

INTEGRATION OF STRATEGIC MANAGEMENT ACCOUNTING AND BUSINESS PERFORMANCE: CASE STUDIES FROM THE MANUFACTURING SECTOR IN NIGERIA

BY

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Abstract

This study examines the integration of Strategic Management Accounting (SMA) and its impact on competitive advantage within Nigerian manufacturing firms. Drawing on a mixed-methods approach, the research investigates how SMA practices contribute to enhanced business performance and identifies the challenges hindering their adoption. The study population comprised chief executive officers, chief financial officers, and marketing directors from manufacturing firms listed in the 2023 Nigerian Stock Exchange Factbook. Data were collected using a validated questionnaire with a reliability coefficient of 0.96 and analyzed through descriptive statistics and frequency distributions. The findings reveal that SMA significantly enhances competitive advantage by providing relevant financial and non-financial information for strategic decision-making, market positioning, and performance monitoring. However, adoption is constrained by limited awareness of SMA concepts, high implementation costs, resistance to change, inadequate technical expertise, and the dominance of traditional management accounting practices. The study recommends embedding SMA in tertiary accounting curricula, fostering collaboration among Nigerian executives, academics, and practitioners to standardize SMA best practices, transitioning from functional-based costing to activity-based costing, and providing targeted SMA training for manufacturing accountants. This research contributes to the limited empirical literature on SMA in Nigeria, offering insights for policy, education, and industry to advance competitive positioning in the manufacturing sector.

Keywords: *Strategic management accounting, Business performance, Manufacturing sector and Competitive advantage*

Introduction

In today's interconnected global economy, manufacturing firms operate in a highly competitive landscape characterized by rapid technological change, shifting consumer demands, and increased globalization. Business competition transcends geographical boundaries, with firms striving to attract and retain customers through superior product quality, pricing strategies, and service delivery (Asaik, 2000). Porter's (1985) framework identifies four primary competitive forces—new entrants, substitute products, industry rivalry, and bargaining power of suppliers and customers—underscoring the need for robust strategic capabilities. Competitive advantage arises when firms consistently outperform rivals, either through cost leadership, differentiation, or market focus (Barney, 2002). Achieving such advantage requires timely, accurate, and strategically relevant information to support decision-making.

Traditional management accounting systems, while useful for internal cost control, often lack the capacity to provide the external, market-oriented insights needed for competitive positioning. Strategic Management Accounting (SMA), first conceptualized by Simmonds (1986), bridges this gap by combining traditional accounting tools with strategic information on customers, competitors, and market trends. SMA facilitates the design, implementation, and monitoring of strategies aimed at improving competitiveness and long-term performance. Unlike conventional approaches, SMA integrates financial and non-financial data to provide a holistic view of organizational performance, enabling managers to align operational decisions with strategic objectives (Setiawan et al., 2019a; Alsharari, 2019).

The adoption of SMA is influenced by multiple organizational and environmental factors, including leadership vision, innovation culture, cost of implementation, competitive intensity, and the technical expertise of accounting personnel (Nguyen & Le, 2020; Hadid & Al-Sayed, 2021). Firms with a strong innovation culture and strategic orientation are more likely to integrate SMA into decision-making processes, leveraging it as a driver of performance improvement (Al-Khatib et al., 2022; Varzaru et al., 2022). However, in Nigeria's manufacturing sector, empirical evidence suggests that SMA adoption remains limited, constrained by low awareness, entrenched reliance on traditional costing systems, and perceived high implementation costs (Pavlatos & Kostakis, 2018). Despite global recognition of SMA's role in enhancing

competitiveness, research on its adoption and performance impact in Nigerian manufacturing is sparse. This gap is particularly concerning given the sector's pivotal role in economic diversification, job creation, and industrial growth. Addressing this gap, the present study investigates the extent to which SMA influences competitive advantage in Nigerian manufacturing firms and identifies the key challenges inhibiting its widespread adoption. By providing evidence-based insights, the study aims to guide industry stakeholders, policymakers, and academia in developing strategies to embed SMA as a core driver of business performance in the manufacturing sector.

Literature Review

Strategic Management Accounting (SMA) is an approach that extends beyond the boundaries of traditional management accounting by integrating both financial and non-financial, internally and externally oriented information to support strategic decision-making (Peters & Soljakova, 2020). Unlike conventional accounting, which primarily focuses on historical cost information and internal reporting, SMA emphasizes competitor analysis, customer profitability, value chain analysis, and market trend monitoring. Its aim is to provide managers with the strategic insights needed to formulate and sustain competitive advantage in rapidly changing business environments (Alsharari, 2019). This holistic approach allows managers to align operational activities with long-term strategic goals, thereby enhancing the organization's adaptability and responsiveness to market dynamics (Turner et al., 2017).

The development and application of SMA are grounded in multiple management and accounting theories. Resource-Based View (RBV) posits that competitive advantage is derived from unique resources and capabilities, including specialized information systems like SMA (Barney, 2002). Contingency Theory suggests that the design and use of SMA tools should be aligned with contextual factors such as environmental uncertainty, competitive intensity, and organizational strategy (Nguyen & Le, 2020). Innovation Diffusion Theory further explains that SMA adoption is influenced by perceived relative advantage, complexity, compatibility with existing systems, and leadership support (Hadid & Al-Sayed, 2021). These theoretical perspectives highlight that SMA adoption is not merely a technical choice but a strategic and organizational one shaped by cultural, structural, and competitive factors.

SMA techniques encompass a wide range of practices aimed at improving decision-making and performance measurement. These include Activity-Based Costing (ABC), which provides more accurate product costing by linking expenses to specific activities; Benchmarking, which compares an organization's processes and performance with best-in-class competitors; Value Chain Analysis, which identifies opportunities to reduce costs and enhance customer value across all business functions; and Customer Profitability Analysis, which determines the long-term value of different customer segments (Cescon et al., 2019). SMA also incorporates Competitor Cost Assessment and Strategic Pricing, enabling firms to anticipate market shifts and respond proactively (Pavlatos & Kostakis, 2018). These tools collectively equip managers with the intelligence needed to pursue cost leadership, differentiation, or hybrid strategies effectively (Porter, 1985).

Empirical studies consistently link SMA adoption to improved business performance, measured both financially and operationally. Turner et al. (2017) demonstrated that SMA practices enhance profitability, operational efficiency, and market responsiveness in the hospitality and manufacturing sectors. Varzaru et al. (2022) found that innovative management accounting tools, particularly those with strategic orientation, positively influence both short-term profitability and long-term sustainability. In emerging markets, SMA is particularly valuable for navigating volatile economic conditions, enhancing customer focus, and enabling proactive strategic shifts (Al-Khatib et al., 2022). Nigerian evidence, though limited, suggests that firms employing SMA achieve better cost control, stronger market positioning, and higher adaptability to competitive pressures (Afriyie, Du, & Musah, 2019).

Despite its benefits, several factors hinder SMA adoption in manufacturing firms. High implementation costs remain a major obstacle, particularly in resource-constrained environments where management may view SMA as non-essential (Enmore & Ness, 1991). There is also a significant knowledge gap among accounting professionals, as SMA is often underrepresented in accounting curricula and professional training programs (Shank, 2007). Organizational resistance to change, especially from managers accustomed to traditional costing systems, further slows adoption (Roslender, 1996). Other barriers include inadequate top-management support, insufficient technical expertise, and a lack of standardized SMA frameworks (Nguyen & Le, 2020; Hadid & Al-Sayed, 2021). In Nigeria, these challenges are compounded by infrastructural constraints, inconsistent regulatory frameworks, and limited cross-functional collaboration.

While the literature acknowledges the strategic importance of SMA in enhancing competitive advantage, there is a scarcity of empirical studies focusing on its application in Nigeria's manufacturing sector. Most Nigerian research on management

accounting has concentrated on cost control, budgeting, and performance measurement using traditional tools, overlooking SMA's strategic and market-oriented dimensions. Furthermore, few studies have examined the combined effect of SMA practices and organizational factors—such as innovation culture, leadership orientation, and competitive intensity—on business performance. This study addresses these gaps by empirically investigating the extent to which SMA influences competitive advantage and identifying the contextual barriers to its adoption in Nigerian manufacturing firms.

Methodology

This study adopted an ex-post facto research design to examine the influence of Strategic Management Accounting (SMA) on competitive advantage in Nigerian manufacturing firms and to identify barriers to its adoption. The target population comprised chief executive officers, chief financial officers, and marketing directors of manufacturing companies listed in the 2023 Nigerian Stock Exchange Factbook, with eligibility restricted to firms listed for at least fifteen years to ensure operational maturity and data availability. A total of 150 respondents from 50 firms were approached using a purposive sampling technique, with three respondents (CEO, CFO, and marketing director) selected per firm. Data were collected through a structured questionnaire designed on a five-point Likert scale and subjected to face and content validation by industry and academic experts. Reliability testing using the test–retest method produced a Kendall Coefficient of Concordance of 0.96, indicating high instrument consistency. The questionnaire covered dimensions of SMA usage, competitive advantage, and perceived implementation barriers. Data analysis involved descriptive statistics (mean scores, frequency distributions, and percentages) for summarizing responses, supported by tabular and graphical presentations. The mean acceptance benchmark was set at 3.00 for decision-making, with values above this threshold indicating agreement. Ethical standards were maintained through informed consent, confidentiality assurances, and the use of aggregated data reporting to protect respondent anonymity.

Results

Table 1: Questionnaire Administration and Retrieval

Respondents	Questionnaires Distributed	Questionnaires Returned	Not Returned	Questionnaires Returned & Used
Chief Executives	50	15	35	
Chief Accountants	50	15	35	
Marketing Directors	50	15	35	
Total	150	45	105	
Percentage	100%	30%	70%	

Out of the 150 questionnaires administered across 50 manufacturing firms, 105 (70%) were completed and used for analysis, while 45 (30%) were not retrieved. The relatively high retrieval rate reflects strong participation by the target respondents, lending credibility to the dataset.

Table 2: Influence of SMA on Competitive Advantage

Response Category	Weight (x)	Chief Executives (f)	Score (fx)	Chief Accountants (f)	Score (fx)	Marketing Directors (f)	Score (fx)	Total Frequency (f)	Total Score (fx)
Strongly Agree (SA)	5	10	50	25	125	8	40	43	215
Agree (A)	4	21	84	10	40	10	40	41	164
Disagree (D)	3	4	12	0	0	17	51	21	63
Strongly Disagree (SD)	2	0	0	0	0	0	0	0	0
Neutral (N)	1	0	0	0	0	0	0	0	0
Total	-	35	146	35	165	35	131	105	442

XMean Score: $442/105 = 4.21$

With a mean score of 4.21, well above the benchmark value of 3.00, respondents strongly agreed that SMA positively influences competitive advantage in Nigerian manufacturing firms. This finding suggests that SMA enhances firms' ability to analyze market conditions, improve cost structures, and develop strategies that strengthen competitive positioning.

Table 3: Ranking of Barriers to SMA Implementation

Barrier to SMA Implementation	Mean Score	Rank
Lack of qualified SMA-skilled accountants	4.58	1
High cost of implementation	4.47	2
Resistance to change from traditional practices	4.32	3
Limited knowledge/awareness of SMA concepts	4.15	4
Absence of standardized SMA frameworks in Nigeria	3.96	5
Overreliance on traditional costing systems (FBC)	3.84	6
Perception of SMA as non-essential	3.68	7
Lack of cross-functional collaboration	3.54	8
"Shadow accounting" practices undermining SMA adoption	3.22	9

The most critical barriers to SMA adoption include the shortage of accountants with SMA expertise, the high cost of implementation, and entrenched resistance to moving away from traditional management accounting systems. Lower-ranked barriers, such as "shadow accounting" practices, were perceived as less influential but still relevant in hindering adoption.

Discussion of the Findings

The analysis reveals a strong consensus among respondents that Strategic Management Accounting (SMA) significantly enhances competitive advantage in Nigerian manufacturing firms, with a high mean score of 4.21. This confirms that SMA serves as a powerful tool for integrating financial and non-financial data to inform strategic decision-making, improve cost structures, and enhance market responsiveness. These findings align with Turner et al. (2017), who demonstrated that SMA facilitates better alignment between operational performance and long-term strategic objectives, thereby strengthening competitive positioning. The high adoption potential of SMA is evident in respondents' acknowledgment of its strategic value. This is consistent with Petera and Soljakova (2020), who found that SMA enables organizations to shift from purely internal cost control to proactive market-oriented decision-making. Similarly, Varzaru et al. (2022) reported that firms implementing SMA experience improvements in both financial profitability and sustainability outcomes.

However, the study also highlights persistent barriers to SMA adoption. The shortage of qualified SMA-skilled accountants ranked as the most critical constraint, underscoring a skills gap in Nigeria's accounting workforce. This mirrors the observations of Hadid and Al-Sayed (2021), who stressed that technical expertise and professional competence are prerequisites for effective SMA implementation. The high cost of implementation emerged as the second most significant barrier, reflecting similar findings by Enmore and Ness (1991), who noted that the perceived cost-benefit imbalance often discourages firms from transitioning to advanced management accounting systems. Resistance to change from entrenched traditional costing practices also ranked prominently, consistent with Roslender (1996), who argued that cultural inertia and fear of disruption are major obstacles to adopting new accounting methods. This resistance is particularly relevant in the Nigerian context, where many manufacturing firms have long relied on Functional-Based Costing (FBC). Additionally, the lack of standardized SMA frameworks in Nigeria limits the consistency and comparability of practices across firms, echoing concerns raised by Nguyen and Le (2020) about the absence of formalized SMA guidelines in many developing economies.

From a theoretical perspective, the results strongly support the Resource-Based View (RBV), which posits those unique organizational capabilities—such as SMA integration—serve as sources of sustainable competitive advantage (Barney, 2002). The findings also resonate with Contingency Theory, emphasizing that the effectiveness of SMA is contingent upon organizational context, including leadership support, innovation culture, and market conditions. The observed skill and cost barriers underscore the Innovation Diffusion Theory premise that adoption is shaped by perceived complexity, relative advantage, and compatibility with existing practices. Comparative insights show that while SMA benefits are well-documented globally, the Nigerian manufacturing sector lags in adoption due to structural and capability constraints. For example, in Malaysia and Eastern Europe, Cescon et al. (2019) and Pavlatos and Kostakis (2018) found that strong regulatory support, standardized training, and a culture of innovation facilitated higher SMA adoption rates. By contrast, Nigerian manufacturers face fragmented knowledge, limited institutional support, and cost-sensitivity issues that slow progress. In essence, this study confirms that SMA is a strategic enabler capable of significantly improving competitive

advantage in Nigerian manufacturing firms, but its full potential will only be realized through targeted interventions addressing skills development, cost barriers, cultural change, and institutional support frameworks.

Conclusion

This study examined the integration of Strategic Management Accounting (SMA) and its impact on competitive advantage in Nigerian manufacturing firms. The results reveal that SMA significantly enhances competitive positioning by equipping firms with comprehensive, strategically relevant financial and non-financial information. By enabling managers to align operational actions with long-term strategic goals, SMA fosters improved cost management, market responsiveness, and customer value creation. However, despite these benefits, SMA adoption in Nigerian manufacturing remains constrained by several barriers. The most pressing challenges include a shortage of SMA-skilled accountants, high implementation costs, resistance to replacing traditional costing systems, and the absence of standardized SMA frameworks in Nigeria. These challenges are compounded by limited awareness and insufficient professional training, resulting in a slow transition from conventional management accounting to strategic, market-oriented practices. The findings reinforce the Resource-Based View (RBV), Contingency Theory, and Innovation Diffusion Theory, confirming that SMA can be a source of sustainable competitive advantage when aligned with organizational capabilities, culture, and environmental context. Addressing the identified barriers is therefore essential for Nigerian manufacturing firms to fully leverage the strategic potential of SMA.

Recommendations

Based on the study's findings, the following recommendations are proposed:

1. Nigerian universities should incorporate SMA and marketing accounting courses into their accounting curricula to ensure that future accountants are equipped with the necessary skills. Professional bodies such as ICAN and ANAN should provide specialized SMA certification programs.
2. Manufacturing firms should provide continuous professional development opportunities through workshops, seminars, and training programs focusing on SMA tools such as Activity-Based Costing, value chain analysis, and customer profitability analysis.
3. Firms should transition to ABC systems to improve the accuracy of cost allocation and the strategic relevance of accounting data, thereby enhancing decision-making quality.
4. Management should implement structured change programs to reduce resistance, involving employees early in the SMA adoption process and demonstrating the tangible benefits of the new system.

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