opinions. Overall, ABC seems beneficial for informed decision-making and cost optimization, yet its reception varies. This analysis emphasizes the need for clearer communication about its benefits and the potential areas where improvement might be necessary to ensure wider acceptance across business scales.

Table 3: Tabulated data for Target Costing:

Description	**SA**	**A**	**UN**	**D**	**SD**	**Total**
Target Costing	**(5)**	**(4)**	**(3)**	**(2)**	**(1)**	

Target Costing instills cost-awareness, ensuring feasible product pricing while maintaining quality, vital for small businesses' competitiveness.	7	2	1	5	3	18
It aligns costs with customer expectations, Target Costing aids small businesses in creating value-driven products meeting market demands efficiently.	4	3	4	3	4	18
Its flexible approach allows small businesses to adjust strategies, optimize resources, and enhance competitiveness within dynamic market landscapes.	6	3	5	1	3	18
Total Responses	**17**	**8**	**10**	**9**	**10**	**54**
Percentage of Response	**31.48**	**14.81**	**18.51**	**16.66**	**18.5**	**100**

Source: Author's Computation from Field Survey (2023)

The tabulated data for Target Costing showcases its impact on SMEs financial performance. Table 3 highlights the method's significance in cost-awareness and aligning costs with customer expectations. The average score of 46.29 out of 100 select strongly agree and agree, this indicates a generally positive perception. However, there's room for improvement in understanding and embracing this approach across the board. The percentage distribution indicates substantial acceptance (31.48%) and notable support (14.81%) but also reveals areas where further education or clarification might be necessary (16.66% and 18.5%). Overall, it suggests a promising tool for SMEs to competitively manage costs and meet market demands, albeit with room for enhancing understanding and application.

Table 4: Tabulated data for Return on Investment:

Description/Scale	**SA**	**A**	**UN**	**D**	**SD**	**Total**
ROI	**(5)**	**(4)**	**(3)**	**(2)**	**(1)**	
ROI measures profitability, aiding decisions by showing how efficiently investments generate income relative to their cost.	8	3	2	4	1	18
It assesses the success of investments, helping SMBs compare and prioritize projects for optimal financial growth.	4	3	3	4	4	18
ROI informs resource allocation, enabling informed choices on where to invest for maximum profit potential.	7	5	2	1	3	18
Total Responses	**19**	**11**	**7**	**9**	**8**	**54**
Percentage of Response	**35.19**	**20.37**	**12.96**	**16.66**	**14.81**	**100**

Source: Author's Computation from Field Survey (2023)

The tabulated data for Return on Investment (ROI) reveals a collective perception among respondents regarding its significance in decision-making. According to table 4 majority aligns ROI with high efficiency and profitability (SA: 35.19% and A: 20.37%). This consensus indicates a recognition of ROI's role in aiding SMEs to prioritize projects for financial growth and resource allocation.

However, notable numbers (UN: 12.96% and D: 16.66%) suggest a portion sees room for improvement or uncertainty in understanding ROI's implications. The responses also indicate a lesser acknowledgment (SD: 14.81%) of ROI's importance. Overall, the data highlights a general positive outlook on ROI's value in evaluating investment success, yet it also hints at areas where further education or clarification might be beneficial to enhance comprehension and decision-making.

Table 5: Tabulated data for Return on Asset:

Description/Scale	**SA**	**A**	**UN**	**D**	**SD**	**Total**
ROA	**(5)**	**(4)**	**(3)**	**(2)**	**(1)**	
ROA measures how efficiently a company generates profit from its assets, critical for small-scale businesses' viability.	3	5	5	1	4	18
It helps small and medium enterprises assess their asset utilization against industry standards for competitiveness.	7	2	5	3	1	18
It aids in evaluating the effectiveness of asset employment, guiding strategic decisions for growth in SMEs.	5	5	3	3	2	18
Total Responses	**15**	**12**	**13**	**7**	**7**	**54**
Percentage of Response	**27.77**	**22.22**	**24.07**	**12.96**	**12.96**	**100**

Source: Author's Computation from Field Survey (2023)

The table presents responses on Return on Assets (ROA) across varying scales: strongly agree (SA) to strongly disagree (SD). SMEs generally rate ROA positively (SA: 27.77%, A: 22.22%) compared to negative perceptions (D: 12.96%, SD: 12.96%). The scale emphasizes stronger agreement, highlighting a collective inclination towards recognizing ROA's importance in assessing profitability from assets. However, notable proportions remain neutral (UN: 24.07%), suggesting uncertainty or a lack of consensus. The average score leans positively but indicates a range of perceptions. SMEs seem aware of ROA's significance for competitiveness and strategic decision-making, yet a significant portion doesn't strongly align with any specific viewpoint, implying a need for further clarity or education on this metric.

The data analysis depicts varied perceptions among Nigerian Small and Medium Scale Enterprises (SMEs) regarding different strategic methodologies. Target Costing (TC) receives the highest positive reception, with 31.48% strongly agreeing and 14.81% agreeing. Activity Based Costing (ABC) follows closely. However, Return on Investment (ROI) and Return on Assets (ROA) exhibit high affirmative responses, indicating potential certainty among respondents about these financial performance metrics. In general, the results suggest a diversified understanding and acceptance level of these methodologies among SMEs in Nigeria.

Test of Hypothesis:
The Pearson's Product Moment Correlation (PPMC) technique is used to analyses the data. The output of the analysis is shown below alongside the results, interpretation and discussion.

Test of Hypothesis One:
Ho_1**:** There is no significant relationship between activity-based costing and return on investment of quoted SMEs in Nigeria

Table 6: Correlation for the relationship between Activity Based Costing and Return on Investment

		ABC	**ROI**
ABC	Pearson Correlation	1	.929*
	Sig. (2-tailed)		.022
	N	5	5

ROI	Pearson Correlation	.929*	1
	Sig. (2-tailed)	.022	
	N	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Version 23.

The correlation results in table 6 shows a strong positive relationship (Pearson correlation of .929) between Activity-Based Costing (ABC) and Return on Investment (ROI) for SMEs in Nigeria. The significance level of .022 (at the 0.05 significance level) confirms this relationship's statistical significance. Contrary to the null hypothesis (Ho_1), which suggested no significant relationship, these findings strongly reject the notion of no association between ABC and ROI. The strong positive correlation implies that as the implementation or utilization of ABC increases, there's a notable positive impact on the ROI of quoted SMEs in Nigeria. This robust statistical association suggests that ABC practices might be influential in enhancing the return on investment among these SMEs, contradicting the initial hypothesis.

Test of Hypothesis Two:
Ho_2**:** There is no significant relationship between activity-based costing and return on asset of quoted SMEs in Nigeria

Table 7: Correlation for the relationship between Activity Based Costing and Return on Assets

		ABC	**ROA**
ABC	Pearson Correlation	1	.872
	Sig. (2-tailed)		.054
	N	5	5
ROA	Pearson Correlation	.872	1
	Sig. (2-tailed)	.054	
	N	5	5

Source: SPSS Version 20.

The correlation analysis between Activity-Based Costing (ABC) and Return on Assets (ROA) for SMEs in Nigeria yields a Pearson correlation coefficient of 0.872, which indicates a strong positive relationship between the two variables. However, the p-value of 0.054, though close to the conventional significance level of 0.05, does not reach it, suggesting that the relationship observed could potentially occur due to random chance in a smaller sample size. Hence, based on these findings, while a strong positive correlation is evident, it's not statistically significant within this limited dataset. Consequently, the results indicate a positive but insignificant relationship between ABC and ROA in Nigerian SMEs.

Test of Hypothesis Three:
Ho_3**:** There is no significant relationship between target costing and return on investment of quoted SMEs in Nigeria

Table 8: Correlation for the relationship between Target Costing and Return on Investment

		TC	**ROI**
TC	Pearson Correlation	1	.879*
	Sig. (2-tailed)		.049
	N	5	5
ROI	Pearson Correlation	.879*	1
	Sig. (2-tailed)	.049	
	N	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Version 20.

The correlation analysis between target costing (TC) and return on investment (ROI) for SMEs in Nigeria yields a significant relationship (r = 0.879, p = 0.049). This result contradicts Ho_3, which proposed no significant relationship between these variables. The strong positive correlation suggests that as target costing practices increase, so does the return on investment. With both variables significantly related at a 0.05 significance level, it implies that the use of and changes in target costing influences ROI in Nigerian SMEs. Consequently, rejecting the null hypothesis (Ho_2) is reasonable, indicating a noteworthy association between target costing and the return on investment among the quoted SMEs in Nigeria, potentially influencing financial outcomes positively.

Test of Hypothesis Four:

Ho_4**:** There is no significant relationship between target costing and return on asset of quoted SMEs in Nigeria

Table 9: Correlation for the relationship between Target Costing and Return on Assets

		TC	ROA
TC	Pearson Correlation	1	.872
	Sig. (2-tailed)		.054
	N	5	5
ROA	Pearson Correlation	.872	1
	Sig. (2-tailed)	.054	
	N	5	5

Source: SPSS Version 20.

The correlation analysis between target costing (TC) and return on assets (ROA) for quoted SMEs in Nigeria yields a Pearson correlation coefficient of 0.872. This indicates a strong positive relationship between TC and ROA. However, the p-value of 0.054 suggests that this relationship is not statistically significant at a conventional significance level (typically 0.05). Thus, while there appears to be a strong correlation between TC and ROA, the sample size might be too small to draw definitive conclusions. The results indicate that there is positive but insignificant relationship between target costing and ROA in Nigerian SMEs.

Discussion of Findings

The correlation analyses conducted regarding Activity-Based Costing (ABC), Target Costing (TC), and their relationships with Return on Investment (ROI) and Return on Assets (ROA) among quoted SMEs in Nigeria yielded intriguing insights. For Activity-Based Costing (ABC) and ROA, the findings indicated positive but insignificant relationship. This result implied that as the utilization of ABC increases, there's a notable positive impact on ROI and as a result ROI also increases. This aligns with the idea that ABC practices might enhance the ROI among SMEs in Nigeria. Similarly, the examination of Target Costing (TC) revealed significant findings regarding its relationship with ROI (contradicting Ho_4). The strong positive correlation implies that as TC practices increase, ROI tends to increase as well, suggesting a notable influence of TC methods on financial outcomes among quoted SMEs in Nigeria. However, when exploring the relationships between these costing methods (ABC and TC) with Return on Assets (ROA), the results were both positive but insignificant. While strong positive correlations were observed, the statistical significance at the 0.05 level. In general, the results of this study proved that target costing (TC) and Activity based costing (ABC) positively relates to financial performance which is contrary to the findings of Umelo et al. (2021)

The positive relationship between SMA practices and financial performance found in this study aligns to the findings of Emiaso and Egbunike (2018) Their findings echo the trend seen in the correlation analyses, emphasizing the positive impact of strategic accounting practices on like ROI. Additionally, ThankGod (2022) findings as it relates to banks aligns with the discovered relationships between the costing methods and financial performance. Also, Oboh and Ajibolade (2017) investigated into banks and their findings supports the findings of this study in the sense that it aligns with the discovered relationships between costing methods and ROI. Their study's emphasis on how strategic management accounting influences decision-making for competitive advantage and increased market share. However, it's crucial to note that while these studies provide supportive evidence, the correlation analyses presented regarding ROA, hint at the need for larger sample sizes to draw more definitive conclusions. Small sample sizes can potentially limit the statistical power to detect true effects, as reflected in the insignificance regarding ROA. The correlation analyses strongly suggest positive relationships between specific costing methods (ABC and TC) and ROI among Nigerian SMEs, mirroring the positive impact highlighted in empirical reviews within different sectors. Yet, the lack of significance for ROA emphasizes the necessity for more extensive studies to solidify these relationships and their implications accurately.

Conclusion

The findings of this study on strategic management accounting and financial performance in Nigerian SMEs shed light on correlations between various accounting practices on return on investment (ROI) or return on assets (ROA). Based on the findings of the study, we conclude that there is positive relationship between Target Costing (TC) and ROI in Nigerian SMEs, suggesting a possible impact. This implies that TC influences on ROI to a large extent. And as TC practices are established in SMEs, their ROI increases at a significant level. We conclude that TC techniques also increases SMEs return on assets (ROA) but at an insignificant level.

Also, the study indicated a positive influence of ABC practices on ROI and ROA in these SMEs. While there's a suggestion of associations between these accounting methods and profitability metrics, we conclude that ABC practices leads to significant increase in ROI in Nigerian SMEs. While, ABC practices also results in increase in ROA but at an insignificant level in SMEs.

In essence, this study's findings highlight promising indications of relationships between strategic management accounting practices and profitability in Nigerian SMEs. To solidify these findings and better understand the relationships between these accounting practices and business profitability in Nigerian SMEs, further comprehensive research with larger and awareness programs are imperative. Further, only through expanded data collection and rigorous analysis can a clearer understanding of how these strategic accounting approaches affect financial performance be attained, enabling more informed decision-making for businesses in Nigeria's SME sector.

Recommendations

Sequel to the above findings and conclusion, the below recommendations are made.

Nigerian SMEs should enhance data collection for robust analysis, fostering adoption of ABC and target costing practices to potentially improve ROI and asset management.

Government agencies should support research initiatives to aid in increasing awareness on strategic management accounting practices' impact on SMEs' financial performance.

Financial institutions should develop tailored financing schemes encouraging SMEs to adopt modern management accounting methods for sustainable growth and enhanced returns.

Research community conduct extensive studies with diverse SME samples to validate the relationships between management accounting strategies and profitability in Nigeria.

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