

Structural Model Showing the Influence of Customer Orientation and Competitor Orientation on Sustainable Competitiveness with the Moderating Role of Strategic Flexibility

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Abstract:

This study investigates the influence of Customer Orientation (CU) and Competitor Orientation (CO) on Sustainable Competitiveness (SC) among special group SMEs engaged in public procurement, while examining the moderating role of Strategic Flexibility (SF). Data was collected from 393 SMEs registered with the Public Procurement Regulatory Authority (PPRA) in Tanzania, using structured questionnaires. Analysis was done through Partial Least Squares Structural Equation Modeling (PLS-SEM). Results indicate that both customer orientation and competitor orientation have significant positive effects on sustainable competitiveness. Strategic flexibility negatively moderates the relationship between competitor orientation and sustainable competitiveness, while its moderating effect on the customer orientation path was not significant. The model explains 55% of the variance in sustainable competitiveness, highlighting the important role of market orientation strategies in enhancing long-term competitiveness in public procurement contexts. The findings provide valuable insights for policymakers and SME leaders aiming to strengthen the performance of special group enterprises in dynamic procurement environments.

Keywords: Customer Orientation, Competitor Orientation, Strategic Flexibility and Sustainable Competitiveness.

I. INTRODUCTION

Sustainable competitiveness (SC) has become a central focus in both academic and policy discussions, driven by the need to align economic performance with environmental and social goals. Rooted in frameworks such as the 2030 Agenda for Sustainable Development, SC emphasizes strategies that foster long-term resilience, inclusive participation, and economic stability (Agbedahin, 2019). One specific focus of this global agenda is the integration of Special Group SMEs enterprises owned by youth, women, elders, and persons with disabilities into public procurement systems, particularly in developing economies.

These efforts are seen as essential in reducing inequalities and promoting inclusive economic development (Nkunda, Marijani, and Jarbandhan, 2024).

In Tanzania, the Public Procurement Regulatory Authority (PPRA) has institutionalized this inclusion by defining and registering special group SMEs for preferential access to government procurement opportunities (PPRA, 2023). While these policies present a strong developmental narrative, actual implementation remains constrained by multiple challenges. Studies by Karani and Moronge (2017) and Adefare et al. (2024) highlight both opportunities and persistent barriers, including limited capabilities, market access, and institutional inefficiencies. As such, the link between participation in public procurement and achieving sustainable competitiveness remains unstable due to a lack of research.

Balancing sustainability and competitiveness poses a challenge for these enterprises. Despite policy support, many firms still prioritize immediate competitiveness over sustainable practices (Bentivoglio et al., 2021). Yet, in dynamic and competitive environments, sustainable practices are increasingly viewed as integral to long-term competitive advantage. This is where strategic flexibility (SF) plays a vital role. SF enables firms to adapt to rapid changes, reconfigure resources, and respond to uncertainty, features critical for SMEs operating in procurement-driven markets (Morgan et al., 2019; Brozovic, 2023; Bashir, 2023).

In this context, market orientation (MO), which focuses on understanding and responding to customer and competitor needs, has been widely recognized as a key strategic approach for firm success (Jaworski & Kohli, 1993; Narver & Slater, 1990). Market-oriented firms are better positioned to anticipate market changes, develop innovative solutions, and achieve both short-term profitability and long-term resilience. Numerous studies affirm MO's impact on business outcomes such as innovation, learning, profitability, and performance (Rhee et al., 2010; Kumar et al., 2011; Wahyuni & Astawa, 2020; Crick, 2024). However, there is limited understanding of how MO interacts with internal capabilities like strategic flexibility to enhance sustainable competitiveness, particularly within the public procurement arena, while involving special group SMEs. Therefore, this study applies Market Orientation Theory and the Dynamic Capability Theory (DCT) to examine how customer orientation and competitor orientation impact sustainable competitiveness, and how strategic flexibility moderates these relationships.

II. LITERATURE REVIEW

Theoretical literature review

This study integrates Market Orientation Theory (Narver & Slater, 1990) and Dynamic Capability Theory (Teece et al., 1997) to explain how SMEs achieve sustainable competitiveness in dynamic settings like public procurement. Market Orientation Theory stresses understanding and responding to customer and competitor needs to enhance agility, innovation, and internal collaboration, which are crucial in regulated environments. However, it lacks focus on long-term adaptability. Dynamic Capability Theory addresses this by emphasizing a firm's ability to sense changes, seize opportunities, and reconfigure resources amid volatility (Teece, 2009). This is vital for SMEs facing shifting policies and competitive pressures, highlighting strategic flexibility as key for sustained competitiveness (Awais et al., 2023). By combining these theories, the study examines how special group SMEs detect market signals and translate them into adaptive actions, promoting resilience and success in the evolving public procurement landscape (Morgan et al., 2020).

Empirical Literature Review

Customer Orientation and Sustainable Competitiveness

Customer orientation is a pivotal organizational strategy that prioritizes the understanding and fulfillment of both current and prospective customers' needs and preferences (Narver & Slater, 1990). Within the context of public procurement, this approach entails the systematic collection and utilization of customer related information to deliver superior value-added offerings (Karttunen et al. 2024). Organizations exhibiting strong customer orientation ensure that customer intelligence is disseminated across all organizational levels, fostering continuous improvement in customer service and satisfaction (Padmanaaban et al., 2024.).

Importantly, customer orientation extends beyond addressing present demands; it also involves anticipating future customer requirements, thereby enabling enhanced value creation and delivery that contribute to sustainable competitiveness (Hilman & Kaliappen, 2013). Empirical evidence indicates a positive influence of customer orientation on firms' innovation capabilities and overall performance, particularly when organizations actively engage with their target client segments (Woo et al., 2021). This customer-centric focus is widely regarded as a critical driver of competitive advantage and superior business outcomes (Tseng et al., 2018).

The strategic significance of customer orientation for organizations operating within public procurement frameworks is demonstrated by the consensus that a significant and positive relationship exists between firm performance and customer orientation, despite the fact that some studies report mixed results (Frambach et al., 2016; Wang, Ling et al., 2021). Based on this evidence, the following hypothesis was proposed:

H1: Customer orientation positively influences the sustainable competitiveness.

Competitor Orientation and Sustainable Competitiveness

Competitor orientation is one of the key dimensions of market orientation that entails the systematic identification, analysis, and response to the strengths, weaknesses, and strategies of current and potential competitors to attain and sustain a competitive advantage (Narver & Slater, 1990). In the context of public procurement, it is particularly important to enhance strategic responsiveness and resilience in an environment that is characterized by regulatory complexity, dynamic stakeholder demands, and increasing competition, as well as competitor orientation (Njoroge & Kinyua, 2025).

Firms with a strong competitor orientation leverage competitive intelligence to inform strategic decision making, drive product and service innovation, and align resource allocation with market dynamics. This proactive posture not only facilitates differentiation but also enables organizations to anticipate changes in the competitive landscape, thereby promoting sustainable competitiveness. Empirical studies support this assertion, highlighting the multifaceted benefits of competitor orientation in public sector contexts. For example, Kaliappen and Hilman (2013) demonstrate that competitor-oriented firms are more effective in channeling strategic resources toward high-impact areas, which directly contributes to improved competitive performance. Lopez-Torres (2023) reveals that increased competitor awareness among public procurement entities enhances their agility in responding to market disruptions and adapting to shifting stakeholder expectations. Similarly, OECD (2023) provides evidence linking competitor orientation to improved purchasing performance and innovation outcomes in public sector organizations. Isoghom and Worgu (2025) further argue that environmental responsiveness, including awareness of market competition, is a crucial determinant of supply chain competitiveness in public procurement. Collectively, these findings suggest that competitor orientation is not merely a reactive mechanism but a strategic

capability that drives innovation, supports informed decision making, and strengthens sustainable competitiveness in public procurement.

H2: Competitor orientation positively affects the sustainable competitiveness.

Moderating role of Strategic Flexibility on customer and competitor advantage

Customer and competitor orientation has been widely acknowledged as a strategic driver of sustainable competitiveness across organizational contexts. However, empirical findings have shown inconsistent and context-dependent relationships between this key dimension of market orientation and firm performance outcomes (Brozovic, 2023). These inconsistencies suggest the presence of contingent factors that may influence or alter the strength and direction of this relationship. Among the most cited of such contingencies is strategic flexibility, which plays a crucial moderating role in dynamic and uncertain environments such as public procurement.

Strategic flexibility is defined as a firm's ability to effectively adapt, reconfigure, and redeploy its resources in response to environmental shifts, market volatility, and competitive pressures (Brozovic, 2023). In public procurement, where regulatory rigidity, budgetary constraints, and fluctuating stakeholder demands are present, adaptability is crucial for organizations, particularly SMEs, to maintain a sustainable competitive edge. Organizations with high levels of strategic flexibility are better equipped to anticipate market trends, seize emerging opportunities, and mitigate risks associated with procurement disruptions or evolving customer requirements.

Morgan et al. (2019) argue that in the face of intensifying global competition, the ability to quickly reallocate resources, modify operations, and pursue alternative market approaches has become indispensable for maintaining competitiveness. Sen et al. (2023) emphasize that SMEs, due to their structural simplicity and agility, are well-positioned to leverage strategic flexibility as a competitive lever, particularly in navigating public procurement frameworks that often demand quick adaptation to policy changes and stakeholder expectations. Moreover, Guo and Cao (2014) identify strategic flexibility as a facilitator of resilience, enabling firms to respond effectively to crises and market uncertainty.

Empirical evidence reinforces the moderating role of strategic flexibility. Sen et al. (2023) found that firms operating in public procurement with strong market orientation achieved better competitive outcomes when their strategies were supported by high adaptability in resource utilization and relationship management. Lopez-Torres (2023) further reported that organizational sustainability and competitiveness are positively influenced by the ability to realign strategies and structures in response to environmental turbulence. Yet, Aabo et al. (2024) caution that although flexibility often correlates with performance improvements, such benefits are not guaranteed across all settings, and contextual fit remains a critical factor.

Additional insights from Lopez-Torres et al. (2022) indicate that sustainability-driven competitiveness is significantly enhanced by organizational structures and capabilities, such as flexibility that enables firms to implement and sustain strategic change. Jewel and Ali (2023), in their study of sustainable public procurement in Bangladesh, underscore the gap between policy and practice, advocating for strategic tools like flexibility to bridge this divide and embed sustainability more effectively.

Moreover, research conducted by Guerra and Camargo (2024) and Gligor et al. (2021) substantiates the assertion that strategic capabilities, including learning orientation and supplier adaptability, function as significant moderators or mediators in the correlation between strategic orientation and performance. In a related finding, Royo-Vela et al. (2022) demonstrate that competitor orientation enhances performance only when firms can align their strategic posture with a capacity for timely response and innovation,

reinforcing the role of adaptive mechanisms.

Taken together, the literature positions strategic flexibility as a crucial capability that amplifies the effects of customer and competitor orientation on sustainable competitiveness. It enables special group SMEs in public procurement to navigate regulatory complexity, improve responsiveness, and sustain long-term strategic performance. Accordingly, the following hypotheses are proposed:

H3: Strategic flexibility moderates the relationship between customer orientation and the sustainable competitiveness.

H4: Strategic flexibility moderates the relationship between competitor orientation and the sustainable competitiveness.

Conceptual framework

This study's conceptual framework depicts the relationships between CU and CO with SC, highlighting SF as a moderating variable that influences the strength and direction of these relationships. As shown in Figure 1

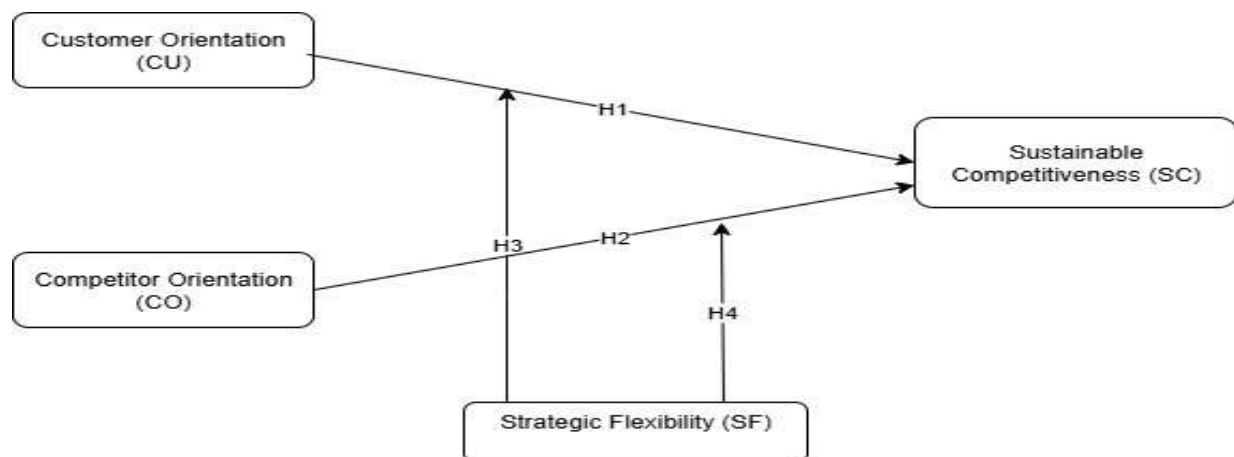


Fig. 1: A Conceptual Framework

III. METHODOLOGY

Research Philosophy, Design, and Approach

This study adopted a positivist research philosophy to investigate the influence of customer and competitor orientation on sustainable competitiveness, moderated by strategic flexibility. Consistent with this stance, a deductive research approach was employed, beginning with theory-driven hypotheses and followed by empirical testing through quantitative methods (Rahi, 2017). The study utilized an explanatory research design to examine causal relationships among variables and applied a survey strategy using structured, closed-ended questionnaires. Data were collected cross-sectionally and analyzed using Structural Equation Modeling (SEM) to assess both direct and moderated effects, ensuring the findings were statistically robust, generalizable, and aligned with the study's theoretical framework.

Sampling techniques and sample size

This study employed a census sampling technique, targeting all 503 Special Group SMEs officially registered by the Public Procurement Regulatory Authority (PPRA) as of January 2025. These SMEs owned by women, youth, and persons with disabilities were considered as eligible participants in Tanzania's public procurement system. The use of a census was justified by the population's manageable size, accessibility, and direct relevance to the research objectives. It ensured comprehensive data coverage,

eliminated sampling error, and enhanced the generalizability and validity of the findings. The unit of analysis consisted of firm-level representatives, such as managers or group leaders, with data collected through a structured, cross-sectional survey.

Data collection, analysis, and presentation

This study employed a self-administered, structured questionnaire as the primary instrument for data collection, consistent with the quantitative cross-sectional survey design. The questionnaire consisted exclusively of closed-ended items measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), a widely used approach for capturing perceptions in behavioral and management research (Bryman, 2016). The instrument was designed to reflect the study's conceptual framework and was distributed to all 503 registered Special Group SMEs through both physical and digital means to ensure comprehensive population coverage. Once collected, the quantitative data were coded and processed using Statistical Package for Social Sciences (SPSS) Version 23 for descriptive statistics, and SmartPLS 4 for inferential analysis using Partial Least Squares Structural Equation Modelling (PLS-SEM). This second-generation multivariate method was chosen due to its robustness in handling small sample sizes, its flexibility with non-normal data, and its capacity to model complex relationships among latent constructs (Hair et al., 2010). The analysis followed a two-stage approach as recommended by Hair et al. (2022), beginning with the assessment of the measurement model (outer model) for reliability and validity, followed by evaluation of the structural model (inner model) through bootstrapping with 5,000 resamples to estimate path coefficients and significance levels.

Evaluation of models

The evaluation of the PLS-SEM model followed the two-step approach recommended by Hair et al. (2022), beginning with the assessment of the measurement model to ensure reliability and validity before proceeding to the structural model. For the reflective measurement model, indicator reliability was assessed through standardized loadings, which were expected to be ≥ 0.70 , while convergent validity was established through Average Variance Extracted ($AVE \geq 0.50$). The significance of outer loadings was evaluated using t-values and p-values obtained via bootstrapping. Once the measurement model met these thresholds, the structural model was assessed to test the hypothesized relationships between constructs. This involved evaluating the coefficient of determination (R^2), which indicates the variance explained in the endogenous constructs, and predictive relevance (Q^2), using blindfolding procedures. According to Hair et al. (2017, 2019), R^2 values of 0.75, 0.50, and 0.25 represent substantial, moderate, and weak explanatory power, respectively, while Q^2 values above zero indicate predictive relevance. Additionally, the significance of path coefficients, effect size (f^2), and multicollinearity using the Variance Inflation Factor (VIF) were examined. Collectively, these metrics confirmed the adequacy and robustness of both the measurement and structural models for empirical validation of the study's theoretical framework.

IV. RESULTS AND DISCUSSION

The response rate achieved in this study was 78.1%, which is considered excellent by established research standards. According to Mugenda (2003), a response rate of 50% is deemed adequate for analysis, 60% is regarded as good, and a rate of 70% or higher is classified as excellent. Hence, the 78.1% response rate in this study satisfies the basic criteria for reliable and precise analysis. As presented in Table 1, a high level of participation not only enhances the credibility of the findings but also ensures that the collected data is sufficiently representative of the target population, thereby strengthening the generalizability and robustness of the study outcomes.

Table 1: Respondent rate

Type of Respondent	Expected	Actual	Percent
Representatives of Registered Special Groups	503	393	78.13

Source: Data analysis (2025)

Reflective Measurement Models

The initial phase in evaluating the reflective measurement model involves assessing indicator reliability through standardized factor loadings. Hair et al. (2019) recommend a threshold of 0.70, which suggests that the latent construct accounts for at least 50% of the indicator's variance, thereby confirming acceptable item reliability. As demonstrated in Figure 1, the majority of the indicators met or exceeded this threshold, affirming their reliability. One exception was the indicator SFC, which recorded a loading of 0.494. Although this value falls below the recommended cutoff, the indicator was retained based on theoretical justification and the overall adequacy of the construct's composite reliability and average variance extracted (AVE). Its removal would not substantively enhance model validity or reliability, thus supporting its inclusion.

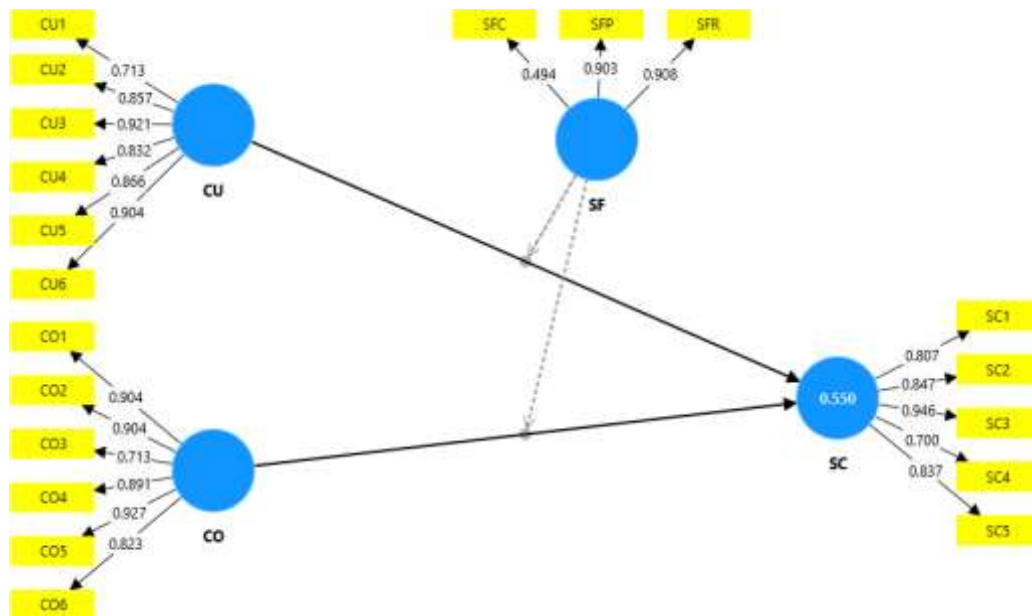


Figure 1: Measurement (Outer) model

Internal Consistency Reliability

The internal consistency reliability, demonstrated strong and valid construct measurement with CR values between 0.827 and 0.946 and AVE above 0.50 for all constructs, while Strategic Flexibility's slightly lower Cronbach's Alpha of 0.693 remained acceptable within social science standards.

Table 2: Internal consistency reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
CO	0.930	0.932	0.946	0.746

CU	0.923	0.941	0.940	0.725
SC	0.886	0.910	0.917	0.691
SF	0.693	0.817	0.827	0.628

Source: Data analysis (2025)

Discriminant Validity Analysis

Discriminant validity was assessed using the Heterotrait-Monotrait ratio (HTMT), as recommended by Franke and Sarstedt (2019). As shown in Table 3, all HTMT values fall below the conservative threshold of 0.85, suggesting that the constructs are empirically distinct. Specifically, HTMT values ranged from 0.038 to 0.762. The relatively high HTMT value between SF and SC was (0.762), which is still within acceptable bounds, indicating adequate discriminant validity. These results support the conclusion that the latent constructs measured in this study are conceptually and statistically distinct.

Table 3: HTMT ratio

	CO	CU	SC	SF	SF x CU	SF x CO
CO						
CU	0.176					
SC	0.377	0.396				
SF	0.124	0.228	0.762			
SF x CU	0.076	0.038	0.204	0.237		
SF x CO	0.073	0.078	0.235	0.167	0.125	

Source: Data analysis (2025)

Assessment of the structural model

After the confirmation of the measurement model's reliability and validity, the next step in Partial Least Squares Structural Equation Modeling (PLS-SEM) involves assessing the structural model. This assessment aims to evaluate the hypothesized relationships between constructs and determine the extent to which the theoretical model is supported by the empirical data. As outlined by Hair et al. (2019), the structural model evaluation is guided by several key criteria: the coefficient of determination (R^2), which quantifies the variance in endogenous constructs explained by exogenous variables; the predictive relevance (Q^2) obtained through blindfolding procedures; and the statistical significance and relevance of the path coefficients, which reflect the strength and direction of hypothesized relationships.

Collinearity Statistics Variance Inflation Factor (VIF) Inner Model Statistics

To assess potential multicollinearity within the inner structural model, including both main effects and interaction terms, the Variance Inflation Factor (VIF) was examined. VIF values indicate the extent to which the variance of an estimated regression coefficient is increased due to collinearity among predictor constructs. As recommended by Hair et al. (2019), VIF values below 5 suggest that multicollinearity is not a critical issue, whereas values above this threshold may signal potential distortion in the estimation of path coefficients. The collinearity diagnostics for the structural model are presented in Table 4.

Table 4: Model statistics

Construct	VIF
CO	1.051
CU	1.076
SC	
SF	1.108
SF x CO	1.065
SF x CU	1.048

Source: Data analysis (2025)

VIF values ranged from 1.048 to 1.108, well below the threshold of 5, indicating no multicollinearity concerns and ensuring stable, reliable path coefficient estimates.

Coefficient of determination (R^2)

The coefficient of determination (R^2) shown in Figure 2 indicates the structural model's explanatory power by representing the variance in each endogenous construct explained by its exogenous variables, with higher R^2 values reflecting stronger model performance (Hair et al., 2019; Henseler et al., 2018; Cohen, 1988).

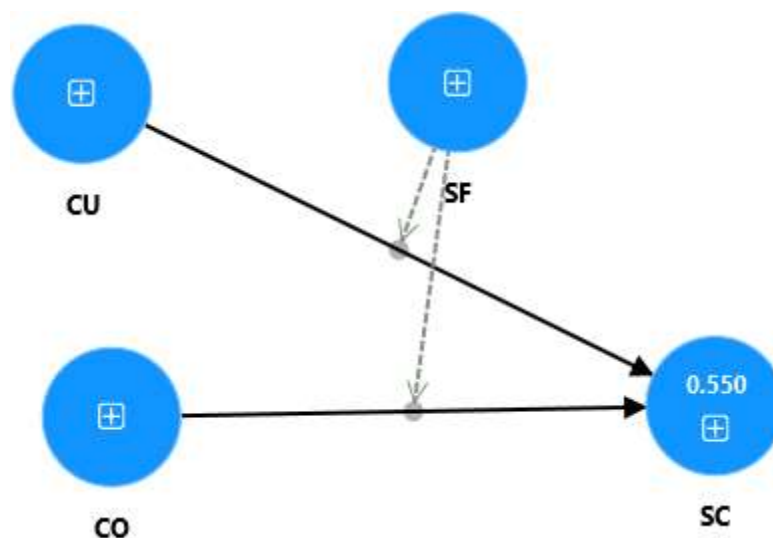


Figure 2: Coefficient of determination (R^2)

Results from the PLS-SEM analysis revealed that the model accounted for 55% of the variance in Sustainable Competitiveness, indicating a moderate to substantial level of explanatory power based on Hair et al.'s classification.

Assessment of the Effect Size of the Coefficient of Determination (f^2)

Following the assessment of R^2 , the effect size (f^2) was examined to determine the relative impact of each exogenous variable on the endogenous construct by assessing the change in R^2 when the variable is omitted, as shown in Table 5. According to Cohen's (1988) guidelines, f^2 values of 0.02, 0.15, and 0.35 represent small, medium, and large effects, respectively, while values below 0.02 indicate negligible impact.

Table 5: Effect Sizes of the Coefficient of Determination

Construct	Effect size f ²	Decision
CO	0.146	Medium
CU	0.093	Small
SC		
SF x CU	0.573	High
SF x CO	0.040	Small

Source: Data analysis (2025)

The findings indicate that SF has the strongest impact on Sustainable Competitiveness, with a large effect size ($f^2 = 0.573$), highlighting its critical role in enabling special group SMEs to adapt and sustain competitive advantage in public procurement.

Assessment of Predictive Relevance (Q²)

The model has appropriate predictive power for sustainable competitiveness, as evidenced by predictive relevance values above zero obtained using Stone-Geisser's Q² statistic through the blindfolding process (Table 6).

Table 6: PLSpredict MV - Summary Overview

	Q ² predic t	PLS- SEM_RMS E	PLS- SEM_MA E	LM_RMS E	LM_MA E	IA_RMS E	IA_MA E
SC ₁	0.324	0.870	0.613	0.889	0.606	1.059	0.841
SC ₂	0.386	0.778	0.546	0.796	0.542	0.993	0.804
SC ₃	0.565	0.571	0.408	0.575	0.414	0.865	0.705
SC ₄	0.199	1.117	0.791	1.135	0.787	1.249	0.965
SC ₅	0.337	0.815	0.595	0.836	0.585	1.001	0.824

Source: Data analysis (2025)

Q² was assessed using the PLSpredict/CVPAT approach, which showed positive Q²predict values for all Sustainable Competitiveness indicators (SC₁–SC₅), ranging from 0.199 to 0.565, while RMSE and MAE comparisons showed that the PLS-SEM model performs similarly to or better than the linear model and exceeds the idealistic benchmark, thereby demonstrating robust predictive accuracy and practical utility (Hair et al., 2019).

Path Coefficient and Hypothesis testing

The final structural model evaluation involved analyzing path coefficients to test hypothesized relations

hips, using a non-parametric bootstrapping procedure with 5,000 resamples to estimate significance metrics, where coefficients closer to ± 1 indicate stronger effects and relationships with T-values above 1.645 or 1.96 and P-values below 0.05 were deemed statistically significant, thus validating the theoretical model as shown in Figure 3.

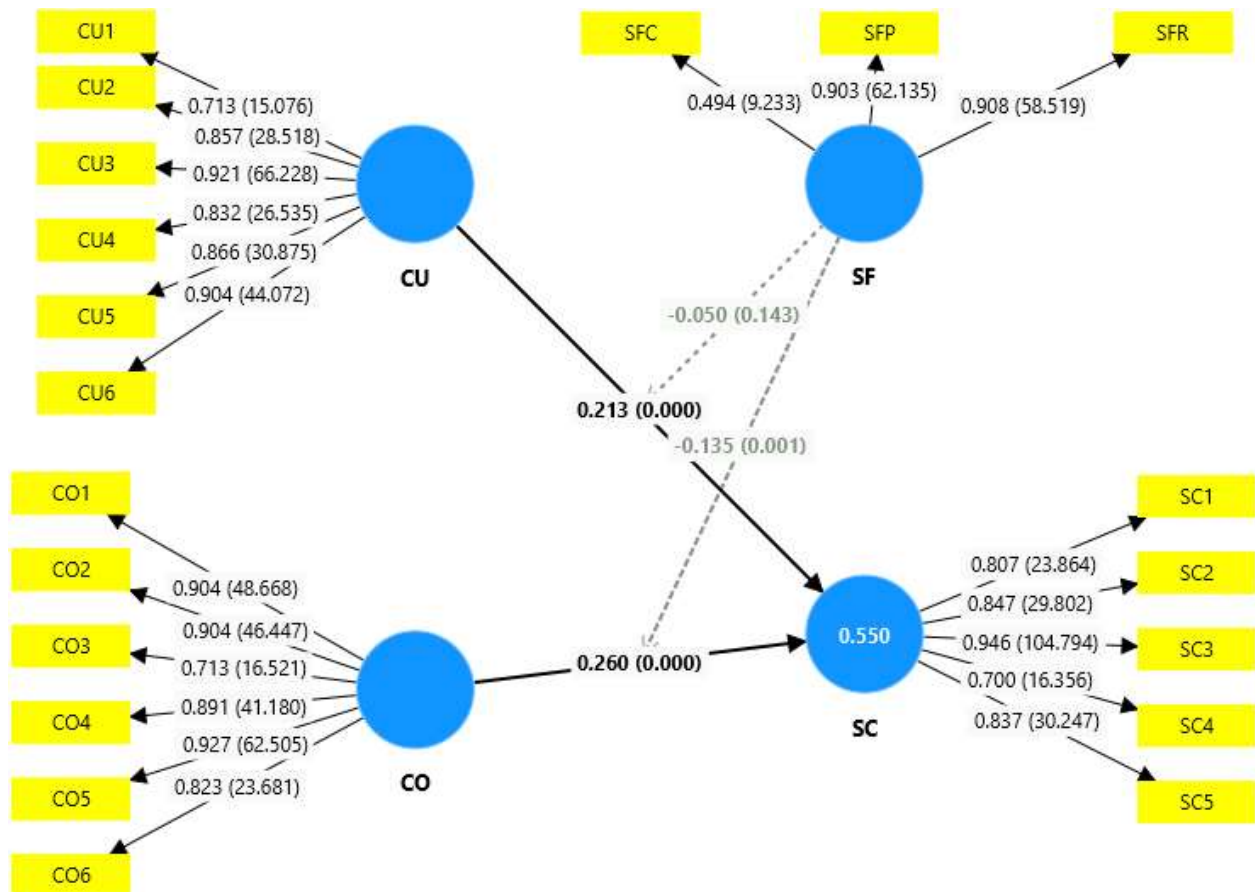


Figure 3: Bootstrapping; T Statistics (|O/STDEV|)

After confirming that the measurement model met the required psychometric standards, the analysis advanced to evaluating the structural model, where the significance of direct effect hypotheses (H1 to H4) was assessed through the structural path model, with results presented in Figure 3 and Table 7.

Table 7: Assessment of Structural Model Direct Relationships and Moderating Variables

Hypothesis	Path relationship	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
H1	CU → SC	0.216	0.039	5.438	0.000
H2	CO → SC	0.262	0.037	6.999	0.000
H3	SF x CU → SC	-0.051	0.034	1.464	0.143
H4	SF x CO → SC	-0.139	0.040	3.369	0.001

Source: Data analysis (2025)

Key

H1: Customer orientation positively influences the sustainable competitiveness of special group SMEs in public procurement.

H2: Competitor orientation positively affects the sustainable competitiveness of special group SMEs in public procurement.

H3: Strategic flexibility moderates the relationship between customer orientation and sustainable competitiveness of special group SMEs in public procurement.

H4: Strategic flexibility moderates the relationship between competitor orientation and sustainable competitiveness of special group SMEs in public procurement.

The study on the sustainable competitiveness of special group SMEs in public procurement employed a structural model to test four hypotheses, Bringing out underlying complexities dynamics across market orientation dimensions. Findings confirmed a significant positive effect of customer orientation on sustainable competitiveness ($M = 0.216$, $T=5.438$, $p = 0.000$), supporting Hypothesis 1, and similarly validated Hypothesis 2 with a strong link between competitor orientation and competitiveness ($M = 0.262$, $T= 6.999$, $p = 0.000$). Regarding moderation effects, Hypothesis 3 was not supported due to the non-significant interaction between strategic flexibility and customer orientation ($M = -0.051$, $T=1.464$, $p = 0.143$), suggesting that strategic flexibility does not alter this relationship. In contrast, Hypothesis 4 was accepted, with strategic flexibility significantly moderating the link between competitor orientation and sustainable competitiveness ($M = -0.166$, $T= 3.369$, $p = 0.001$), indicating its critical role in enhancing strategic responses to competitive pressures.

Findings confirmed a significant positive effect of customer orientation on sustainable competitiveness ($T=5.438$, $p=0.000$), supporting H1, and similarly validated H2 with a strong link between competitor orientation and competitiveness ($T= 6.999$, $p = 0.000$). Regarding moderation effects, H3 was not supported due to the non-significant interaction between strategic flexibility and customer orientation ($T=1.464$, $p = 0.143$), suggesting that strategic flexibility does not alter this relationship. In contrast, H4 was accepted, with strategic flexibility significantly moderating the link between competitor orientation and sustainable competitiveness ($T= 3.369$, $p = 0.001$), indicating its critical role in enhancing strategic responses to competitive pressures.

The empirical results of this study indicate that sustainable competitiveness is significantly and positively influenced by customer orientation in the special group of small and medium-sized enterprises (SMEs) that participate in public procurement. This finding provides strong support for the first hypothesis and validates the core idea of Market Orientation Theory, which holds that a company's capacity to predict, comprehend, and successfully address consumer wants is a key component of sustainable competitive advantage.

Positioned as a dynamic organizational capability, customer orientation helps SMEs to improve service delivery, maintain strategic alignment with market expectations, and demonstrate flexibility in changing procurement environments. In the complex regulatory structures and performance requirements of public sector procurement, where responsiveness to end-user needs can be a leading competitive factor, these qualities are particularly important for SMEs.

The findings are consistent with an earlier empirical study by Tseng et al. (2018), which highlights how customer orientation improves overall performance and environmental sustainability by balancing organizational actions with stakeholder expectations. Similarly, Woo et al. (2021) demonstrate that customer-focused strategies significantly improve innovation capacity, which in turn strengthens firm

performance and resilience. Padmanaaban et al. (2024) extend this perspective by validating the innovation as a mediating role in the customer orientation competitiveness nexus, particularly within the context of emerging markets characterized by volatility and constrained institutional support. Furthermore, Mahmood and Khan (2023) emphasize the benefits of combining consumer orientation with corporate social responsibility. They point out that this combination strengthens stakeholder loyalty and trust, both of which are necessary for establishing long-term competitive balance.

The study found out that the second hypothesis substantiates and reinforces the proposition that strategic attentiveness to competitive dynamics is essential for achieving and sustaining a competitive edge, particularly in highly regulated and performance-sensitive procurement environments. From a conceptual standpoint, competitor orientation serves as a strategic capacity that empowers businesses to deliberately observe, analyze, and react to market trends and competitor actions. Such an approach improves market foresight, helps SMEs make better strategic decisions, and maximizes success in competitive bidding procedures as they navigate the complexities of public procurement. These capabilities collectively contribute to long-term organizational resilience and competitiveness.

The results align with prevailing trends in current research. For instance, according to Njoroge and Kinyua (2025), competitor awareness is a crucial facilitator of organizational growth and profitability, underscoring the importance of strategic orientation in generating competitive advantage. At the same time, Lopez-Torres (2023) shows that SMEs focused on sustainability outperform their less responsive competitors when they incorporate competitive knowledge into their operational frameworks. Furthermore, Isoghom and Worgu (2025) contend that improving supply chain competitiveness in the context of public procurement requires environmental responsiveness and market knowledge, both of which include aspects of competitor orientation.

The findings showed a complex pattern of moderation: SF significantly influenced the CO–SC connection, but its interaction with CU was not statistically significant, suggesting that the two strategic orientations had distinct effects. This implies that although customer orientation remains a valuable internal capability, its competitive impact is not necessarily enhanced by strategic flexibility in highly regulated procurement contexts. This finding echoes prior studies (e.g., Pekovic & Rolland, 2016), which argue that the effectiveness of customer orientation may depend on contextual enablers such as technological infrastructure, market fluidity, and institutional autonomy factors often limited in SMEs operating under public procurement constraints.

On the other hand, the moderation effect of SF on the CO-SC relationship was statistically significant, supporting Hypothesis 4. This suggests that SMEs possessing higher levels of strategic flexibility are better positioned to transform competitor insights into adaptive strategies, thereby achieving sustainable competitive advantage. This outcome aligns with the work of Khan et al. (2022) and Yang et al. (2022), who position SF as a dynamic capability that enhances the responsiveness and resource reconfiguration needed to capitalize on market intelligence. Moreover, in public procurement settings, where competitive benchmarking and agile response are critical, SF enables SMEs to recalibrate bids and strategies more effectively (Tammi et al., 2014). These results reinforce broader theoretical assertions (e.g., Brozovic, 2023; Morgan et al., 2019) that strategic flexibility is instrumental in enabling firms to navigate environmental uncertainty, particularly when paired with competitive awareness.

IV. CONCLUSION

This study confirms that both customer and competitor orientation are essential for driving sustainable

competitiveness among special group SMEs in public procurement. Customer orientation enhances service delivery and market alignment, while competitor orientation supports adaptability and strategic decision-making. Strategic flexibility plays a key moderating role, significantly strengthening the impact of competitor orientation but not customer orientation likely due to institutional and technological constraints. SMEs should prioritize integrating competitor orientation with strategic flexibility, while policymakers are encouraged to reduce structural barriers and enhance technological support to maximize the benefits of customer orientation. Future studies should examine how senior management may help SMEs with limited resources build dynamic skills. This includes how leadership development can improve agility, innovation, and change management. Longitudinal and comparative research across industries or geographical areas may also provide information about environmental influences and the long-term effects of these capacities on the sustainability and resilience of SMEs.

V. REFERENCES

1. Aabo, T., Pantzalis, C., Park, J. C., Trigeorgis, L., and Wulff, J. N. (2024). CEO personality traits, strategic flexibility, and firm dynamics. *Journal of Corporate Finance*, 84, 102524.
2. Adefare, T., Adeola, O., Mogaji, E., Nguyen, N. P., and Mogaji, S. A. (2024). Empowering women agriculture entrepreneurs: banks' role in achieving sustainable development goals. *International Journal of Bank Marketing*.
3. Agbedahin, A. V. (2019). Sustainable development, Education for Sustainable Development, and the 2030 Agenda for Sustainable Development: Emergence, efficacy, eminence, and future. *Sustainable development*, 27(4), 669-680.
4. Awais, M., Afzal, A., Firdousi, S., and Hasnaoui, A. (2023). Is fintech the new path to sustainable resource utilisation and economic development?. *Resources Policy*, 81, 103309.
5. Bashir, M. (2023). The influence of strategic flexibility on SME performance: is business model innovation the missing link?. *International Journal of Innovation Science*, 15(5), 799-816.
6. Brozović, D., Jansson, C., and Boers, B. (2023). Strategic flexibility and growth of small and medium-sized enterprises: a study of enablers and barriers. *Management Decision*.
7. Cohen, J. (1988). Set correlation and contingency tables. *Applied psychological measurement*, 12(4), 425-434.
8. Crick, J. M., Friske, W., and Morgan, T. A. (2024). The relationship between coopetition strategies and company performance under different levels of competitive intensity, market dynamism, and technological turbulence. *Industrial Marketing Management*, 118, 56-77.
9. Frambach, R. T., Fiss, P. C., and Ingenbleek, P. T. (2016). How important is customer orientation for firm performance? A fuzzy set analysis of orientations, strategies, and environments. *Journal of Business Research*, 69(4), 1428-1436.
10. Geisser, S. (1973). The predictive sample reuse meth. University of Minnesota.
11. Gligor, D. M., Gölgeci, I., Newman, C., and Bozkurt, S. (2021). Performance implications of the buyer-supplier market orientation fit. *Industrial Marketing Management*, 93, 161-173.
12. Guerra, R. M. D. A., and Camargo, M. E. (2024). Mediation of learning orientation on market orientation and business performance: evidence from Brazilian Small and Medium Enterprises (SMEs). *Benchmarking: An International Journal*, 31(2), 590-610.
13. Hair Jr, J., Page, M., and Brunsveld, N. (2019). *Essentials of business research methods*. Routledge.
14. Hair Jr, J., Page, M., and Brunsveld, N. (2022). *Essentials of business research methods*. Routledge.

15. Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. (2010). *Multivariate data analysis*. Uppersaddle River.
16. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43, 115-135.
17. Isoghom, H. W., & Worgu, P. O. (2025). Sustainable public procurement and supply chain competitiveness of Federal Universities in Nigeria.
18. Jaworski, B. J., and Kohli, A. K. (1993). Market orientation: antecedents and consequences. *Journal of marketing*, 57(3), 53-70.
19. Kaliappen, N., and Abdullah, H. H. (2013). Enhancing organizational performance through strategic alignment of cost leadership strategy and competitor orientation. *Middle-East Journal of Scientific Research*, 18(10), 1411-1416.
20. Karani, K., and Moronge, M. (2017). Determinants of Youth Access to Procurement Opportunities in Public Sector in Kenya: A Case of National Treasury. *Strategic Journal of Business and Change Management*, 4(2), 1089 - 1107.
21. Karttunen, E., Jääskeläinen, A., Malacina, I., Lintukangas, K., Kähkönen, A. K., & Vos, F. G. (2024). Dynamic capabilities view on value creation in public procurement. *Journal of Public Procurement*, 24(1), 114-141.
22. Khan, R. U., Salamzadeh, Y., Abbasi, M. A., Amin, A., & Sahar, N. E. (2022). Strategic orientation and sustainable competitive performance of family firms: Evidence of an emerging economy. *Journal of Small Business Strategy*, 32(2), 67-82.
23. Lopez-Torres, G. C. (2023). The impact of SMEs' sustainability on competitiveness. *Measuring Business Excellence*, 27(1), 107-120.
24. Mahmood, & Khan, (2023). CSR and customer orientation: A sustainable pathway towards competitive advantage? A customer's perspective. *Social Responsibility Journal*, 19(4), 741-755.
25. Morgan, T., Anokhin, S. A., and Wincent, J. (2019). Influence of market orientation on performance: the moderating roles of customer participation breadth and depth in new product development. *Industry and Innovation*, 26(9), 1103-1120.
26. Mugenda, A., and Mugenda, O. (2003). *Research methods: Quantitative and qualitative approaches*. Nairobi: African Center for Technology Studies
27. Narver, J. C., and Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of marketing*, 54(4), 20-35.
28. Njoroge, N. W., & Kinyua, G. M. (2025). Strategic Orientation as an Antecedent of Competitive Advantage: Evidence from Review of Literature. *Int. J. Educ. Res.*, 13(3), 35-68.
29. Nkunda, R. M., Marijani, R., & Jarbandhan, D. B. (2024). Inclusive Public Procurement: Special Groups' Financial Support and the Supply of Services and Goods to Public Organisations in Tanzania. *Administratio Publica*, 32(2).
30. OECD. (2023). *Public procurement for public sector innovation: Facilitating innovators' access to innovation procurement* (OECD Working Papers on Public Governance No. 80). OECD Publishing.
31. Padmanaaban, P., Jha, S., Emmaniel, R., Subramanian, N., Raj, R., & Agrawal, R. K. (2024). Building Stronger Relationships: The Role of Consumer-Centric Marketing Strategies. *European Economic Letters*.
32. Pekovic, S., & Rolland, S. (2016). Customer orientation and firm's business performance: A

- moderated mediation model of environmental customer innovation and contextual factors. *European Journal of Marketing*, 50(12), 2162-2191.
33. Public Procurement Regulatory Authority (PPRA). (2023, October). Guidelines for participation of special groups in public procurement.
34. Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
35. Sen, S., Savitskie, K., Mahto, R. V., Kumar, S., and Khanin, D. (2023). Strategic flexibility in small firms. *Journal of Strategic Marketing*, 31(5), 1053-1070.
36. Stone, M. (1974). Cross-validation and multinomial prediction. *Biometrika*, 509-515.
37. Tammi, T., Saastamoinen, J., & Reijonen, H. (2014). Market orientation and SMEs' activity in public sector procurement participation. *Journal of Public Procurement*, 14(3), 304-327.
38. Tseng, L. M. (2018). How customer orientation leads to customer satisfaction: Mediating mechanisms of service workers' etiquette and creativity. *International Journal of Bank Marketing*, 37(1), 210-225.
39. Wahyuni, N. M., and Astawa, I. P. (2020). An integrative model of market orientation on innovation performance. *Journal of Management and Marketing Review*, 5(1), 51-63.
40. Wang, Y., Xue, X., & Guo, H. (2022). The sustainability of market orientation from a dynamic perspective: the mediation of dynamic capability and the moderation of error management climate. *Sustainability*, 14(7), 3763.
41. Wang, Z., Ling, K. C., and Li, H. (2021). The impact of knowledge sharing on the relationship between market orientation and service innovation. *International Journal of Knowledge Management*, 17(2), 130-154.
42. Woo, H., Kim, S. J., and Wang, H. (2021). Understanding the role of service innovation behavior on business customer performance and loyalty. *Industrial Marketing Management*, 93, 41-51.
43. Yang, M., Jaafar, N., Al Mamun, A., Salameh, A. A., & Nawi, N. C. (2022). Modelling the significance of strategic orientation for competitive advantage and economic sustainability: the use of hybrid SEM-neural network analysis. *Journal of Innovation and Entrepreneurship*, 11(1), 44.