

Top Management Team Quality as a Determinant of Strategic Management Accounting Practices: Evidence from Indigenous Manufacturing Firms in Ogun State, Nigeria

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ABSTRACT

This study examined the influence of Top Management Team (TMT) quality on Strategic Management Accounting Practices (SMAPs) sophistication among indigenous manufacturing firms in Ogun State, Nigeria. Anchored in Upper Echelons Theory and Contingency Theory, the study adopted a cross-sectional survey design, collecting questionnaire data from TMT members of 50 indigenous manufacturing firms selected from 57 firms operating within Agbara Industrial Estate. Data were analysed using descriptive statistics and multiple regression. The findings revealed that TMT quality positively and significantly influenced SMAP sophistication ($\beta = 0.462, p < 0.001$). Environmental uncertainty also had a significant positive effect ($\beta = 0.217, p = 0.002$), whereas competition intensity, firm size, and firm age were not significant predictors. These findings highlight managerial capability and environmental uncertainty as important determinants of sophisticated strategic management accounting practices. The study extends Upper Echelons and Contingency perspectives within the context of indigenous manufacturing firms in an emerging economy. It recommends strengthening executive competence, strategic leadership, and professional accounting capabilities to enhance SMAP sophistication.

Keywords: *Strategic Management Accounting Practices; Top Management Team Quality; Environmental uncertainty; manufacturing firms; Nigeria.*

1.0 Introduction

Nigeria's manufacturing industry has long been a pillar of the nation's industrialization and economic expansion (Oyewo, 2022). Manufacturing companies are looking for creative ways to improve their overall performance, profitability, and competitiveness as a result of the Nigerian economy's growing diversification (Olayemi, 2024). Indigenous manufacturing firms (owned by Nigerians, and small in size) operate in an environment characterized by cost pressure, currency volatility, infrastructure constraints, supply-chain disruptions, intense import competition, and regulatory complexity (Oboh & Ajibolade, 2017; Olayemi, 2024). Under these conditions, the ability to deploy strategically oriented management accounting is beyond routine cost accumulation, it becomes material for survival and performance (Olayemi, 2024).

SMAP have emerged as a crucial instrument in this regard for coordinating financial management with strategic goals. Beyond typical cost accounting, SMAP gives managers comprehensive financial and non-financial data to improve long-term strategy planning, resource allocation, and decision-making. As businesses seek to increase operational efficiency, save expenses, and strengthen their position in the market, strategies including Activity-Based Costing (ABC), Target Costing, Competitor Analysis, and Balanced Scorecard have become more popular (Langfield-Smith, 2008)

While SMAPs are widely discussed, evidence shows uneven adoption and implementation in practice, sometimes described as the “paradox” of SMA has high conceptual appeal, but inconsistent diffusion and institutionalization (Nixon & Burns, 2012). For emerging economies, the adoption problem is often not simply about technique awareness, but about managerial capacity, governance systems, information quality, and strategic intent (Bromiley & Rau, 2014; Nimfa, Abdul Latiff & Abd Wahab, 2024).

The effectiveness of Strategic Management Accounting depends not only on the availability of appropriate techniques but also on the organizational capabilities required to deploy them effectively (TMT) (Bromiley & Rau, 2014; Nimfa et al., 2024). The TMT, which consists of management in charge of strategic choices, can affect the company's strategic orientation,

including the choice and application of management accounting systems (Bromiley & Rau, 2014).

Upper Echelons Theory argues that strategic choices and organizational outcomes reflect the characteristics and cognitive bases of TMT (Bromiley & Rau, 2014). From this perspective, firms with higher-quality TMTs should be more capable of adopting and configuring advanced SMAP bundles aligned with competitive strategy.

Statement of Problem

Despite increasing interest in SMA/SMAPs, many indigenous manufacturing firms in developing economies like Nigeria still rely heavily on conventional/ traditional management accounting and budgeting routines, with limited strategic analytics ((Ojra et al., 2021; Abdullah et al., 2020; Doktoralina & Apollo, 2019). At the same time, competitive intensity and environmental uncertainty demand more sophisticated information for strategic pricing, cost leadership, product profitability, and performance control (Cadez & Guilding, 2008).

Evidence from developing economies suggests TMT factors can be significant drivers of SMA adoption (Nimfa, Abdul Latiff & Abd Wahab, 2024; McHugh & Duane, 2025; Bekos & Chari, 2023). However, Nigerian indigenous manufacturing companies frequently have particular difficulties such restricted access to financing, inefficient supplier chains, and shifting market conditions (Oyewo, 2022). Despite these obstacles, little is known about how the quality of TMTs in Nigerian manufacturing companies influences the sophistication and uptake of SMA tools.

There is a dearth of empirical data that particularly addresses the Nigerian situation (Awa et al., 2024; Eze et al., 2018), despite research in developed nations demonstrating a favourable correlation between TMT quality and SMA efficacy (McHugh & Duane, 2025; Bekos & Chari, 2023). By investigating the connection between TMT quality and SMAP sophistication in Nigerian indigenous manufacturing companies, this study aims to close this gap. Understanding how TMT characteristics such as education, experience, cognitive variety, and strategic orientation affect the choice and application of SMA tools and procedures is the goal of the study. Additionally, the study will look into how these firms' success is enhanced by the way SMA procedures are configured. This study aims to close this gap by investigating the

relationship between TMT quality and SMAP sophistication among indigenous manufacturing firms operating within the Agbara Industrial Estate, Ogun State, Nigeria.

Research Hypotheses

H01: Top Management Team Quality has no significant effect on Strategic Management Accounting Practices Sophistication among indigenous manufacturing firms.

H02: Environmental Uncertainty has no significant effect on Strategic Management Accounting Practices Sophistication among indigenous manufacturing firms.

H03: Competition Intensity has no significant effect on Strategic Management Accounting Practices Sophistication among indigenous manufacturing firms.

H04: Firm Size has no significant effect on Strategic Management Accounting Practices Sophistication among indigenous manufacturing firms.

H05: Firm Age has no significant effect on Strategic Management Accounting Practices Sophistication among indigenous manufacturing firms.

2.0 Literature Review

2.1 Conceptual Review

Strategic Management Accounting (SMA) has evolved as a significant extension of conventional management accounting, reflecting the growing need for accounting systems that support long-term strategic decision-making rather than merely recording historical financial transactions. Roslender and Hart (2019) describe SMA as the generation and application of accounting information for the formulation, implementation, and evaluation of business strategy, while Cadez and Guilding (2020) emphasize its role in integrating financial and non-financial information to support strategic competitiveness. Unlike traditional management accounting, which concentrates primarily on internal cost control, budgeting, and financial reporting, SMA incorporates externally oriented information—including competitor intelligence, customer profitability, market positioning, and value chain analysis—to facilitate strategic decision-making (Uyar et al., 2022). This broader orientation reflects a shift from operational efficiency towards the creation and sustenance of competitive advantage.

Despite widespread academic acceptance, the conceptual boundaries of SMA remain a subject of debate. One of the major criticisms is the absence of a universally accepted definition and standardized framework. Different scholars conceptualize SMA either as a collection of strategic accounting techniques, an extension of management accounting, or a strategic information system that integrates accounting with strategic management. Empirical studies differ considerably in their operationalization of SMA, making comparison across studies difficult and contributing to inconsistent findings regarding its determinants and organizational outcomes. This conceptual ambiguity has slowed theoretical development and limited consensus regarding what constitutes genuine SMA sophistication.

Another area of debate concerns the distinction between the adoption of individual SMA techniques and the sophistication of SMAPs. Much of the existing literature measures SMA by examining whether firms implement isolated techniques such as Activity-Based Costing (ABC), Target Costing, Life-Cycle Costing, Benchmarking, Competitor Accounting, or the Balanced Scorecard (Cadez & Guilding, 2020). However, the implementation of isolated techniques does not necessarily indicate that an organization has developed a strategically integrated management accounting system. Increasingly, scholars argue that organizational value is created through the configuration and integration of complementary accounting practices rather than through the adoption of individual techniques in isolation. SMA sophistication should be viewed as the extent to which multiple accounting techniques are strategically coordinated to support organizational planning, competitive positioning, resource allocation, and performance management.

The effectiveness of SMA is therefore influenced not only by the availability of sophisticated accounting techniques but also by the organizational capabilities required to utilize them effectively. The successful implementation of SMA depends on managerial competence, organizational learning, technological infrastructure, governance quality, and strategic commitment. Firms may possess advanced accounting technologies yet derive limited strategic value if TMT lack the capability to interpret accounting information and incorporate it into strategic decision-making. Conversely, organizations with capable leadership teams may successfully leverage relatively simple accounting tools to achieve superior strategic outcomes

through effective integration and managerial judgement. This suggests that the strategic value of SMA is determined less by technical sophistication alone than by the quality of managerial interpretation and organizational implementation.

Within this context, the quality of Top Management Teams (TMTs) assumes considerable importance. SMA requires managers to process complex financial and non-financial information, anticipate competitive developments, evaluate alternative strategic options, and allocate organizational resources effectively. Executives possessing diverse professional expertise, broad industry experience, strategic orientation, governance competence, and cognitive diversity are more likely to recognize the strategic relevance of sophisticated accounting information and support its institutionalization throughout the organization. High-quality TMTs therefore facilitate the transformation of accounting information from a routine reporting mechanism into a strategic resource capable of improving organizational competitiveness.

Nevertheless, the relationship between TMT quality and SMA sophistication should not be viewed as deterministic. Organizations operating under similar managerial capabilities frequently exhibit different levels of SMA sophistication because external contingencies also shape managerial decisions. Environmental uncertainty, technological change, competitive intensity, regulatory pressures, and resource availability influence both the demand for strategic accounting information and the organization's capacity to implement sophisticated accounting systems. Managerial capability alone cannot adequately explain variations in SMA sophistication without considering the organizational and environmental contexts within which strategic decisions are made.

SMA encompasses a broad range of complementary techniques that collectively enhance strategic decision-making. These include Activity-Based Costing (ABC), Target Costing, Life-Cycle Costing, Competitor Accounting, Customer Profitability Analysis, Value Chain Analysis, Benchmarking, Strategic Pricing, and the Balanced Scorecard (Cadez & Guilding, 2020). Rather than functioning as independent accounting tools, these techniques generate integrated information that enables organizations to understand cost structures, evaluate competitor behaviour, identify profitable customer segments, optimize resource allocation, and

measure both financial and non-financial performance. Their strategic significance lies in their collective ability to improve organizational adaptability and long-term competitiveness rather than merely improving accounting efficiency.

For indigenous manufacturing firms in Nigeria, the strategic importance of SMA is particularly evident. These firms operate within an environment characterized by exchange-rate volatility, persistent inflation, infrastructural deficiencies, supply chain disruptions, regulatory uncertainty, and increasing domestic and international competition. Under such conditions, traditional management accounting systems that emphasize historical financial reporting may provide insufficient information for strategic decision-making. Sophisticated SMAPs become increasingly valuable because they provide managers with timely, externally oriented, and strategically relevant information that supports pricing decisions, competitor analysis, cost optimization, customer profitability assessment, and performance evaluation. The adoption of sophisticated SMA represents not merely an accounting innovation but a strategic capability that enhances organizational resilience and competitiveness within challenging business environments.

SMA should be understood as a multidimensional strategic capability rather than simply a collection of accounting techniques. Its effectiveness depends upon the interaction between managerial competence, organizational capabilities, and environmental conditions. The conceptual foundation for the present study, which examines how TMT quality influences the sophistication of SMAPs among indigenous manufacturing firms in Ogun State, Nigeria. By focusing on SMA sophistication rather than the adoption of isolated techniques, the study contributes to a more comprehensive understanding of how strategic accounting systems support organizational competitiveness in emerging economies.

Top Management Team (TMT) Quality

The quality of a Top Management Team (TMT) is a critical determinant of organizational success, encompassing the collective attributes of the senior leadership team. These attributes include experience, education, decision-making ability, cognitive diversity, and strategic vision. According to Zhang and Li (2020), the ability of a TMT to make well-informed and

strategic decisions is a key factor in driving business success. High-quality teams contribute a wealth of knowledge, provide innovative problem-solving approaches, and bring a variety of perspectives, all of which can significantly improve decision-making and enhance organizational outcomes (Fitriasari et al., 2021).

Key Components of TMT Quality

1. **Experience:** The level of expertise and industry knowledge possessed by a TMT, which enables them to make informed decisions and understand the nuances of their organization's environment (Menz, 2022).
2. **Cognitive Diversity:** The variety of viewpoints, skills, and knowledge that TMT members bring to strategic discussions. This diversity enhances problem-solving and fosters innovation (Căpuşneanu et al., 2021).
3. **Strategic Orientation:** The ability of the TMT to plan strategically and align financial decisions with the broader objectives of the organization. A TMT's strategic orientation ensures that decisions are consistent with the long-term vision of the company (Zhao & Seibert, 2023).
4. **Management Skills:** The capability to effectively manage and utilize accounting data to make strategic decisions. Effective management of SMA tools relies heavily on the TMT's ability to interpret and act on financial information (Rashid et al., 2021).

Relationship Between TMT Quality and SMA P

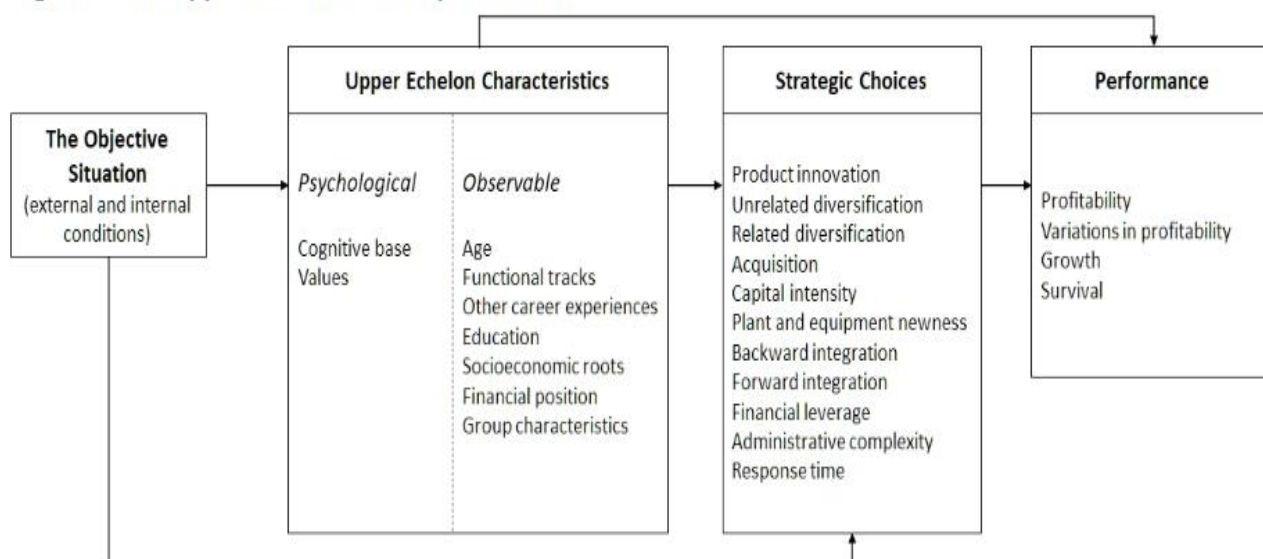
High-quality TMTs are more likely to adopt and configure Strategic Management Accounting Practices (SMAPs) in a way that aligns with the organization's long-term strategic objectives. This is because TMTs with the right mix of experience, cognitive diversity, and strategic orientation have the ability to understand the strategic value of SMA tools and integrate them into the organization's broader strategic framework. These teams are better positioned to make informed decisions about costing methods, performance evaluation tools, and resource allocation to support strategic initiatives (Menz, 2022; Bai & Chang, 2024).

For instance, TMTs with a strong strategic orientation are more likely to recognize the importance of using Activity-Based Costing (ABC) to manage costs more effectively and

improve decision-making processes that impact long-term profitability. Similarly, TMTs with strong financial expertise and experience in strategic planning are better able to configure tools like the balanced scorecard and target costing to monitor performance and make adjustments in response to changes in the market or competition

The Upper Echelons Theory (Hambrick & Mason, 1984) provides a foundational framework for understanding how managerial characteristics shape strategic choices and organizational outcomes. According to this theory, the quality of the TMT, particularly its background characteristics, influences the strategic direction of the organization, including the adoption of Strategic Management Accounting Practices (SMAPs) (Zhang & Li, 2020).

Figure 1: The upper echelons conceptual model



Adopted from Bekos & Chari (2023)

2.4 Theoretical Foundation

Upper Echelons Theory (UET)

Upper Echelons Theory (UET), originally developed by Hambrick and Mason (1984), is one of the most influential behavioural theories in strategic management because it explains organizational outcomes as reflections of the characteristics and cognitive orientations of TMT. The theory argues that strategic choices are not purely rational responses to environmental conditions but are filtered through the experiences, values, personalities, and cognitive

capabilities of TMT. Organizational strategies, control systems, innovation decisions, and performance outcomes are shaped by how executives perceive, interpret, and respond to strategic challenges (Bromiley & Rau, 2014).

The central proposition of the theory is that observable managerial characteristics—including educational attainment, professional experience, functional background, age, tenure, and cognitive diversity—serve as proxies for deeper psychological attributes that influence strategic decision-making. Within the context of Strategic Management Accounting (SMA), the theory implies that the sophistication of management accounting systems depends significantly on the quality of top management teams (TMTs). Executives possessing broader strategic perspectives, stronger analytical capabilities, and diverse professional experiences are expected to recognize the strategic value of advanced accounting techniques and champion their adoption as mechanisms for enhancing organizational competitiveness (Zhang & Li, 2020).

Recent empirical evidence largely supports this theoretical proposition. Studies have demonstrated that diverse and highly competent TMT are associated with greater organizational innovation, superior governance practices, and more sophisticated management accounting systems (Wang et al., 2019; Zhang & Wiersema, 2022). Likewise, Fitriasari et al. (2021) found that executives with diverse educational and professional backgrounds are more inclined to support advanced performance measurement systems and strategically oriented management accounting practices. These findings reinforce the argument that managerial capability constitutes a valuable organizational resource capable of shaping strategic accounting choices and improving organizational adaptability.

Despite its considerable explanatory power, Upper Echelons Theory has attracted substantial criticism. One of its principal limitations lies in its reliance on observable demographic characteristics as proxies for complex psychological and cognitive attributes. Variables such as age, educational qualifications, tenure, and functional background are relatively easy to measure, but they may not accurately represent executive competence, leadership effectiveness, strategic thinking, or decision-making quality. Empirical studies employing

demographic proxies often produce inconsistent findings because individuals with similar observable characteristics may differ considerably in cognitive ability, leadership style, and strategic orientation.

A second criticism concerns the theory's tendency toward managerial determinism. UET assumes that organizational outcomes are largely driven by executive characteristics, thereby assigning relatively limited importance to external institutional pressures, organizational culture, governance structures, and resource constraints. Critics argue that strategic decisions emerge from interactions between managerial capabilities and organizational contexts rather than from executive characteristics alone. As a result, highly competent management teams may still fail to implement sophisticated SMAPs where technological infrastructure, financial resources, or institutional support are inadequate.

Furthermore, much of the empirical evidence supporting Upper Echelons Theory originates from large corporations in developed economies where governance systems, technological capabilities, and institutional environments differ substantially from those found in developing countries. The generalizability of these findings to indigenous manufacturing firms in Nigeria remains uncertain. Organizations operating in emerging economies frequently contend with infrastructural deficiencies, macroeconomic instability, regulatory uncertainty, limited access to finance, and institutional weaknesses that may constrain managerial discretion irrespective of executive quality. These contextual differences suggest that managerial competence alone cannot fully explain variations in Strategic Management Accounting sophistication across organizations.

Another limitation concerns the theory's limited consideration of collective managerial processes. Although Upper Echelons Theory acknowledges TMT, many empirical studies continue to focus on individual executive characteristics, particularly those of chief executive officers. Such an approach underestimates the collaborative nature of strategic decision-making, where organizational outcomes often result from interactions among executives with diverse expertise, functional responsibilities, and perspectives. Measuring TMT quality using multidimensional constructs such as cognitive diversity, governance capability, strategic orientation, leadership competence, and openness to innovation may provide a more

comprehensive understanding of how management teams influence SMAPs than relying solely on demographic indicators.

Notwithstanding these criticisms, Upper Echelons Theory remains highly relevant to the present study because it provides a robust theoretical explanation for why firms with stronger TMT are more likely to adopt sophisticated SMAPs. Indigenous manufacturing firms operating in Nigeria face persistent environmental uncertainty, increasing competition, technological change, and resource constraints that require informed strategic decision-making. Under these conditions, the ability of TMT to interpret environmental signals, integrate strategic accounting information, and align accounting systems with organizational objectives becomes increasingly important. The theory therefore offers an appropriate foundation for examining how multidimensional TMT quality influences Strategic Management Accounting sophistication.

However, this study recognizes that managerial characteristics alone cannot adequately explain Strategic Management Accounting adoption. Rather, the influence of TMT is expected to interact with contextual factors such as environmental uncertainty and competitive intensity. For this reason, Upper Echelons Theory is complemented by Contingency Theory, allowing the study to integrate managerial capability with organizational and environmental conditions. The combination of these theoretical perspectives provides a more comprehensive explanation of Strategic Management Accounting sophistication than either theory could offer independently.

Contingency Theory

Contingency Theory has remained one of the dominant theoretical perspectives in management accounting because it explains organizational effectiveness as a function of the alignment between internal organizational characteristics and external environmental conditions. The theory argues that no single management or accounting system is universally effective; rather, the appropriateness of any management accounting practice depends on the specific circumstances under which an organization operates (Nguyen & Nguyen, 2021). Within strategic management accounting (SMA), the theory suggests that accounting systems should be designed to reflect organizational strategy, environmental uncertainty, technological

complexity, competitive intensity, and organizational structure rather than adhering to standardized accounting practices (Parker et al., 2022; Al-Hattami, 2023).

The central proposition of Contingency Theory is that organizations achieve superior performance when there is an appropriate fit between management accounting systems and contextual variables. The effectiveness of Strategic Management Accounting Practices (SMAPs) is not determined solely by the sophistication of accounting techniques but by the extent to which those techniques correspond with the organization's strategic objectives and operating environment (Ahmad & Zabri, 2019). This perspective represents a significant departure from earlier normative accounting theories that assumed universally applicable management practices irrespective of organizational circumstances.

Empirical evidence provides substantial support for the contingency perspective. Numerous studies have demonstrated that organizations operating in highly uncertain, technologically dynamic, or intensely competitive environments are more likely to adopt sophisticated strategic management accounting systems than firms operating under relatively stable conditions (Parker et al., 2022; Al-Hattami, 2023). These findings suggest that environmental complexity increases managers' demand for broader, externally oriented, and strategically relevant accounting information. Techniques such as competitor accounting, strategic costing, customer profitability analysis, and balanced scorecards become increasingly valuable as organizations seek to improve strategic responsiveness under uncertain conditions.

Despite its widespread acceptance, Contingency Theory has attracted considerable criticism. One of its principal limitations is the absence of a universally accepted framework for identifying and measuring contingency variables. Researchers have operationalized contingencies using diverse constructs—including environmental uncertainty, organizational size, technology, strategy, market competition, organizational culture, and leadership characteristics—making empirical findings difficult to compare across studies. This conceptual diversity has contributed to inconsistent empirical results and limited theoretical precision.

Furthermore, contingency research often assumes relatively straightforward relationships between contextual variables and organizational outcomes. Critics argue that organizations rarely respond passively to environmental conditions; instead, managers actively interpret,

influence, and reshape their environments through strategic decision-making. The theory has been criticized for underestimating managerial agency and overemphasizing environmental determinism. This limitation is particularly important because firms facing similar environmental conditions frequently adopt substantially different accounting systems, suggesting that contextual factors alone cannot adequately explain variations in Strategic Management Accounting Practices.

Another limitation concerns the theory's explanatory rather than predictive nature. While Contingency Theory effectively explains why different organizations adopt different accounting systems, it provides limited guidance regarding which specific combinations of organizational and environmental factors produce the most effective management accounting configurations. As a result, contingency studies often identify statistical associations without fully explaining the mechanisms through which contextual variables influence accounting innovation and organizational performance.

Within the Nigerian manufacturing sector, the explanatory value of Contingency Theory is particularly relevant. Indigenous manufacturing firms operate in environments characterized by exchange-rate volatility, inflationary pressures, infrastructural deficiencies, regulatory uncertainty, supply chain disruptions, and increasing global competition. Under such conditions, reliance on conventional management accounting systems may be insufficient for effective strategic decision-making. The theory therefore suggests that organizations experiencing higher levels of environmental uncertainty should exhibit greater demand for sophisticated Strategic Management Accounting Practices capable of supporting strategic planning, competitor analysis, pricing decisions, and performance management.

However, environmental conditions alone may not be sufficient to explain differences in SMA sophistication among indigenous manufacturing firms. Organizations operating within the same industrial environment frequently display substantial variation in the adoption of strategic accounting practices. This observation suggests that contextual pressures require complementary managerial capabilities before they can be translated into effective accounting innovations. Contingency Theory should not be viewed as an independent explanation of SMA adoption but rather as a complementary perspective that explains how environmental

conditions interact with organizational resources and managerial quality to influence strategic accounting decisions.

Accordingly, this study adopts Contingency Theory because it provides a robust framework for explaining how environmental uncertainty and competitive conditions influence the sophistication of Strategic Management Accounting Practices among indigenous manufacturing firms in Ogun State, Nigeria. The theory complements Upper Echelons Theory by recognizing that while TMT provide the strategic capability required to implement sophisticated accounting systems, the extent to which such systems are adopted is also shaped by the external environment in which firms operate. Integrating these theoretical perspectives therefore offers a more comprehensive explanation of Strategic Management Accounting sophistication than either theory could provide independently.

2.5 Empirical Review

Strategic Management Accounting (SMA) has received sustained scholarly attention over the past three decades because of its capacity to generate strategically relevant financial and non-financial information that supports organizational competitiveness and long-term value creation. Early empirical investigations concentrated primarily on identifying and classifying SMA techniques, whereas more recent studies have shifted towards explaining the organizational, managerial, and environmental conditions that facilitate or constrain their adoption. This shift reflects growing recognition that the effectiveness of SMA depends not merely on the availability of accounting techniques but also on the strategic capabilities of the organizations implementing them. The characteristics of Top Management Teams (TMTs) have become an important area of empirical inquiry, particularly within the framework of Upper Echelons Theory.

Several empirical studies provide evidence that high-quality management teams positively influence the adoption and sophistication of strategic management accounting practices. Pavlatos and Kostakis (2018), for example, found that firms led by experienced executives with strong strategic orientation were more likely to implement advanced management accounting techniques such as Activity-Based Costing, Target Costing, and the Balanced Scorecard. Similarly, Nuhu et al. (2023) reported that managerial competence significantly enhances the

sophistication of management control systems and strengthens organizational responsiveness to competitive pressures. These findings suggest that managerial capability constitutes an important organizational resource that facilitates the successful implementation of strategic accounting innovations.

Although these studies provide empirical support for the role of TMT quality, their conclusions should be interpreted cautiously. Most rely on cross-sectional survey designs, which establish statistical associations rather than causal relationships. It remains uncertain whether superior managerial quality drives SMA adoption or whether organizations that have already institutionalized sophisticated accounting systems are more likely to attract highly qualified executives. Moreover, many of these studies employ perceptual measures of managerial quality and SMA sophistication obtained from the same respondents, increasing the likelihood of common method bias and potentially inflating observed relationships.

The positive relationship between TMT quality and SMA adoption is not consistently supported across the literature. Anduaem (2024) argues that managerial competence alone cannot adequately explain differences in SMA implementation because organizational culture, technological capability, institutional support, and environmental uncertainty frequently mediate or moderate managerial influence. The result challenges the relatively deterministic interpretation of Upper Echelons Theory by suggesting that executive capability operates within broader organizational and institutional contexts rather than functioning as an independent driver of accounting innovation. Organizations possessing highly qualified management teams may still exhibit low levels of SMA sophistication where technological infrastructure, governance systems, or organizational resources remain inadequate. This perspective indicates that the influence of TMT quality may be contingent upon complementary organizational capabilities rather than universally applicable across firms.

Empirical evidence from emerging economies further illustrates the contextual nature of SMA adoption. Studies conducted in several Asian and Eastern European countries generally report increasing implementation of strategic management accounting techniques as firms respond to globalization, technological advancement, and competitive pressures. In contrast, evidence from many African economies presents a less consistent picture. Nik Abdullah et al. (2022) observed that although managers increasingly recognize the strategic value of SMA techniques,

many organizations continue to rely predominantly on conventional budgeting and cost-control systems. This discrepancy suggests that awareness of SMA does not necessarily translate into organizational implementation, giving rise to what has been described as the "SMA adoption gap." The persistence of this gap implies that factors beyond managerial awareness, including institutional quality, resource availability, technological readiness, and organizational learning capabilities, may substantially influence SMA implementation.

Within the Nigerian context, empirical findings remain fragmented and somewhat contradictory. Oboh and Ajibolade (2017) reported that strategic accounting information was used largely to complement traditional financial reporting rather than to support broader strategic decision-making. Similarly, Ugochukwu and Ojo (2019) found that indigenous manufacturing firms continued to depend heavily on conventional costing techniques despite increasing environmental uncertainty and market competition. The authors attributed this limited adoption to inadequate managerial expertise, weak organizational support systems, and insufficient investment in accounting innovation. These findings portray Nigerian manufacturing firms as relatively slow adopters of strategic management accounting practices.

However, more recent Nigerian studies present a more optimistic perspective. Ojo and Adeyemi (2020) reported that firms managed by executives with higher educational qualifications and broader industry experience demonstrated greater adoption of strategic costing and performance measurement systems. Likewise, Abiodun (2024) found a positive relationship between SMA implementation and competitive advantage among small and medium-sized enterprises. While these studies reinforce the importance of managerial capability, they also introduce inconsistencies within the Nigerian evidence base. The divergent findings may reflect differences in industrial sectors, organizational size, measurement approaches, or periods of investigation rather than genuine contradictions in managerial influence. Nevertheless, the inconsistency highlights the need for further context-specific research capable of explaining why some indigenous firms successfully institutionalize SMA while others continue to rely on conventional management accounting practices.

A critical examination of the existing literature also reveals important methodological limitations. First, most empirical studies conceptualize SMA adoption as a binary or cumulative measure, focusing on whether individual techniques such as Activity-Based Costing, Target

Costing, or the Balanced Scorecard are adopted. This approach overlooks the possibility that organizations derive strategic value from the integration and configuration of complementary accounting practices rather than from isolated techniques.

Second, much of the existing evidence is derived from studies involving large multinational corporations operating in developed economies. Indigenous manufacturing firms, particularly those operating in resource-constrained environments, remain comparatively underrepresented. Given substantial differences in institutional quality, managerial capacity, technological infrastructure, competitive conditions, and access to financial resources, findings generated in developed economies cannot be assumed to apply directly to Nigerian manufacturing firms. This limits the external validity of much of the current literature.

Third, measurement of TMT quality remains conceptually narrow in many studies. Managerial quality is frequently operationalized using observable demographic variables such as educational attainment, age, tenure, or years of managerial experience. While these variables provide useful proxies, they fail to capture more substantive dimensions of executive capability, including cognitive diversity, strategic orientation, governance effectiveness, leadership quality, innovation orientation, and decision-making competence. Such simplified measures restrict understanding of the mechanisms through which management teams influence strategic accounting decisions and may explain inconsistencies reported across empirical studies.

Finally, relatively few empirical investigations simultaneously integrate managerial characteristics and contextual contingencies within a single analytical framework. Studies grounded exclusively in Upper Echelons Theory often understate the influence of organizational and environmental conditions, whereas contingency-based studies tend to pay insufficient attention to executive characteristics. The interaction between managerial quality and environmental uncertainty in shaping Strategic Management Accounting sophistication remains inadequately understood, particularly within indigenous manufacturing firms operating in developing economies.

In summary, although existing empirical evidence generally supports the proposition that high-quality management teams contribute to the adoption of Strategic Management Accounting

practices, the literature remains characterized by inconsistent findings, methodological limitations, narrow operationalization of managerial quality, and limited evidence from indigenous manufacturing firms in developing countries. More importantly, relatively little empirical attention has been devoted to examining how multidimensional TMT quality influences the sophistication of Strategic Management Accounting Practices within the unique institutional and competitive environment of Nigeria. Addressing this gap contributes not only to extending the explanatory power of Upper Echelons Theory but also to providing context-specific evidence on the managerial capabilities required to strengthen strategic accounting systems and enhance organizational competitiveness among indigenous manufacturing firms.

3.0 Methodology

The study adopted a cross-sectional survey design to examine the influence of Top Management Team (TMT) quality on Strategic Management Accounting Practices (SMAPs) sophistication among indigenous manufacturing firms in Nigeria. The study was conducted at Agbara Industrial Estate, Ogun State, a major manufacturing hub characterised by competitive pressures and environmental uncertainty. The population comprised 57 indigenous manufacturing firms identified through the Manufacturers Association of Nigeria directory and the industrial estate register. The sample size was determined using Yamane's (1967) formula for finite populations at a 5% precision level: $n = N/[1 + N(e^2)]$ $n = N/[1 + N(e^2)]$. Substituting the population of 57 yielded approximately 50 firms. Accordingly, 50 firms were selected, representing 87.7% of the population. One structured questionnaire was administered to a TMT respondent in each firm. All 50 questionnaires were returned and found suitable for analysis, yielding a 100% response rate. Data collected were analysed using IBM SPSS Statistics version 29. Descriptive statistics to summarised respondent characteristics and study variables, while multiple regression were employed to assessed the relationship between TMT quality and SMAP sophistication, controlling for environmental uncertainty, competition intensity, firm size, and firm age: Regression assumptions, including linearity, residual normality, homoscedasticity, and multicollinearity, were assessed using appropriate diagnostic tests. Variance Inflation Factors were examined for multicollinearity, and statistical significance was evaluated at the 5% level. Regression coefficients, standard errors, and model-fit statistics informed hypothesis testing.

Model Specification

The functional relationship for the study is expressed as:

$$\text{SMAPS} = f(\text{TMTQ}, \text{ENVU}, \text{COMP}, \text{FSIZE}, \text{FAGE})$$

The econometric model is specified as:

$$\text{SMAPS} = \beta_0 + \beta_1\text{TMTQ} + \beta_2\text{ENVU} + \beta_3\text{COMP} + \beta_4\text{FSIZE} + \beta_5\text{FAGE} + \varepsilon$$

Where:

SMAPS = Strategic Management Accounting Practices Sophistication

TMTQ = Top Management Team Quality

ENVU = Environmental Uncertainty

COMP = Competition Intensity

FSIZE = Firm Size

FAGE = Firm Age

β_0 = Intercept

$\beta_1 - \beta_5$ = Regression Coefficients

ε = Error Term

4.0 Data Presentation and Analysis

Reliability Analysis and Validity Test

As presented in table 1 Cronbach's Alpha values ranged from **0.786 to 0.891**, while the overall instrument reliability was **0.873**. Since all values exceed the commonly accepted threshold of **0.70**, the questionnaire demonstrates satisfactory internal consistency. This implies that the items used to measure TMT quality, environmental uncertainty, competition intensity, and SMAP sophistication were reliable for further statistical analysis. More so, The Kaiser-Meyer-Olkin value of **0.811** indicates that the sample was adequate for factor analysis. Bartlett's Test of Sphericity was significant, $\chi^2 = 567.321$, $p < 0.001$, confirming that the correlation matrix was not an identity matrix. Therefore, the research instrument possesses acceptable construct validity.

Table 1: The reliability of the questionnaire was examined using Cronbach's Alpha.

Construct	Number of Items	Cronbach's Alpha
TMT Quality	8	0.864
Environmental Uncertainty	5	0.801
Competition Intensity	4	0.786
SMAP Sophistication	12	0.891
Overall Instrument	29	0.873

Table 2: Validity Analysis

Test	Result	Threshold	Decision
KMO Measure	0.811	> 0.60	Acceptable
Bartlett's Test Chi-square	567.321	Significant	Acceptable
Bartlett's Test Sig.	0.000	< 0.05	Acceptable

Table 3: Descriptive Statistics of Study Variables

Variable	Mean	Std. Dev.	Min	Max
TMT Quality	3.34	0.66	2.03	4.75
Environmental Uncertainty	3.23	0.74	1.76	4.64
Competition Intensity	3.47	0.50	2.36	4.54
Firm Size	4.26	0.47	3.25	5.33
SMAP Sophistication	4.27	0.48	3.25	5.00

Table 4: SMAP Sophistication Distribution

Sophistication Category	Frequency	Percentage
Market/Competitor-led	26	52%
Balanced Strategic Analytics	14	28%
Basic Budgeting and Cost Focus	7	14%
Strategic Costing-led	3	6%
Total	50	100%

Regression Analysis

As shown in table 5, The regression results indicate that the model explained 55.6% of the variation in SMAP sophistication ($R^2 = 0.556$; adjusted $R^2 = 0.505$). TMT quality had a positive

and significant effect ($\beta = 0.462$, $t = 5.70$, $p < 0.001$), followed by environmental uncertainty ($\beta = 0.217$, $t = 3.27$, $p = 0.002$). However, competition intensity ($\beta = 0.181$, $p = 0.078$), firm size, and firm age had no statistically significant effects at the 5% level. These findings highlight TMT quality and environmental uncertainty as significant predictors of SMAP sophistication among the sampled firms.

Table 5: The regression model examined the effect of TMT quality, environmental uncertainty, competition intensity, firm size, and firm age on SMAP sophistication.

Predictor	Coefficient (β)	t-stat	p-value	Decision
TMT Quality	0.462	5.70	< 0.001	Significant
Environmental Uncertainty	0.217	3.27	0.002	Significant
Competition Intensity	0.181	1.80	0.078	Not significant at 5%
Firm Size	0.057	0.49	0.624	Not significant
Firm Age	-0.004	-0.42	0.677	Not significant
R ² / Adjusted R ²	0.556 / 0.505			

Hypotheses Decision

Hypothesis	Result	Decision
H01: TMT quality has no significant relationship with SMAP sophistication.	$\beta = 0.462$, $p < 0.001$	Rejected
H02: Environmental uncertainty has no significant relationship with SMAP sophistication.	$\beta = 0.217$, $p = 0.002$	Rejected
H03: Competition intensity has no significant relationship with SMAP sophistication.	$\beta = 0.181$, $p = 0.078$	Not rejected at 5%
H04: Firm size has no significant relationship with SMAP sophistication.	$\beta = 0.057$, $p = 0.624$	Not rejected
H05: Firm age has no significant relationship with SMAP sophistication.	$\beta = -0.004$, $p = 0.677$	Not rejected

Discussion of Findings

The findings establish Top Management Team (TMT) quality as the strongest significant predictor of Strategic Management Accounting Practices (SMAPs) sophistication ($\beta = 0.462$, $p < 0.001$), followed by environmental uncertainty ($\beta = 0.217$, $p = 0.002$). The positive effect of TMT quality supports Upper Echelons Theory, which posits that organisational choices reflect the capabilities, experience, and strategic orientations of senior managers. This suggests that competent and strategically oriented management teams are better positioned to integrate accounting information into competitor analysis, pricing, cost management, customer

profitability, and strategic performance evaluation. The finding is consistent with research linking managerial characteristics to advanced management accounting practices (Cadez & Guilding, 2008; Pavlatos & Kostakis, 2018). The significant effect of environmental uncertainty supports Contingency Theory, which emphasises the importance of aligning management accounting systems with organisational and environmental conditions. Market volatility, technological change, and regulatory uncertainty may increase firms' demand for timely, forward-looking information to support strategic adaptation. This finding reinforces the relevance of externally oriented accounting information in uncertain operating environments.

Conversely, competition intensity, firm size, and firm age were not statistically significant predictors at the 5% level. These results suggest that competitive pressure and organisational characteristics alone may not adequately explain SMAP sophistication; however, further investigation is required to establish the mechanisms underlying these relationships.

Overall, the findings support the complementary application of Upper Echelons and Contingency theories in explaining SMAP sophistication. They highlight the importance of strengthening managerial competence and professional accounting capabilities while recognising the informational demands created by environmental uncertainty. Nevertheless, the cross-sectional design supports conclusions about statistical associations rather than definitive causal effects.

5.0 Conclusion and Recommendation

The study concludes that TMT quality is a strategic antecedent of SMAP sophistication among indigenous manufacturing firms operating within the Agbara Industrial Estate, Ogun State, Nigeria. Consistent with Upper Echelons Theory, firms with stronger managerial human capital and governance capability are more likely to configure advanced SMAP bundles that support strategic positioning. Given persistent volatility and competitive pressure in Nigeria's manufacturing environment, strengthening TMT capability is a practical lever for deepening SMA and improving firm competitiveness.

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