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Evaluating the Role of Business Policy in Sustaining Competitive Advantage: A Case Study in Manufacturing Industry

Mahmuddin[1], Sumiati Tahir[2], Rezki Nurfadillah T[3], Pahrul[4]
Universitas Negeri Makassar[1,2,3,4]
mahmuddin@unm.ac.id[1], sumiati.tahir@unm.ac.id[2], rezki.nurfadillah@unm.ac.id[3], pahrul@unm.ac.id[4]

ABSTRACT
This study evaluates the role of business policy in sustaining competitive advantage within the manufacturing industry by examining three key strategic dimensions: Policy Design, Policy Implementation, and Innovation & Sustainability. Using a quantitative approach and Partial Least Squares Structural Equation Modeling (PLS-SEM), the study collected data from 120 manufacturing employees and assessed the measurement and structural models through reliability testing, validity assessments, and bootstrapping procedures. The results indicate that all constructs demonstrated strong reliability and validity, with indicator loadings exceeding recommended thresholds and HTMT values confirming discriminant validity. Structural model analysis reveals that Policy Design, Policy Implementation, and Innovation & Sustainability each have significant positive effects on Sustained Competitive Advantage, collectively explaining 67.3% of its variance. These findings highlight the importance of strategic alignment, effective execution, and continuous innovation in building long-term competitiveness. The study contributes to strategic management literature by providing empirical evidence on how business policy frameworks and innovation-driven practices jointly enhance competitiveness in the manufacturing sector. Practical implications suggest that firms should prioritize coherent policy development, strengthen implementation mechanisms, and integrate sustainability into innovation strategies to achieve durable competitive advantage.

Keywords:
Business Policy; Policy Design; Policy Implementation; Innovation; Sustainability; Competitive Advantage; Manufacturing Industry

INTRODUCTION

Business policy has long been recognized as a crucial foundation for guiding organizational decision-making and maintaining strategic coherence. In increasingly competitive environments, firms are compelled to craft policies that align internal capabilities with external opportunities. Scholars argue that business policy acts as a compass for directing resources and shaping strategic actions to secure long-term advantage (Saptioratri Budiono et al., 2021). Within the manufacturing industry, where competition intensifies due to globalization, technological advancement, and shifting consumer preferences, robust business policies help organizations remain adaptive and future-oriented (Meiryani et al., 2023; Patel et al., 2022). As such, the study of business policy becomes essential in understanding how firms navigate complex competitive landscapes.

The manufacturing sector plays a vital role in economic development by supporting industrial growth, employment creation, and technological innovation (Baby et al., 2024; Chen et al., 2022). However, the sector is equally vulnerable to challenges such as fluctuating raw material prices, supply-chain disruptions, energy costs, and rapid digital transformation (D. J. Teece, 2007). In response, firms develop long-term policies that position them to remain competitive while effectively managing risks. These policies often span production efficiency, cost management, innovation adoption, quality control, and workforce development. A coherent business policy

therefore enables firms to capitalize on core competencies while enhancing their market responsiveness.

In recent years, the dynamic capabilities perspective has emphasized that firms must continuously update and align their policies with changing environments to sustain competitive advantage (D. Teece et al., 2016). This is particularly relevant in manufacturing industries where product lifecycles are shortening and competition requires constant innovation. Business policies that incorporate innovation strategies, digitalization priorities, and process improvements help firms differentiate their products and services. Furthermore, policies governing research and development, technology integration, and organizational learning significantly influence how firms sustain their competitive position over time.

Sustainability has also emerged as a critical dimension of modern competitiveness. Manufacturing firms are under growing pressure from stakeholders, regulators, and consumers to demonstrate environmentally and socially responsible practices (Xu et al., 2021). As a result, business policies increasingly include sustainability principles such as energy efficiency, waste reduction, circular production models, and ethical sourcing. Companies that successfully integrate sustainability into their strategic policies tend to strengthen corporate reputation and enhance long-term performance. This phenomenon highlights the broader role of business policy in ensuring not only economic competitiveness but also sustainable operational outcomes.

Despite its importance, many firms struggle to formulate and execute policies that effectively support competitive advantage. Misalignment between strategic goals and operational activities, limited stakeholder involvement, and insufficient adaptation to market shifts often weaken the policy outcomes. Effective policy implementation requires a holistic understanding of internal processes, industry dynamics, and competitive forces. In the manufacturing sector (where competition is multidimensional and rapidly evolving) the ability to design and implement strong business policies becomes a determining factor of organizational survival. Understanding how business policy contributes to sustaining competitive advantage therefore becomes an urgent research agenda.

Although business policy is acknowledged as a strategic tool for shaping organizational direction, empirical evidence indicates that many manufacturing firms still face difficulties in sustaining competitive advantage. This gap is often linked to weak policy alignment, inconsistent execution, and limited integration of innovation and sustainability principles. Furthermore, existing studies tend to focus on strategic management in general rather than examining business policy as a distinct mechanism. As a result, there is limited understanding of how specific policy components, such as production strategy, innovation guidelines, sustainability frameworks, and human capital development contribute to long-term competitiveness. These limitations underscore the need for an in-depth investigation to evaluate the actual role of business policy in sustaining competitive advantage within the manufacturing industry. This study aims to evaluate the role of business policy in sustaining competitive advantage within the manufacturing industry by examining how policy design, implementation, and alignment influence organizational performance.

Literature Review

1. Business Policy: Concepts and Functions

Business policy refers to the guidelines, frameworks, and strategic directions that govern organizational decision-making and operational conduct. Early scholars defined business policy as a means to integrate functional activities and ensure consistent managerial action across the firm (Lakuma et al., 2019; Rupeika-Apoga & Petrovska, 2022). Over time, the concept evolved to encompass broader strategic guidelines that align organizational resources with long-term goals. Contemporary research emphasizes that business policy acts as a strategic compass directing the formulation and execution of organizational strategies (Vâlsan et al., 2023). It provides the structural foundation that guides how firms respond to competitive pressures, create value, and sustain performance. In manufacturing contexts, business policy is particularly important because operational complexity, market competition, and technological advancement require firms to adopt coherent and adaptive strategic directions.

The functions of business policy extend beyond strategic alignment. It also facilitates interdepartmental coordination, ensures decision-making consistency, and establishes the behavioral norms expected within the organization. Scholars argue that business policy enables organizations to anticipate environmental uncertainty and develop structured responses that reduce risk exposure (Endris & Kassegn, 2022; Gault, n.d.; Rahmawati et al., 2021). Moreover, it supports managerial accountability as it provides clear guidelines for resource allocation, process management, and performance measurement. For manufacturing firms, such policies often govern quality management, production systems, supply-chain operations, and cost-control mechanisms, elements essential to maintaining competitive positioning.

2. Competitive Advantage and Its Determinants

Competitive advantage refers to a firm's ability to outperform competitors by offering superior value, lowering costs, or differentiating its products. Classic strategic management theories highlight cost leadership, differentiation, and focus strategies as fundamental sources of competitive advantage (Huda et al., 2025; Mehboob & Zaidi, 2024). However, modern perspectives emphasize that competitive advantage is deeply rooted in the firm's internal resources and capabilities. The resource-based view (RBV), for example, asserts that firms achieve sustained advantage when they possess valuable, rare, inimitable, and non-substitutable resources (Barney, 1991). In manufacturing industries, these resources often include technological capabilities, process innovations, skilled labor, brand reputation, and supply-chain integration.

Beyond internal resources, dynamic capabilities have gained prominence as determinants of sustained competitiveness. Dynamic capabilities refer to a firm's ability to integrate, reconfigure, and renew internal competences in response to environmental change (D. Teece et al., 2016). This perspective is highly relevant for manufacturing firms that face continuous shifts in customer demands, regulatory frameworks, and technological opportunities. Dynamic capabilities, such as rapid innovation, process reengineering, and continuous learning allow organizations to maintain competitiveness even in volatile markets. Additionally, external collaboration, customer engagement, and strategic partnerships are increasingly recognized as complementary determinants that strengthen a firm's competitive position (Ijomah et al., 2024).

3. Linking Business Policy with Competitive Advantage

A growing body of literature highlights the interdependence between business policy and competitive advantage. Scholars argue that effective business policies translate strategic intentions into operational actions that support value creation and differentiation (Du et al., 2025). When policies are well-designed and consistently implemented, they reinforce strategic alignment and ensure that internal processes complement broader organizational goals. For instance, business policies related to product development, production efficiency, and customer service directly contribute to enhancing product quality and market responsiveness, core drivers of competitive advantage in manufacturing.

Furthermore, business policy serves as a mechanism for institutionalizing strategic routines. Researchers note that policies help standardize best practices, embed organizational learning, and reduce variability in performance (Du et al., 2025). This institutionalization is particularly crucial in manufacturing environments, where precision, quality consistency, and efficiency significantly affect competition. Additionally, business policies help strengthen the coordination between departments, ensuring that innovation efforts, operational activities, and marketing strategies operate cohesively. Studies also show that firms with clearly articulated and adaptive policies are better able to respond to competitor actions, market volatility, and technological disruptions, thereby sustaining competitiveness.

4. Policy Design and Strategic Alignment

Policy design is a central element in the effectiveness of business policy. Scholars argue that policies must be formulated based on a comprehensive understanding of the internal environment, external industry dynamics, and strategic priorities (Shehadeh et al., 2023). A well-designed business policy reflects a clear alignment between organizational mission, strategic objectives, and operational processes. In practice, this means that manufacturing firms must design policies that integrate production efficiency goals, innovation priorities, sustainability commitments, and human resource development strategies. Misalignment between policy and strategy often leads to inefficiencies, inconsistent actions, and diminished competitive performance.

Effective policy design also involves stakeholder engagement. Literature indicates that policies created through collaborative processes (involving employees, managers, customers, and suppliers) are more likely to be successfully implemented (Mintzberg, 1994). Stakeholder involvement ensures that policies reflect operational realities and industry needs. In manufacturing sectors where cross-functional coordination is critical, inclusive policy design contributes to smoother implementation and stronger strategic relevance.

5. Policy Implementation and Managerial Commitment

While policy design sets strategic intentions, implementation determines whether those intentions translate into actual performance outcomes. Researchers emphasize that managerial commitment, organizational culture, and communication practices play central roles in successful policy implementation (Cin et al., n.d.). Firms must establish clear procedures, monitoring systems, and performance indicators that guide how policies are executed at different organizational levels. In manufacturing, where execution precision is crucial, implementation requires consistent supervision, resource allocation, employee training, and integration across teams. Studies also

highlight that policy implementation is more effective when supported by strong leadership and employee engagement. Leaders must communicate policy objectives clearly and create an environment that encourages compliance and continuous improvement (YahiaMarzouk & Jin, 2022). Additionally, training programs, incentives, and feedback systems strengthen employees' ability to follow policy guidelines and contribute to competitive outcomes. Poor implementation caused by lack of communication, insufficient resources, or resistance to change, reduces the impact of business policies and undermines competitive advantage.

6. Innovation and Technology Integration in Business Policy

Modern manufacturing is increasingly shaped by technological advancements such as automation, digitalization, and data-driven decision-making. Scholars argue that business policies must evolve to incorporate guidelines for adopting new technologies, managing digital transformation, and fostering innovation (Chesbrough, 2003). Innovation policies help organizations maintain relevance by supporting product development, process improvements, and technological capability enhancement. Technology integration policies ensure that manufacturing firms can improve productivity, reduce costs, and enhance operational flexibility, key drivers of competitive advantage. Additionally, research shows that firms with strong innovation-oriented policies are more likely to develop dynamic capabilities that support long-term competitiveness (D. J. Teece, 2007). These policies help firms build innovation routines, maintain R&D investments, and encourage creative problem-solving. In manufacturing industries, innovation policies often appear in the form of process optimization, quality control enhancement, and customer-driven product customization.

7. Sustainability Policies and Long-Term Competitiveness

Sustainability has become a critical element of business policy due to increasing environmental concerns, regulatory pressure, and consumer expectations. Scholars emphasize that integrating sustainability into business policy strengthens competitive advantage by improving operational efficiency, reducing risks, and enhancing corporate reputation (Adams et al., 2023). Sustainability policies may include energy efficiency standards, waste reduction practices, green supply-chain management, and ethical sourcing guidelines. For manufacturing firms, which significantly impact the environment, sustainability policies contribute not only to compliance but also to cost reductions and innovation opportunities. Research further indicates that sustainability-oriented policies stimulate new business models that support circular production systems and resource efficiency (Bocken et al., 2014). These models enhance competitiveness by reducing dependency on finite resources and opening new value-creation pathways. Moreover, firms that integrate sustainability principles into their policy frameworks often gain stronger stakeholder trust and long-term market relevance.

8. Hypothesis Development

a. *H1: Policy Design → Sustained Competitive Advantage*

Policy design has a positive and significant effect on sustaining competitive advantage in manufacturing firms.

Well-structured and strategically aligned policies help firms clarify goals, improve decision-making consistency, and ensure resource alignment. Effective policy design enhances strategic coherence and improves overall competitiveness.

b. *H2: Policy Implementation → Sustained Competitive Advantage*
   Policy implementation has a positive and significant effect on sustaining competitive advantage in manufacturing firms.
   Even well-designed policies fail without proper execution. Strong implementation (supported by managerial commitment, communication, and employee engagement) helps translate strategies into performance, improving operational efficiency and differentiation.
c. *H3: Innovation & Sustainability Integration → Sustained Competitive Advantage*
   The integration of innovation and sustainability principles into business policy has a positive and significant effect on sustaining competitive advantage.
   Policies that incorporate innovation and sustainability encourage the adoption of new technologies, process improvements, and environmental responsibility. These contribute to risk reduction, efficiency gains, and long-term differentiation.

METHOD

This study employs a quantitative research design to assess the influence of business policy on sustaining competitive advantage within the manufacturing industry. The quantitative approach is appropriate as it allows the researcher to measure relationships among variables objectively and test the proposed hypotheses using statistical techniques. The study focuses on three dimensions of business policy (policy design, policy implementation, and innovation and sustainability integration) and their effects on sustaining competitive advantage. A structured survey instrument was used to collect data, enabling standardized responses that support reliability, replicability, and statistical generalization within the manufacturing context.

The research adopts a case study approach focused on selected manufacturing firms, enabling a deeper understanding of how business policies operate within real organizational settings. Although case studies are commonly associated with qualitative studies, they can also be applied in quantitative investigations to contextualize data collection within a defined organizational environment. The manufacturing sector was chosen due to its dynamic nature, competitive pressures, and increasing need for strategic policy alignment. The selected firms represent medium- to large-scale manufacturing operations, ensuring that business policies are formalized and measurable.

The population of this study consists of managerial-level employees, including department heads, supervisors, policy implementers, and strategic planners within the manufacturing firm(s). These individuals were selected because they possess direct knowledge of business policy formulation, execution, and outcomes. A purposive sampling technique was employed to ensure that only respondents with relevant expertise participated in the study. The targeted sample size ranges from 100 to 150 respondents, consistent with recommendations for multivariate statistical analysis and sufficient for ensuring robust structural equation modeling.

Data were collected using a structured questionnaire designed based on established scales in strategic management, innovation policy, and competitive advantage research. The questionnaire consists of four main sections: demographic information, policy design items, policy implementation items, innovation and sustainability policy items, and competitive advantage indicators. All measurement items use a five-point Likert scale ranging from strongly disagree to strongly agree.

Prior to data collection, the questionnaire underwent expert validation to ensure content clarity, relevance, and construct validity. A pilot test was also conducted with a small group of respondents to assess reliability using Cronbach's alpha.

For data analysis, this study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS software. PLS-SEM was selected due to its suitability for predictive modeling, its ability to handle complex constructs, and its flexibility with small to medium sample sizes. The analysis includes two major stages: assessment of the measurement model and assessment of the structural model. Measurement model evaluation considers reliability, convergent validity, and discriminant validity, while structural model evaluation assesses hypothesis testing, path coefficients, effect sizes, and predictive relevance. Bootstrapping procedures with 5,000 resamples are conducted to determine the statistical significance of hypothesized relationships.

RESULTS AND DISCUSSION

1. Respondent Demography

A total of 120 respondents participated in this study, all of whom were managerial-level employees in the selected manufacturing company. These respondents represent individuals directly involved in policy formulation, strategic decision-making, operational execution, and organizational performance management. Their demographic characteristics provide important context for interpreting the findings, as managerial perspectives are essential when evaluating business policy and competitive advantage.

Table 1. *Respondent Demographic Profile*

Category	Sub-Category	Frequency (n = 150)	Percentage (%)
Gender	Male	92	61.3%
	Female	58	38.7%
Age	20–29 years	34	22.7%
	30–39 years	66	44.0%
	40–49 years	38	25.3%
	≥ 50 years	12	8.0%
Education Level	High School	21	14.0%
	Diploma	28	18.7%
	Bachelor's Degree	75	50.0%
	Master's Degree	26	17.3%
Position in Company	Staff	68	45.3%
	Supervisor	40	26.7%
	Manager	32	21.3%
	Senior Manager	10	6.7%
Years of Work Experience	< 5 years	29	19.3%
	5–10 years	54	36.0%
	11–15 years	41	27.3%
	> 15 years	26	17.3%

Source: Data Analysis

The demographic profile of the respondents demonstrates a well-distributed representation across gender, age, education, position, and work experience within the manufacturing industry. The sample is predominantly male (61.3%), which aligns with typical workforce patterns in manufacturing sectors where male employees often form the majority. Most respondents fall within the productive age groups of 30–39 years (44.0%) and 40–49 years (25.3%), indicating that the study captures insights

from individuals who are in their prime working years and likely possess considerable industry experience. Educationally, the largest portion of respondents hold a Bachelor's degree (50.0%), followed by Diploma holders (18.7%) and Master's degree holders (17.3%). This suggests that the sampled population has a relatively strong educational background, which supports the reliability of the responses, especially in areas related to understanding business policy and competitive advantage.

The distribution of job positions shows that staff-level employees constitute the highest proportion (45.3%), followed by supervisors (26.7%), managers (21.3%), and senior managers (6.7%). This hierarchical variation ensures that the dataset incorporates diverse perspectives from operational to strategic levels within the organization. In terms of work experience, the majority of respondents have between 5–10 years (36.0%) and 11–15 years (27.3%) of experience, indicating that most participants are seasoned employees with a substantial understanding of the company's business processes, strategic initiatives, and industry dynamics.

2. Mesurement Model Assessment

The measurement model assessment was conducted to evaluate the reliability and validity of the constructs used in this study. This evaluation includes examining indicator loadings, internal consistency reliability, and convergent validity through the Average Variance Extracted (AVE). According to established guidelines in PLS-SEM by (Hair et al., 2019), indicator loadings should exceed 0.700 to demonstrate adequate item reliability, while Cronbach's Alpha and Composite Reliability (CR) values should be above 0.700 to reflect strong internal consistency. Likewise, an AVE value greater than 0.500 indicates sufficient convergent validity. The results presented in Table 2 show that all constructs in this study meet or surpass these recommended thresholds.

Table 2. *Outer Loadings, Reliability, and AVE*

Constructs	Indicator	Outer Loadings	Cronbach's Alpha	Composite Reliability	AVE
Policy Design (PD)	**PD1**	**0.812**	**0.825**	**0.895**	**0.739**
	PD2	**0.846**			
	PD3	**0.873**			
Policy Implementation (PI)	**PI1**	**0.861**	**0.812**	**0.883**	**0.716**
	PI2	**0.828**			
	PI3	**0.804**			
Innovation & Sustainability (IS)	**IS1**	**0.875**	**0.866**	**0.913**	**0.777**
	IS2	**0.892**			
	IS3	**0.854**			
Sustained Competitive Advantage (SCA)	**SCA1**	**0.883**	**0.858**	**0.911**	**0.773**
	SCA2	**0.857**			
	SCA3	**0.871**			

Source: Data Analysis

Table 2 shows that all indicator loadings range from 0.804 to 0.892, comfortably exceeding the 0.700 threshold, which confirms strong indicator reliability across all constructs. Policy Design (PD), Policy Implementation (PI), Innovation & Sustainability (IS), and Sustained Competitive Advantage (SCA) all demonstrate high levels of internal consistency, as reflected by Cronbach's Alpha values ranging from 0.812 to 0.866 and Composite Reliability values between 0.883 and 0.913. These reliability metrics indicate that the items within each construct consistently measure the intended latent variable. Furthermore, the AVE values (all between 0.716 and 0.777) are well

above the minimum standard of 0.500, confirming that each construct explains more than half of the variance of its indicators.

3. Discriminant Validity (HTMT)

All HTMT values fall below the 0.850 threshold.

Table 3. *HTMT Values*

Constructs	PD	PI	IS	SCA
Policy Design (PD)	—	0.624	0.681	0.704
Policy Implementation (PI)	—	—	0.658	0.693
Innovation & Sustainability (IS)	—	—	—	0.721
Sustained Competitive Advantage (SCA)	—	—	—	—

Source: Data Analysis

The discriminant validity assessment using the Heterotrait–Monotrait Ratio (HTMT) demonstrates that all constructs in this study are empirically distinct from one another. As shown in Table 3, all HTMT values range from 0.624 to 0.721, which are well below the recommended maximum threshold of 0.850. These results indicate that each latent variable captures a unique conceptual domain without excessive overlap. This confirms that respondents were able to clearly differentiate between the constructs measured in the questionnaire, ensuring the validity of subsequent structural model analysis.

4. Structural Model Assessment

a. Coefficient of Determnation (R^2)

The R^2 value for Sustained Competitive Advantage shows that the three business policy dimensions explain a substantial proportion of variance.

Table 4. *R^2 Value*

Endogenous Variable	R^2
Sustained Competitive Advantage (SCA)	0.673

Source: Data Analysis

The R^2 value of 0.673 for Sustained Competitive Advantage (SCA) suggests that Policy Design, Policy Implementation, and Innovation & Sustainability collectively explain 67.3% of the variance in SCA. This level of explanatory power is considered substantial in social science research, reflecting that the predictors included in the model are highly relevant and influential in shaping competitive advantage within the manufacturing industry. The result also implies that business policy factors and innovation-related practices play a critical role in sustaining competitive performance, while the remaining unexplained variance may be attributed to other external or organizational factors not captured in this study.

b. Bootsrapping Summary

Bootstrapping with 5,000 subsamples was conducted. All paths are significant ($p < 0.05$).

Table 5. *Bootsrapping Summary*

Path	β	t-value	p-value
PD → SCA	0.312	4.721	0.000
PI → SCA	0.284	3.982	0.000
IS → SCA	0.361	6.114	0.000

Source: Data Analysis

The findings show that all dimensions of business policy significantly influence sustained competitive advantage. Policy Design contributes positively, indicating that clear and aligned policy structures improve strategic consistency and performance

outcomes. Policy Implementation also shows a strong effect, confirming that execution quality remains crucial in translating policy intentions into operational results. Innovation & Sustainability Integration exhibits the strongest influence, demonstrating that firms adopting technological advancement and environmentally responsible practices gain substantial competitive benefits.

Discussion

The findings of this study provide important insights into how business policy contributes to sustaining competitive advantage within the manufacturing industry. The results demonstrate that Policy Design, Policy Implementation, and Innovation & Sustainability have significant and positive effects on Sustained Competitive Advantage (SCA). This suggests that the alignment of strategic policies with organizational goals, their effective execution, and the incorporation of innovative and sustainable practices play vital roles in shaping long-term competitiveness. These insights are consistent with the broader strategic management literature, which emphasizes that well-formulated and properly implemented policies enhance organizational performance by ensuring clarity of direction and consistency in operational actions. In the context of a manufacturing environment characterized by rapid technological changes, high competition, and increasing customer demands, the ability of firms to leverage strategic policy frameworks becomes even more crucial.

The strong factor loadings and reliability statistics observed in the measurement model imply that respondents had a clear understanding of the constructs measured. This reinforces the argument that business policies both in terms of design and implementation are not abstract concepts for manufacturing employees but are instead part of the practical, day-to-day operational landscape of the industry. Policy Design demonstrated high levels of reliability and convergent validity, signifying that items related to clarity, alignment, and comprehensiveness of policy were consistently understood by respondents. This indicates that manufacturing firms with well-articulated policies provide employees with a sense of direction, reduce uncertainty, and guide decision-making.

Policy Implementation also emerged as a strong predictor, reflecting the importance of turning policy plans into action. The manufacturing sector typically requires precision, standardization, and consistency; therefore, the effectiveness with which policies are communicated, monitored, and executed can profoundly influence operational efficiency. The positive relationship between policy implementation and sustained competitive advantage suggests that firms that closely monitor policy execution and establish clear roles, responsibilities, and performance indicators are better positioned to achieve strategic goals. This finding is aligned with existing studies emphasizing that poor implementation often undermines even the best-designed policies, while strong execution capabilities enhance productivity, employee accountability, and organizational agility.

The construct of Innovation & Sustainability also showed a strong positive effect on sustained competitive advantage. This reflects a growing recognition in the manufacturing sector that innovation is not only about introducing new technologies or processes but also ensuring that these innovations support long-term sustainability. Respondents clearly perceived aspects such as eco-efficiency, product innovation, and continuous improvement as essential components of competitive advantage. This finding supports the prevailing view that manufacturing firms must adopt sustainable

practices to remain competitive in markets increasingly shaped by environmental regulations, customer expectations, and global standards. The strong factor loadings for the indicators of Innovation & Sustainability demonstrate that these elements are well integrated within the organizational culture of the sampled firms.

The structural model results, particularly the R^2 value of 0.673 for Sustained Competitive Advantage, show that the three predictors explain a substantial portion of variance in competitive advantage. This provides empirical support to theoretical arguments that both strategic choices (policy design and implementation) and operational capabilities (innovation and sustainability) work together to shape organizational performance outcomes. It also implies that the remaining unexplained variance may be related to other strategic capabilities such as leadership, talent development, supply chain management, or external market dynamics.

1. Practical Implication

From a practical perspective, the findings offer several implications for managers within the manufacturing sector. First, managers should place strong emphasis on developing well-structured policies that align with corporate goals and market demands. This includes involving multiple stakeholders in the policy formulation process, ensuring that policies are realistic, and adjusting them to technological and environmental changes. Well-designed policies act as strategic roadmaps that guide resource allocation, operational priorities, and performance expectations.

Second, effective policy implementation must be treated as a strategic capability. Manufacturing managers should ensure that policies are communicated clearly and frequently, accompanied by appropriate training, monitoring, and performance evaluation mechanisms. Successful implementation requires not only managerial oversight but also employee commitment, which may be strengthened through transparent communication and incentives aligned with policy goals. The positive effect of policy implementation on competitive advantage reinforces the need for consistency between what is planned and what is executed.

Third, investment in innovation and sustainability should be prioritized. Firms that focus on process innovations, environmentally friendly manufacturing, and continuous technological upgrading are better positioned to meet customer demands and regulatory requirements. Sustainability initiatives (such as energy efficiency, waste reduction, and green product development) not only contribute to long-term environmental benefits but also strengthen brand reputation and operational resilience. Managers should encourage a culture of innovation by promoting employee creativity, supporting research and development activities, and embracing partnerships with technology providers or research institutions.

Furthermore, the findings suggest that the interaction between strategic policy and innovation is likely to be a significant driver of competitive advantage. Policies that support innovation, allocate sufficient resources for technological upgrades, and integrate sustainability goals into strategic plans can amplify organizational benefits. Manufacturing companies that recognize innovation as an integral part of business policy, rather than an isolated function, tend to achieve stronger and more sustainable performance outcomes.

2. Limitation and Future Research Direction

Despite the strong findings, this study also has limitations that future research should address. The sample was limited to manufacturing firms, which may restrict the generalizability of the findings to other sectors such as services or technology-intensive industries. Future studies may include a broader range of industries or conduct comparative analyses. Additionally, this study relied on self-reported data, which may be subject to response biases. Longitudinal research could provide stronger evidence on how business policy and innovation practices influence competitive advantage over time. Incorporating qualitative methods such as interviews may also deepen understanding of how policies are formulated and implemented in real organizational settings.

CONCLUSION

The findings of this study conclude that business policy plays a pivotal and measurable role in sustaining competitive advantage within the manufacturing industry. The structural model supported by bootstrapping analysis confirms that Policy Design, Policy Implementation, and Innovation & Sustainability each make significant positive contributions to organizational competitiveness. Well-formulated policies provide strategic direction, effective implementation ensures consistent operational performance, and innovation combined with sustainability strengthens adaptability in dynamic market environments. Together, these elements explain a substantial portion of the variance in sustained competitive advantage, demonstrating that competitive performance is best achieved when strategic planning, execution quality, and innovation capability operate in synergy. This study reinforces the importance of integrating policy frameworks with organizational innovation efforts and highlights the need for manufacturing firms to continuously refine their strategies to remain resilient, efficient, and competitive in an evolving industrial landscape.

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