

Standard costing and cost driver management in quoted consumers manufacturing firms in Nigeria

Oyedare, Olufemi Akinloye

Accounting and Finance Department, Ajayi Crowther University, Oyo, Nigeria

Corresponding author: oaoyedare@acu.edu.ng

<https://doi.org/10.33003/fujafr-2026.v4i3.417.375-388>

Abstract

Purpose: This study examined the effect of standard costing on cost driver management in quoted consumer manufacturing firms in Nigeria to address persistent production cost increases and inefficiencies inherent in traditional cost control systems. Specifically, it assessed the individual impacts of standard material, labour, and overhead costing on cost driver management.

Methodology: A descriptive survey research design was adopted. Structured questionnaires were administered to 300 purposively selected accounting and finance personnel across the target firms. Collected data were analyzed using descriptive statistics and multiple regression analysis.

Results and Conclusion: The empirical findings revealed that standard material, labour, and overhead costing collectively explain 55.1% of the variation in cost driver management ($R^2 = 0.551$, $F = 85.73$, $p < 0.05$). Individually, standard material costing ($\beta = 0.361$, $p = 0.000$), standard labour costing ($\beta = 0.284$, $p = 0.001$), and standard overhead costing ($\beta = 0.197$, $p = 0.012$) each exerted positive and statistically significant effects, with material costing having the strongest impact. The study concluded that effective standard costing implementation significantly enhances cost driver management by strengthening cost control and highlighting operational inefficiencies.

Implication of findings: Management should strengthen material and labour variance tracking frameworks while integrating modern techniques like activity-based costing for overhead allocation to maximize cost control effectiveness and overall operational performance in Nigerian manufacturing firms.

Keywords: Cost driver management, labour costing, manufacturing firms, material costing, overhead costing

1. Introduction

According to Iliemena and Amedu (2019), standard costing remains one of the most vital management accounting techniques adopted by manufacturing organizations for planning, controlling, and evaluating operational activities. In an increasingly dynamic and competitive business environment, manufacturing enterprises face persistent operational challenges, including rising material costs, inflationary pressures, exchange rate volatility, technological shifts, and supply chain disruptions. These macroeconomic headwinds have heightened the need for robust cost management systems capable of improving operational efficiency, enhancing profitability, and ensuring long-term corporate sustainability. Consequently, manufacturing firms rely on standard costing to establish benchmark costs and systematically evaluate performance. The consumer manufacturing sector plays a strategic role in the Nigerian economy through industrial output, employment generation, value addition, and overall economic development. However, quoted consumer manufacturing companies in Nigeria contend with escalating costs across key inputs, including direct materials, direct labour, energy, transportation, and production overheads. As noted by Akinleye and Oluyori (2023), a firm's capacity to control production costs serves as a primary determinant of its competitive edge and financial viability. Given the increasing complexity of modern production lines, organizations require sophisticated cost-accounting mechanisms to guide operational decision-making and performance monitoring.

Standard costing operates by establishing predetermined cost rates for direct materials, direct labour, and manufacturing overheads prior to production. Upon completion of production cycles, these standard figures are benchmarked against actual costs to isolate operational variances. Ajayi et al. (2025)

noted that systematic variance analysis enables management to identify operational bottlenecks, curb waste, reinforce budgetary controls, and optimize resource utilization. By providing timely management accounting information, standard costing helps organizations minimize operational costs and maintain efficiency. However, modern cost management extends beyond traditional variance analysis. Contemporary firms increasingly emphasize cost driver management as the process of tracking and controlling the specific activities and factors that cause costs to occur within a production system. Key cost drivers include material consumption rates, machine operating hours, setup frequencies, labour hours, and energy consumption. According to Oranefo (2022), identifying and managing primary cost drivers provides insight into the root causes of cost behaviour, enabling superior resource allocation, precise cost control, and stronger overall operational execution.

The convergence of standard costing and cost driver management offers a comprehensive framework for organizational performance improvement. While standard costing sets performance targets and highlights deviations, cost driver management pinpoints the operational root causes behind those deviations. Oyedele et al. (2023) argued that integrating standard costing systems with active cost driver management equips firms to streamline production costs, boost output, and achieve sustained financial performance. Despite the theoretical benefits and widespread adoption of standard costing systems, many quoted consumer manufacturing firms in Nigeria continue to face dwindling margins and rising unit production costs. Ali-Momoh et al. (2022) observed that weak cost control systems and ineffective tracking of cost drivers lead to resource misallocation and reduced productivity. Furthermore, while existing literature predominantly explores the direct relationship between standard costing and financial performance metrics (e.g., Return on Assets or Profit Margin), limited empirical focus has been placed on how standard costing practices directly influence cost driver management. To address this gap, this study investigates the effect of standard material costing, standard labour costing, and standard overhead costing on cost driver management within quoted consumer manufacturing firms in Nigeria.

2. Literature review

Theoretical Review

This study is anchored on three theoretical perspectives: Activity-Based Costing (ABC) Theory, Scientific Management Theory, and Contingency Theory. Among these, Activity-Based Costing (ABC) Theory serves as the primary underpinning theory because it provides the most comprehensive analytical framework for cost driver identification, activity allocation, and cost behaviour mechanisms central to standard costing and cost driver management.

Activity-Based Costing (ABC) Theory (Underpinning Theory)

Activity-Based Costing (ABC) Theory was formulated by Kaplan and Cooper (1988) to address the growing inaccuracies of traditional cost allocation methods in modern, complex manufacturing environments. The core premise of ABC Theory is that products do not directly consume costs; rather, products consume activities, and activities consume resources. Consequently, indirect and direct operational costs must be traced to products and services through the specific activities driving those costs, rather than through single, volume-based allocation keys. The fundamental assumption of ABC Theory is that operational cost accuracy and managerial control are achievable only when an organization understands the activities generating costs and the specific variables driving operational variations. In manufacturing operations, cost drivers such as setup hours, machine processing cycles, inspection counts, material requisitions, and kilowatt-hour power consumption which serve as the primary determinants of cost behaviour. By identifying and monitoring these drivers, management can accurately allocate resources, eliminate non-value-adding operational steps, and curb cost distortion

(Kaplan & Anderson, 2007). ABC Theory directly underpins this study by bridging the gap between predetermined standards and actual operational execution. While standard costing sets predetermined target costs for material, labour, and overhead inputs, ABC Theory provides the mechanism to track why actual costs deviate from those targets by examining activity cost drivers. Specifically:

- i. Standard Material Costing is evaluated against material-handling and batch-consumption drivers.
- ii. Standard Labour Costing is linked to task-execution and direct labour-hour drivers.
- iii. Standard Overhead Costing is mapped directly to machine, utility, and facility-support drivers.

As empirical evidence shows (Nuhu et al., 2020), firms that integrate activity-based cost management with standard costing frameworks achieve heightened cost discipline, optimized resource allocation, and superior operational performance.

Therefore, Activity-Based Costing Theory provides the most robust theoretical foundation for analyzing the effect of standard material costing, standard labour costing, and standard overhead costing on cost driver management in quoted consumer manufacturing firms in Nigeria.

Empirical Review

Existing literature provides substantial insight into how costing frameworks, driver management, and control mechanisms interact to shape organizational outcomes. The empirical evidence are synthesized around three major thematic findings:

Strategic Value and Operational Efficiency of Modern Costing Systems

Extensive research establishes that combining traditional costing frameworks with cost driver analysis significantly elevates operational visibility, efficiency, and resource allocation. Kaplan and Anderson (2007), Idehen et al. (2026) as well as Quesado & Silva (2021) demonstrate that identifying and tracking cost drivers optimizes production planning, eliminates non-value-adding activities, and enhances cost visibility. Cadez and Guilding (2019) opined that firms employing structured, proactive cost management practices achieve superior operational efficiency, profitability, and competitive advantage compared to those relying on legacy allocation systems. Furthermore, Lavia-Lopez and Hiebl (2015) confirm that flexible cost management acts as a catalyst for organizational adaptability in volatile economic environments. Ahmad and Leftesi (2014), reinforce that systematic cost driver management directly enables lean manufacturing, speeds up resource allocation, and sustains profit margins.

Direct Contributions of Standard Costing Components to Performance

Studies explicitly examining the operational mechanisms of standard costing such as variance analysis protocols, benchmarks, and input costing consistently show direct performance gains. Wang and Hu (2021) observe that standard costing improves production efficiency by establishing clear operational benchmarks. In terms of specific inputs, Sharma and Kumar (2021) and Singh and Verma (2022) confirm that variance analysis protocols promote budgetary discipline and significantly drive raw material cost reductions. Addressing labour productivity, Rao and Rao (2023) find that organizations implementing standard costing record significantly higher labour output than those using traditional allocation keys. Oranefo (2022) highlights that tracking activity cost drivers improves overhead allocation accuracy and capacity utilization, while Ali-Momoh et al. (2022) show that structured cost control practices directly mitigate resource waste.

Standard Costing and Firm Financial Performance in Economic Volatility

A major stream of empirical literature focuses on the linkage between standard costing mechanisms and overall financial returns, particularly within emerging markets facing macroeconomic turbulence. Iliemena and Amedu (2019), Akinleye and Oluyori (2023), Ukpong et al. and Oyedele et al. (2023) affirm that standard material and labour costing practices exert a positive, statistically significant influence on financial performance metrics such as Return on Assets (ROA) and profit margins. Broad organizational surveys across Nigerian industries (Nuhu et al., 2020; Oyewo, 2021) establish that aligning management accounting techniques with operational processes enhances overall organizational effectiveness. This position is further consolidated by a broad body of domestic literature (Adejoh & Sule, 2020; Oyerogba et al., 2021; Adebisi & Oyeleke, 2022; Eze et al., 2022; Ibrahim & Bello, 2023; Okafor & Egbunike, 2023; Yusuf et al., 2024; Mohammed & Hassan, 2024; Lawal et al., 2024; Onifade et al.; Afolabi et al., 2025), which collectively demonstrates that standard costing and variance analysis enhance cost reduction, operational efficiency, and market competitiveness.

Gaps in Literature and Development of Hypotheses

Despite the wealth of empirical research, the overwhelming majority of existing studies evaluate standard costing solely against downstream financial metrics (ROA, ROE, profit margins), neglecting its immediate operational impact on cost driver management itself. Prior literature frequently treats “standard costing” as a single, unidimensional construct, creating a scarcity of empirical insight into how its sub-dimensions standard material costing, standard labour costing, and standard overhead costing individually and jointly influence cost driver management in quoted consumer manufacturing firms. To bridge these empirical gaps, the following research hypotheses are formulated for this study:

H₀₁: Standard material costing has no significant effect on cost driver management in quoted consumer manufacturing firms in Nigeria.

H₀₂: Standard labour costing has no significant effect on cost driver management in quoted consumer manufacturing firms in Nigeria.

H₀₃: Standard overhead costing has no significant effect on cost driver management in quoted consumer manufacturing firms in Nigeria.

Research Framework

The conceptual framework for this study was developed from the Activity-Based Costing (ABC) Theory, which serves as the underpinning theory, and is supported by the concepts of standard costing and cost driver management discussed in the conceptual review. The framework explains how the dimensions of standard costing influence cost driver management in quoted consumer manufacturing firms in Nigeria. Standard costing was the independent variable and is represented by three dimensions: **standard material costing, standard labour costing, and standard overhead costing**. These dimensions reflect the major cost elements that organizations establish as predetermined standards for controlling production activities. Effective management of these cost elements enables organizations to monitor resource consumption, identify inefficiencies, and evaluate operational performance through variance analysis.

Cost driver management constitutes the dependent variable. It refers to the identification, monitoring, and control of factors responsible for cost incurrence within organizational operations. Cost drivers such as material usage, labour utilization, machine hours, energy consumption, and production activities significantly influence production costs and overall operational efficiency. According to Activity-Based Costing Theory, organizational costs arise from activities, and effective management of these activities improves cost control and organizational performance. The framework assumes that improvements in

standard material costing, standard labour costing, and standard overhead costing will enhance cost driver management by providing accurate cost benchmarks, facilitating variance identification, strengthening resource control, and promoting efficient utilization of organizational resources. Consequently, firms that effectively implement standard costing practices are expected to achieve better control of cost-generating activities and improved operational efficiency. The conceptual framework is directly linked to the objectives of the study. The first objective examines the effect of standard material costing on cost driver management. The second objective investigates the influence of standard labour costing on cost driver management. The third objective evaluates the effect of standard overhead costing on cost driver management. These relationships are consistent with the propositions of Activity-Based Costing Theory, which emphasizes that effective management of cost elements and activities enhances cost control and organizational efficiency.

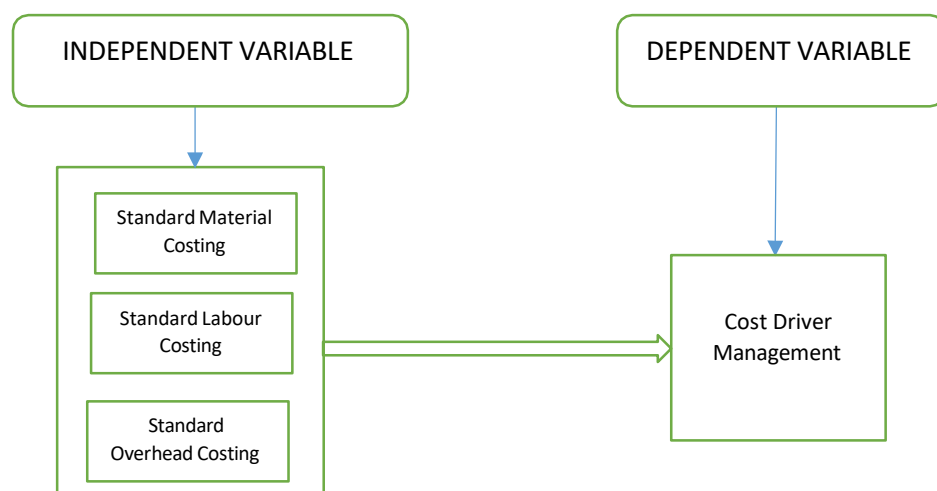


Figure 2.1: Conceptual Framework

Source: Researcher's Conceptualization (2026)

The framework in Figure 2.1 therefore postulates that standard costing dimensions serve as key determinants of cost driver management in quoted consumer manufacturing firms in Nigeria. The expected outcome is that effective implementation of standard costing practices will significantly improve the management of cost-generating activities, resulting in enhanced operational efficiency and cost control.

3. Methodology

The study was conducted in Nigeria, focusing on consumer manufacturing firms quoted on the Nigerian Exchange Group (NGX). These firms operate within the Fast-Moving Consumer Goods (FMCG) sub-sector, which is characterized by high-volume production, intense market competition, and extreme sensitivity to cost fluctuations. The FMCG sector is particularly suited for this study because these organizations rely heavily on structured cost control systems including standard costing and activity cost driver management to preserve profit margins amid Nigeria's volatile macroeconomic environment. The study adopts a descriptive survey research design. This design is appropriate because it enables the researcher to systematically collect primary data from key industry professionals using structured questionnaires without manipulating the underlying variables. Survey designs are widely utilized in management accounting research as they allow for the empirical examination of relationships between variables based on operational experiences in real-world business environments.

The target population comprises management accounting and finance professionals across the quoted consumer manufacturing firms in Nigeria. Specifically, the population includes Chief Financial Officers (CFOs), Finance Managers, Cost Accountants, Management Accountants, and Internal Auditors. This population is chosen because these professionals possess the requisite knowledge, technical expertise, and operational involvement in cost determination, standard setting, variance analysis, and cost driver allocation within their respective organizations. From a total population (N) of 1,200 accounting and finance personnel across the selected quoted consumer manufacturing firms in Nigeria, a sample size (n) of 300 respondents was determined using Taro Yamane's (1967) formula at a 5% margin of error:

$$n = N / (1 + Ne^2)$$

Where:

n = sample size

N = population size

e = level of significance (0.05)

To ensure equitable and objective representation across the various professional cadres, the sample size was allocated across respondent categories using Bowley's (1926) Proportional sampling

The distribution of the sample size is presented below:

Table 3.1: Population and Sample Size Distribution of Respondents

Category of Respondents	Population (N)	Sample Allocation (n)
Accountants	500	125
Finance Managers	250	63
Internal Auditors	200	50
Cost Accountants	250	62
Total	1,200	300

Source: Field Survey, 2026

This proportional allocation ensures balanced representation based on each group's direct involvement in cost management, budgeting, and variance analysis. The sample size is statistically adequate for descriptive and inferential analysis, allowing for valid generalizations within the quoted consumer manufacturing sub-sector in Nigeria. The study relies primarily on primary data collected directly from accounting and finance professionals. Primary data collection is justified because it captures first-hand operational insights regarding standard costing practices and cost driver management systems currently active within these firms. Data was gathered using a structured questionnaire. The instrument is divided into distinct sections:

Section A: Demographic traits (qualifications, job title, years of experience).

Section B: Standard Material Costing (SMC) measured using 5 items focusing on raw material standard price setup, material usage variance tracking, and procurement benchmarking.

Section C: Standard Labour Costing (SLC) measured using 5 items evaluating labour rate standards, wage variance tracking, and labor efficiency/idle time monitoring.

Section D: Standard Overhead Costing (SOC) measured using 5 items examining fixed/variable overhead rate determination, volume variance analysis, and predetermined absorption rates.

Section E: Cost Driver Management (CDM) measured using 5 items operationalizing cost driver identification, activity cost pool tracing, overhead driver monitoring, and operational cost elimination.

Items in Sections B through E were evaluated on a modified 5-point Likert scale (5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly Disagree). Structured scale instruments of this type facilitate standardized data collection, allowing qualitative perceptions to be quantified and analyzed using regression techniques.

To establish instrument validity, the structured questionnaire was subjected to face and content validity checks. Drafts were reviewed by senior management accounting academics and experienced industry practitioners. These experts evaluated whether individual scale items adequately reflected the underlying constructs (SMC, SLC, SOC, CDM) and aligned with the specific research objectives. Revisions were made based on their feedback to enhance question clarity, remove ambiguities, and ensure comprehensive measurement coverage. To confirm internal consistency, a pilot study was conducted with a subset of accounting personnel (outside the main sample frame). In line with standard empirical benchmarks, a Cronbach's Alpha value of 0.70 or higher across all variable subscales was set as the reliability threshold to confirm instrument consistency.

Econometric form: $CDM = \beta_0 + \beta_1 SMC + \beta_2 SLC + \beta_3 SOC + \mu$

Where:

CDM = Cost Driver Management (Dependent Variable)

SMC = Standard Material Costing (Independent Variable)

SLC = Standard Labour Costing (Independent Variable)

SOC = Standard Overhead Costing (Independent Variable)

β_0 = constant term, β_1 - β_3 = coefficients of independent variables, and μ = error term.

Based on the specified model, the following null hypotheses were tested at a 5% ($p = 0.05$) level of significance:

H₀₁: Standard material costing has no significant effect on cost driver management in quoted consumer manufacturing firms in Nigeria.

H₀₂: Standard labour costing has no significant effect on cost driver management in quoted consumer manufacturing firms in Nigeria.

H₀₃: Standard overhead costing has no significant effect on cost driver management in quoted consumer manufacturing firms in Nigeria.

Primary data were processed using SPSS (Version 28.0). Descriptive statistics (mean, standard deviation) summarized item distributions. Inferential statistics, specifically multiple ordinary least squares (OLS) regression analysis, evaluated the joint and individual statistical impacts of the standard costing dimensions on cost driver management.

4. Results and discussion

This section presents the empirical analyses of primary data gathered from 300 accounting and finance professionals across quoted consumer manufacturing firms in Nigeria. The analysis proceeds

sequentially from descriptive statistics summarizing variable characteristics to inferential OLS regression analysis used to test the stated research hypotheses, culminating in an integrated academic discussion of findings in relation to prior literature and theoretical constructs.

4.1 Descriptive Statistical Analysis

Table 4.1: Descriptive Statistics of Study Variables

Variables	N	Mean	Std. Deviation
Standard Material Costing	300	4.12	0.68
Standard Labour Costing	300	3.95	0.74
Standard Overhead Costing	300	3.78	0.81
Cost Driver Management	300	4.05	0.69

Source: Researcher's Computation via SPSS v28 (2026)

Table 4.1 presents the descriptive statistical results of the study variables based on responses from 300 respondents drawn from quoted consumer manufacturing firms in Nigeria. The results show that standard material costing (mean = 4.12, SD = 0.68) has the highest mean score among the independent variables. This indicates a strong level of agreement among respondents that material costing standards are well established and effectively applied in managing production activities. The relatively low standard deviation further suggests that respondents' opinions are closely clustered around the mean, reflecting consistency in responses. Standard labour costing (mean = 3.95, SD = 0.74) also recorded a high mean value, implying that labour costing practices are generally adopted in the sampled firms. However, the slightly higher standard deviation compared to material costing indicates moderate variation in responses, suggesting differences in how firms implement labour cost standards, possibly due to variations in wage systems and workforce management practices. For standard overhead costing (mean = 3.78, SD = 0.81), the results indicate the lowest mean among the independent variables. This suggests that while overhead costing systems exist, their implementation may not be as strong or consistent as material and labour costing practices. The relatively higher standard deviation also reflects greater variability in responses, indicating inconsistency in overhead allocation and control practices across firms.

The dependent variable, cost driver management (mean = 4.05, SD = 0.69), shows a high mean score, indicating that respondents generally agree that cost drivers are actively identified and managed in their organizations. The low standard deviation suggests a strong level of agreement among respondents, implying that cost driver management is widely recognized as an important component of cost control in manufacturing firms. The results in Table 4.1 suggest that standard costing practices are widely adopted in quoted consumer manufacturing firms in Nigeria, with varying degrees of implementation across cost elements. The high mean values across all variables indicate strong awareness and utilization of cost management practices, while the standard deviations highlight some differences in implementation intensity across firms. This provides a preliminary indication that standard costing dimensions may have a meaningful influence on cost driver management, which will be further tested through inferential statistical analysis.

4.2 Inferential Statistical Analysis

This section presents the inferential statistical results used to test the hypotheses formulated in the study. Multiple regression analysis was employed to determine the effect of standard material costing, standard

labour costing, and standard overhead costing on cost driver management in quoted consumer manufacturing firms in Nigeria.

Table 4.2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.742	0.551	0.546	0.421

a. Predictors: (Constant), Standard Overhead Costing, Standard Labour Costing, Standard Material Costing

Source: Researcher's Computation via SPSS v28 (2026)

Table 4.2 shows that the correlation coefficient ($R = 0.742$) indicates a strong positive relationship between standard costing variables and cost driver management. The coefficient of determination ($R^2 = 0.551$) reveals that approximately 55.1% of the variation in cost driver management is explained by standard material costing, standard labour costing, and standard overhead costing. The adjusted R^2 of 0.546 confirms that the model has strong explanatory power even after adjusting for the number of predictors. This implies that the model is statistically robust and suitable for explaining variations in cost driver management among quoted consumer manufacturing firms in Nigeria.

Table 4.3: ANOVA Result

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	45.632	3	15.211	85.73	0.000
Residual	37.154	296	0.126		
Total	82.786	299			

Source: Researcher's Computation via SPSS v28 (2026)

The ANOVA result in table 4.3 shows that the F-statistic value of 85.73 is statistically significant at 0.000 ($p < 0.05$). This indicates that the overall regression model is significant and that the independent variables jointly have a significant effect on cost driver management. Therefore, the model is fit for further interpretation and hypothesis testing.

Table 4.4: Coefficients of Regression Analysis

Variables	Beta (β)	Std. Error	t-value	Sig.
Constant	0.512	0.214	2.39	0.018
Standard Material Costing	0.361	0.072	5.01	0.000
Standard Labour Costing	0.284	0.081	3.51	0.001
Standard Overhead Costing	0.197	0.078	2.53	0.012

Source: Researcher's Computation, 2026

The regression coefficients in table 4.4 indicate that all independent variables have positive and statistically significant effects on cost driver management. Standard Material Costing ($\beta = 0.361$, $p = 0.000$) shows that material costing has the strongest positive effect on cost driver management. A unit increase in standard material costing practices leads to a significant improvement in cost driver management. Therefore, H_{01} is rejected. Standard Labour Costing ($\beta = 0.284$, $p = 0.001$), labour costing also has a significant positive effect, indicating that improved labour cost standards enhance cost driver management. Hence, H_{02} is rejected. Standard Overhead Costing ($\beta = 0.197$, $p = 0.012$), overhead costing has a positive but comparatively weaker effect on cost driver management. This implies that while overhead control contributes to cost driver management, its influence is less dominant compared to material and labour costing. Thus, H_{03} is rejected. The results confirm that standard costing practices

significantly influence cost driver management in quoted consumer manufacturing firms in Nigeria, with material costing having the highest explanatory power among the predictors.

4.3 Discussion of Findings

The empirical findings confirm that standard costing mechanisms serve as direct enablers of operational cost driver management in quoted consumer manufacturing companies in Nigeria. By evaluating standard costing across its core operational sub-components, this study offers granular insight into how traditional variance control systems interact with modern activity driver tracing.

Standard Material Costing and Cost Driver Management

The rejection of H_{01} demonstrates that standard material costing ($\beta = 0.361$, $p = 0.000$) exerts the dominant influence on cost driver management. In high-volume consumer goods manufacturing, raw materials represent the largest component of total cost structures. Standardizing material inputs enables managers to systematically tie material consumption to specific batch production drivers, scrap rates, and order frequencies. This result corroborates the empirical conclusions of Ajayi et al. (2025), who established that material variance tracking directly enhances cost behavior transparency and production efficiency in manufacturing environments. The outcome aligns closely with Activity-Based Costing (ABC) Theory, which posits that material volume and handling activities act as primary drivers of operational resource usage.

Standard Labour Costing and Cost Driver Management

The rejection of H_{02} confirms that standard labour costing ($\beta = 0.284$, $p = 0.001$) significantly improves cost driver management. By establishing standard labour rates and hours per unit, firms can trace labour inefficiencies, idle time, and setup times directly to activity drivers (such as line adjustments or machine breakdown hours). This finding aligns with Akinleye and Oluyori (2023), who demonstrated that labour standard variance tracking significantly reduces operational waste and boosts operating performance in Nigerian manufacturing firms. Theoretically, this finding reinforces Scientific Management Theory, confirming that labour time standardization and rate control provide necessary operational metrics to control labour-related cost drivers effectively.

Standard Overhead Costing and Cost Driver Management

The rejection of H_{03} establishes that standard overhead costing ($\beta = 0.197$, $p = 0.012$) positively impacts cost driver management. However, its lower coefficient reflects the historical difficulty of allocating indirect costs via traditional absorption bases (such as direct labour hours or machine hours). Indirect activities such as quality inspection, setup, and power consumption often demand non-volume allocation keys. This outcome supports the findings of Oranefo (2022) and Oyedele et al. (2023), who noted that standard overhead control achieves maximum efficacy when paired with activity-based driver allocation rather than arbitrary traditional allocation bases.

5. Conclusion

Based on the findings, the study concludes that standard costing is a significant determinant of cost driver management in quoted consumer manufacturing firms in Nigeria. Effective implementation of standard material, labour, and overhead costing enhances the ability of firms to identify, monitor, and control cost drivers within production processes. The study further concludes that material costing plays the most dominant role in influencing cost driver management due to its direct impact on production activities and cost behaviour. Labour and overhead costing also contribute significantly, although their effects vary in magnitude due to differences in operational complexity and allocation challenges. The study also establishes that firms with well-structured standard costing systems are better positioned to

improve cost control, reduce inefficiencies, and enhance operational performance. This reinforces the importance of integrating standard costing practices with cost driver management systems in modern manufacturing environments.

Recommendations

Management of quoted consumer manufacturing firms should strengthen their standard material costing systems to ensure accurate monitoring of material usage and reduction of wastage in production processes.

Firms should enhance standard labour costing practices by implementing effective performance measurement systems that align labour productivity with cost efficiency objectives.

Management should improve standard overhead costing systems through the adoption of more refined allocation techniques such as activity-based costing to better trace indirect costs to relevant cost drivers.

Regular training and capacity development programmes should be provided for accounting and finance personnel to improve their understanding and application of standard costing and cost driver analysis.

Manufacturing firms should integrate cost driver analysis into their budgeting and planning systems to ensure more accurate cost control and improved managerial decision-making.

Reference

- Abdel-Kader, M., & Luther, R. (2018). Management accounting practices in the British food and drinks industry. *British Accounting Review*, 50(2), 143-155.
- Adebisi, A. W., & Oyeleke, B. O. (2022). Standard costing technique and cost control in manufacturing firms in Nigeria. *Journal of Accounting and Financial Management*, 8(3), 45-58.
- Adejoh, E. A., & Sule, A. (2020). Impact of variance analysis on organizational performance in selected manufacturing companies in Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 10(2), 112-124.
- Afolabi, O. M., Olanrewaju, A. O., & Babatunde, R. O. (2025). Operational efficiency and standard costing techniques in the Nigerian FMCG sub-sector. *African Journal of Business and Management*, 19(1), 88-101.
- Afonso, P. S. L. P., Nunes, M., Paisana, A., & Braga, A. C. (2022). The influence of cost management systems on manufacturing performance: Evidence from emerging economies. *Journal of Manufacturing Technology Management*, 33(6), 1092-1111.
- Ahmad, N. S., & Leftesi, A. (2014). An exploratory study of the level of sophistication of management accounting practices in Libyan manufacturing companies. *International Journal of Business and Management*, 2, 1-10.
- Ajayi, A. S., Fakile, S. A., Kolawole, O. A., Ibitowa, S., & Julius, E. A. (2025). The financial performance of standard costing techniques on manufacturing companies in Nigeria. *International Journal of Economics and Management Systems*, 10, 360-373.
- Akinleye, M. G., & Oluyori, M. C. (2023). Standard costing implementation and financial performance of listed manufacturing firms in Nigeria. *Journal of Corporate Finance and Accounting*, 11(1), 34-49. <https://doi.org/10.12691/jfa-11-1-1>
- Ali-Momoh, B. O., Olatunji, O. C., & Ahmed, S. A. (2022). Structured cost control mechanisms and resource waste management in Nigerian industries. *Nigerian Journal of Management Studies*, 22(2), 78-92. <https://doi.org/10.32350/aar.21.04>

- Banker, R. D., Mashruwala, R., & Tripathy, A. (2018). Does a differentiation strategy lead to more sustainable financial performance than a cost leadership strategy? *Management Decision*, 56(10), 2103-2127.
- Bowley, A. L. (1926). Measurement of the precision attained in sampling. *Bulletin of the International Statistical Institute*, 1, 6-62.
- Burns, T., & Stalker, G. M. (1961). *The management of innovation*. Tavistock Publications.
- Cadez, S., & Guilding, C. (2019). Strategy, strategic management accounting and performance. *Accounting, Auditing & Accountability Journal*, 32(2), 617-645.
- Cinquini, L., & Tenucci, A. (2020). Strategic management accounting and business strategy. *Meditari Accountancy Research*, 28(4), 551-575.
- Daft, R. L. (2021). *Organization theory and design* (13th ed.). Cengage Learning.
- Drury, C. (2021). *Management and cost accounting* (11th ed.). Cengage Learning.
- Eze, S. C., Chinedu-Eze, V. C., & Okonkwo, O. (2022). Management accounting practices and operational performance in developing economies. *Journal of Applied Accounting Research*, 23(4), 512-530.
- Horngren, C. T., Datar, S. M., & Rajan, M. V. (2021). *Cost accounting: A managerial emphasis* (17th ed.). Pearson Education.
- Hung, T. C., & Shanmugam, J. K. (2023). The relevance of standard costing and variance analysis in global industries today. *East Asian Journal of Multidisciplinary Research*, 2(2), 731-744. <https://doi.org/10.55927/eajmr.v2i2.2840>
- Ibrahim, M., & Bello, A. (2023). Standard costing sub-dimensions and cost driver control in listed consumer goods firms in Nigeria. *Dutse Journal of Economics and Development Studies*, 10(1), 150-165.
- Idehen, O. F., Jackson-Akhigbe, B., & Abusomwan, R. (2025). Cash flow management and assets growth of listed industrial goods firms in Nigeria. *FUDMA Journal of Accounting and Finance Research [FUJAFR]*, 3(1), 107-119. <https://doi.org/10.33003/fujafr-2025.v3i1.150.107-119>
- Iliemena, R. O., & Amedu, J. N. (2019). Standard costing and financial performance of manufacturing firms in Nigeria: An empirical evaluation. *International Journal of Finance and Management*, 4(2), 15-29.
- Kaplan, R. S., & Anderson, S. R. (2007). *Time-driven activity-based costing: A simpler and more powerful path to higher profits*. Harvard Business School Press.
- Kaplan, R. S., & Atkinson, A. A. (2019). *Advanced management accounting* (3rd ed.). Pearson Education.
- Kaplan, R. S., & Cooper, R. (1988). *Cost and effect: Using integrated cost systems to drive profitability and performance*. Harvard Business School Press.
- Lavia López, O., & Hiebl, M. R. (2015). Management accounting in small and medium-sized enterprises: Current knowledge and avenues for further research. *Journal of Management Accounting Research*, 27(1), 81-119. <https://doi.org/10.2308/jmar-50915>
- Lawal, O. I., Jimoh, A. K., & Yusuff, M. A. (2024). Variance analysis protocols and cost optimization in Nigerian manufacturing firms. *Journal of Accounting, Finance and Auditing*, 12(2), 101-116.
- Lawrence, P. R., & Lorsch, J. W. (1967). *Organization and environment: Managing differentiation and integration*. Harvard University Press.
- Mohammed, U., & Hassan, S. B. (2024). The effectiveness of standard costing systems in mitigating macroeconomic volatility: Evidence from Nigeria. *Journal of Financial and Accounting Studies*, 9(1), 67-82.
- Nuhu, N. A., Baird, K., & Appuhami, R. (2020). The association between the use of management accounting practices and organizational performance. *Accounting Research Journal*, 33(2), 256-271.

- Okafor, T. G., & Egbunike, C. F. (2023). Standard labour and material variance analysis and corporate profitability. *Journal of Accounting Research and Practice*, 15(3), 200-218.
- Onifade Hakeem, O., Ogunsan Adenike, A., Momoh Yusuf, C., & Kedi-Ewroh, L. (2026). Effect of liquidity management on profitability of listed consumer goods firms in Nigeria. *FUDMA Journal of Accounting and Finance Research [FUJAFR]*, 4(2), 192-202. <https://doi.org/10.33003/fujaf-2026.v4i2.370.192-202>
- Oranefo, P. C. (2022). Effect of activity-based costing on performance of manufacturing organizations: Case of Nigeria. *Business and Management Studies: An International Journal*, 7(2), 339-352.
- Otley, D. (2016). The contingency theory of management accounting and control: 1980-2014. *Management Accounting Research*, 31, 45-62. <https://doi.org/10.1016/j.mar.2016.02.001>
- Oyedele, O. A., Ogundipe, L. O., & Adediran, S. A. (2023). Macroeconomic turbulence, standard costing, and Return on Assets (ROA) of quoted firms. *Asian Journal of Economics, Business and Accounting*, 23(8), 122-135.
- Oyerogba, E. O., Memba, F., & Rambo, C. (2021). Standard costing systems, variance analysis, and firm competitiveness in Nigeria. *Research Journal of Finance and Accounting*, 12(6), 75-88.
- Oyewo, B. M. (2021). Outcomes of management accounting systems usage on organizational performance: Evidence from Nigerian firms. *Journal of Accounting in Emerging Economies*, 11(4), 607-632. <https://doi.org/10.1108/JAEE-07-2020-0173>
- Quesado, P., & Silva, R. (2021). Activity-based costing (ABC) and its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 41. <https://doi.org/10.3390/joitmc7010041>
- Rao, K. S., & Rao, V. M. (2023). Standard costing allocation keys and labour productivity optimization in manufacturing operations. *International Journal of Operations & Production Management*, 43(6), 789-805.
- Santos, E. F., Abbas, K., & Cat  nio, A. R. (2020). Cost drivers: Reflections on definitions, concepts, utilities and applicability. *Revista Mineira de Contabilidade*, 21(1), 34-45. <https://doi.org/10.21714/2446-9114RMC2020v21n1t03>
- Shank, J. K., & Govindarajan, V. (2019). *Strategic cost management: The new tool for competitive advantage*. Free Press.
- Sharma, J., & Kumar, S. (2021). Variance analysis protocols and budgetary discipline: Evidence from input costing. *Journal of Cost Management*, 35(4), 22-34.
- Shields, M. D. (2006). Cost and profit driver research. In C. S. Chapman, A. G. Hopwood, & M. D. Shields (Eds.), *Handbooks of management accounting research* (Vol. 2, pp. 531-556). Elsevier. [https://doi.org/10.1016/S1751-3243\(06\)02003-7](https://doi.org/10.1016/S1751-3243(06)02003-7)
- Singh, R. P., & Verma, J. P. (2022). Standard material costing and raw material cost reduction in industrial production. *Journal of Cleaner Production*, 340, 130711.
- Tamulevi  ien  , D., Mackevi  ius, J., & Gai  auskas, L. (2020). Methodology of applying standard costing and normative methods in manufacturing enterprises. *Buhalterin  s Apskaitos Teorija ir Praktika*, 21, 1-15. <https://doi.org/10.15388/batp.2020.19>
- Taylor, F. W. (1911). *The principles of scientific management*. Harper & Brothers.
- Tsai, W. H., Lai, C. W., Tseng, L. J., & Chou, W. C. (2020). Embedded cost driver analysis for activity-based costing systems. *International Journal of Production Economics*, 223, 107-118.
- Ukpong, M. O., Ukpong, E. G., & Ibok, N. (2024). Intellectual capital efficiency and cost of capital among listed manufacturing companies in Nigeria. *FUDMA Journal of Accounting and Finance Research [FUJAFR]*, 2(3), 12-22. <https://doi.org/10.33003/fujaf-2024.v2i3.120.12-22>



- Wang, L., & Hu, Y. (2021). Standard costing, operational benchmarks, and production efficiency: Empirical evidence. *Journal of Accounting and Public Policy*, 40(3), 106820. <https://doi.org/10.1016/j.jaccpubpol.2021.106820>
- Ward, K. (2006). Managing costs and cost structure throughout the value chain: Research on strategic cost management. In C. S. Chapman, A. G. Hopwood, & M. D. Shields (Eds.), *Handbooks of management accounting research* (Vol. 2, pp. 481-506). Elsevier. [https://doi.org/10.1016/S1751-3243\(06\)02001-3](https://doi.org/10.1016/S1751-3243(06)02001-3)
- Yeshmin, F., & Fowzia, R. (2021). Standard costing and variance analysis as tools for cost control and performance evaluation in manufacturing firms. *International Journal of Accounting and Financial Reporting*, 11(2), 44-58.
- Yusuf, M. O., Audu, A. S., & Sanusi, M. (2024). Evaluation of cost control mechanisms and market competitiveness in quoted consumer goods firms. *Nigerian Journal of Accounting and Finance*, 16(1), 110-127.