

**ROLE OF INNOVATION PRACTICES ON SUSTAINABILITY OF
MANUFACTURING SMALL AND MEDIUM ENTERPRISES IN NIGERIA**

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Abstract

As the global business climate becomes more competitive, manufacturing SMEs faces an increasing challenge, necessitating a critical appraisal of conventional models and the development of innovative practices and strategies to respond to the dynamic and demanding market conditions. The goal of this study is to look into the impact of innovation practices on the sustainability of manufacturing Small and Medium scale Enterprises (SMEs) in Lagos State, Nigeria. The sample size is 114 manufacturing SMEs, drawn from a total of 57 registered manufacturing SMEs located in Isolo and Amuwo Odofin Industrial estates in Lagos State. The Statistical package for social science (SPSS) version 23 was used to test three hypothesis employing correlation and regression analysis. This study discovered that innovation strategy have a significant positive effect on sustainability ($r=.627$; $p>0.01$), and same significant positive influence on the effect of organizational culture on sustainability($r=.605$; $p>0.01$). The regression analysis revealed that the model account for 45.2% of the variance in organizational Sustainability. The findings however, revealed the importance of Innovation Strategy and Organisational Culture in fostering sustainability among manufacturing SMEs in Lagos. Practical consequences include the proposal that firms strategically implement new methods and build a good corporate culture in order to improve sustainability. Policymakers may utilize these findings to develop measures that help SMEs encourage innovation and favorable cultural environments, therefore contributing to the region's overall economic sustainability.

Key Words: Innovation Practices, Innovation Strategy, Organizational Culture, Small And Medium Enterprises, Sustainability.

Introduction

In the ever-changing environment of modern business, the idea of sustainability has become a crucial element that affects the performance of organizations. In addition to being a business duty, sustainability is also widely acknowledged as a significant driver of competitive advantage. Historically, the achievement of a company has been evaluated based on its capacity to generate profits and capture a significant portion of the market. Nevertheless, with the increased awareness of environmental and social concerns in society, the significance of sustainability has become more prominent. Organizations are now obligated to reevaluate their plans, including sustainability ideas into their fundamental operations. The motivation for this transformation is not just based on ethical concerns, but it is also increasingly seen as a strategic need for ensuring long-term sustainability (Aslaksen, Hildebrandt, & Johnsen, 2021). Modern organizations are often

influenced by the pressures of globalization and the evolving business landscape. These pressures stem from factors such as the rising demands and changing preferences of consumers, the constant pursuit of better quality goods and services, and the increased expectations of customers. In response to addressing these issues, firms have turned to innovation, which involves a continuous alteration of processes, adoption of new management approaches, acquisition of new skills and generation of new ideas to provide novel goods/services and optimize the benefits derived from current ones. Small and medium-sized enterprises (SMEs) have significant growth prospects in several nations (Etuk, Etuk & Michael, 2014; Pathak & Ahmed, 2016).

In Nigeria, similar to other developing nations, Small and Medium Enterprises (SMEs) are expected to make up a significant portion of the Gross Domestic Product (GDP) in the coming years. Nigeria's manufacturing industry, which encompasses several small and medium-sized enterprises (SMEs) producing various goods such as household items, consumer goods, agricultural products, medical and cosmetic goods, and vehicles, contributes around 10% to the country's annual GDP (National Bureau of Statistics (NBS), 2022). SMEs have a crucial role in both developed and emerging economies (Heinicke, 2018; Ukpabio, Oyebisi, & Siyanbola, 2019). Specifically, it is crucial for corporate managers/executives to provide relevant innovation strategies prior to embarking on a particular investment linked to innovation, owing to the significant risk of failure in commercializing ideas among small and medium-sized manufacturing enterprises. Hence, it is crucial to examine and explore the impact of strategic innovation techniques on the sustained sustainability of small and medium-sized manufacturing enterprises. Prior to initiating the implementation of a new idea, it is important to do an evaluation that will determine the necessary innovation strategy, organizational culture, innovation environment, and technology capacity that need to be implemented or improved. This research will specifically examine the innovation practices and sustainability of small and medium-sized enterprises (SMEs) in the manufacturing sector in Lagos, Nigeria.

However, the concept of sustainability in manufacturing recognizes the essential connections between social issues, environmental challenges, and economic advancement, which impact the future viability and success of enterprises. The majority of manufacturing companies in Nigeria are currently experiencing a significant decline in their competitive edge due to a lack of innovation, slow integration of new technologies, a traditional production system, reliance on non-professionals, imitation of products, inadequate packaging, insufficient infrastructure, challenging business environment, security issues, ineffective marketing strategies, and superior quality offered by competitors, among other factors. To preserve their survival and maintain a competitive edge, businesses must also devise innovative strategies to meet and exceed client expectations. It seems that most manufacturing SMEs fail to develop a culture that prioritizes strategic innovation techniques. Due to increasing local and worldwide rivalry, it is becoming more challenging to enter and maintain a market, market-share, customer base, or clientele. The new game seems to be distinguished by rapid adaptations. Manufacturing organizations must adjust to these changes by understanding the dynamics that need strategic approaches, generating innovative concepts, formulating plans, and implementing those tactics to surpass competitors (Musiello-Neto, Rua, Arias-Oliva & Silva, 2021).

The creative and inventive capacity of small and medium-sized manufacturing enterprises (SMEs) has become a matter of concern due to their significant role in nation development. Innovation practices are crucial elements of corporate strategy, particularly for manufacturing SMEs, and are often seen as the foundation of all plans. An organization's ability to sustain a competitive advantage relies on its aptitude to effectively respond to market dynamics and challenges posed by competitors (Zhang, Khan, Lee, & Salik, 2019). Innovation practices are the primary catalyst for technological revolution, industrial transformation, organizational change, and long-term competitive advantage (Banmairuoy, Kritjaroen, & Homsombat, 2022). Innovation practice is deeply embedded in a firm's organizational structures, processes, products, and services and is a vital element of competitiveness. Innovation should be seen as more than only a novel technology required to improve a company's innovation environment for long-term viability (Lopez-Nicolas & Merono-Cerdan, 2011).

This research is based on the assumption that the primary goal of innovation is to get the advantages of sustainability. Specifically, it seeks to:

- a. assess the effect of innovation strategy on sustainability of manufacturing SMEs in Lagos, Nigeria.
- b. determine extent to which organisational culture affects sustainability of manufacturing SMEs in Lagos, Nigeria.
- c. investigate how innovation practices affects sustainability of manufacturing SMEs in Lagos, Nigeria.

In view of these, the following research question envisaged:

- i. To what extent does innovation strategy affects sustainability of manufacturing SMEs in Lagos, Nigeria?
- ii. What is the effect of organizational culture on sustainability of manufacturing SMEs in Lagos, Nigeria?
- iii. What is the effect of innovation practices on sustainability of manufacturing SMEs in Lagos, Nigeria?

Aligning with the research questions of the study, the following hypotheses were formulated:

- H₀₁: Innovation strategy has no significant effect on sustainability of manufacturing SMEs in Lagos, Nigeria.
- H₀₂: Organisational culture does not significantly affect sustainability of manufacturing SMEs in Lagos, Nigeria.
- H₀₃: Innovation practices does not significantly affect sustainability of manufacturing SMEs in Lagos, Nigeria.

Literature Review

Innovation Practices

The ability of an organization to proactively seek out and implement fresh and enhanced approaches and plans (including internal cultures, distribution channels, products, services, marketing strategies, and management and administrative systems) is referred to as innovation practices (Shuaib & He 2021). Innovation refers to the rebranding, recombination, or reconstruction of existing ideas or plans that challenges the status quo

as a new thought. It may also be a new formula or an inventive approach of creating and sharing riches. Even though some persons may perceive an idea as a replica of something that already exists elsewhere, innovation refers to anything that is unique and original or leads to a shift in the existing order (Gherghina, Botezatu, Hosszu, & Simionescu, 2020). The concept of innovation practices deal with how an organization should handle change and respond to changing circumstances. In the present day, organizations place great significance on innovation as it enables them to enhance market efficiency, improve customer experiences, and produce more revenue (Ahmed, Abduljabbar, & Abed Hussein, 2021). An organization must possess the capability to use state-of-the-art tactics in order to leverage the swiftly progressing technologies. Failure is a potential consequence for organizations that are unable to grow in this dynamic and ever-evolving business landscape.

Innovation Strategy

Innovation strategy refers to the efficient development, enhancement, and implementation of unique and inventive ideas that introduce new products, methods, or approaches to a company, or improve existing products, processes, or techniques. This leads to business success, potential market dominance, customer value, economic growth, and improved living standards (Peykani, Namazi, & Mohammadi, 2022). The concept implies that in order for a new idea to be considered as innovation, it must lead to the creation of new services, new goods, new manufacturing methods, new sources of supply, novel markets, and new organizational structures.

Katz, Preez, and Louw (2016) outlined a set of key principles for strategy, which encompass establishing long-term objectives, formulating a deliberate plan to attain those objectives, allocating the necessary resources for implementation, conducting external analysis while maintaining an internal focus, and employing either a rational or incremental approach to strategy. Katz et al. (2016) further defined innovation strategy as the method by which a company may achieve its long-term goals via the use of innovative practices. They do this by using the separate concepts of strategic plan and progress, while highlighting that innovation serves two primary purposes: improvement (doing things better) and future-oriented emphasis (doing things differently).

Organisational Culture

Scholars such as Papanastassiou, Pearce, and Zanfei (2020) and Waheed, Miao, Waheed, Ahmad, and Majeed, (2019) have highlighted the significance of organization in the efficient management and dissemination of innovation. Several studies have highlighted the importance of components within an organizational culture that promote innovation, stimulate creative behavior, and accelerate the rate of diffusion (Alamsjah & Yunus, 2022; Kashan, Wiewiora, & Mohannak, 2021). According to Azeem, Ahmed, Haider, and Sajjad (2021), the use and long-term viability of innovation are greatly influenced by the organizational culture. These influences result from the integration processes inside organizations, which generate shared norms and core values as established actions and behaviors that are reflected in traditions, procedures, strategies, and institutional structures. Employees are inspired to develop professionally when they see good behavior and similar actions and have confidence in the organization's endorsement of innovation. Therefore, this particular cultural viewpoint has transformed into a need for inventive conduct.

Organisational Sustainability

Organizational sustainability (OS) is widely used by business organizations as a planned approach to integrate organizational economic, environmental, and social goals and procedures at all three operational levels (Singh, Chakraborty, & Roy, 2016). Elkington first introduced the concept of the Triple-Bottom-Line (TBL), which argues that environmental, social, and economic performance are interconnected and contribute to the achievement of sustainability (Nogueira, Gomes & Lopes, 2022). The emphasis is on doing business in a sustainable manner. The colloquial interpretation of sustainability is the act of maintaining the operation of a firm, while another often used phrase in this context is the act of ensuring the long-term viability of organizations (Wales, 2013). The term "reaching success now without sacrificing the demands of the future" is used by Boudreau and Ramstad (2005) to denote the ability to meet the needs of present customers while also considering the wants of future generations. The purpose of organizational sustainability is to establish a society that effectively combines its economic, social, and ecological goals (Szekely & Knirsch, 2005).

During the 1990s, business executives began to increasingly prioritize sustainability as environmental and social concerns gained strategic significance in organizations. Businesses are now including sustainability-related topics more often in their annual reports (Tate & Bals, 2018). Additionally, there has been a growing number of research papers published in recent years on this subject (Seuring & Müller, 2008; Winter & Knemeyer, 2013; Quarshie, Salmi, & Leuschner, 2016). Contemporary culture demands that companies provide more than just affordable and well-made products and services. Companies must also be able to showcase the alignment between their actions and their professed beliefs and ideals. The younger generation, in particular, is actively seeking products that are more sustainable, and younger employees are inclined to select a company that has a proven history of achieving sustainability goals (Hoejmosse & Adrien-Kirby, 2012).

The notion of sustainability has been in existence since the 17th century. The term sustainability originated within the realm of ecology. The concept of sustainability is often grounded in the TBL paradigm (Nogueira, Gomes & Lopes, 2022), which comprises three main dimensions: the planet (referring to the environment), profit (relating to the economic aspect), and people (pertaining to the social aspect). The Triple Bottom Line (TBL) approach on sustainability asserts that firms should not just focus on their economic success, but should also take into account the welfare of society and the conservation of the environment. Corporate sustainability can only be achieved via the proper management of the three aspects of the Triple Bottom Line (TBL), which are often seen as linked components (Van der Byl & Slawinski, 2015; Gao & Bansal, 2013). Sustainability encompasses the comprehensive concept of environmental, social, and economic sustainability, which are interconnected and mutually supportive. These pillars represent the fundamental principles of a sustainable society, aiming to achieve a harmonious equilibrium between economic development, environmental conservation, and social advancement.

Innovation Strategy and Organisational sustainability

Small and medium-sized businesses (SMEs) that can successfully integrate innovation and sustainability into their current or new business strategy will be well-positioned to gain a sizable competitive edge and achieve future success as the global economy shifts towards a more sustainable framework. Since innovation is essential to the growth and competitiveness of businesses, small and medium-sized enterprises (SMEs) may differentiate themselves from the competition, attract new customers, and boost sustainability by developing and implementing novel products, services, or processes (Azeem, Ahmed, Haider & Sajjad, 2021). Manufacturing SMEs should spend in staff training, research and development, and forming partnerships with academic institutions or research organizations when devoting resources to strengthening their innovative capacities (Peer & Stoeglehner, 2013). This facilitates the establishment of a company culture that rewards creativity and problem-solving.

According to earlier research, pursuing sustainable growth requires following a well-defined innovation strategy rather than an ad hoc plan (Terziovski, 2010; Kalay & Gary, 2015; Aas, Breunig, Hydle & Pedersen, 2015). Still, most businesses find it impossible to devote time and resources to the study of ideas such as sustainability that have little bearing on their overarching business objectives. Sustainability in the economic, social, and environmental spheres is crucial for achieving organizational goals and objectives. Thus, the study hypothesize that:

Organisational culture and Sustainability

Organizational culture and sustainability are closely related, and this relationship acts as a catalyst to transform businesses into socially and environmentally responsible entities (Crossley, Elmagrhi, & Ntim, 2021). A company's culture, which encompasses its shared values, beliefs, and customs, plays a crucial role in determining its commitment to sustainable practices and ability to consistently achieve environmental and social goals. When sustainability becomes firmly ingrained in an organization's collective beliefs and practices, it permeates and impacts all aspects of its operations (Tipu, 2022). Employees inherently consider how their actions will affect the environment and society, which fosters a sense of collective responsibility and encourages sustainable conduct (Bansal, 2003). The creation of this shared understanding ensures that sustainability is not just a directive from above, but also a core component of the company's core values and principles (Quarshie, Salmi, & Leuschner, 2016). Thus, the study hypothesize that:

The Nexus between Innovation Practices and Organisational Sustainability

The future of businesses and communities is greatly influenced by the concepts of sustainability and innovation practices, which are closely linked. Innovation, defined as the process of generating and implementing novel ideas, products, or methods, is essential for businesses to adapt to changing market demands, enhance their competitive edge, and assure long-term growth. Sustainability, on the other hand, places importance on the careful use of resources, protecting the environment, and advancing social well-being, all while ensuring that economic progress does not put the well-being of future generations at risk (Li & Qamruzzaman, 2023).

Effective management practices play a crucial role in fostering innovation and instilling a mindset of sustainability inside organizations. By employing effective managerial

strategies, organizations can create a conducive environment for generating innovative ideas, implementing sustainable initiatives, and achieving a harmonious balance between economic, environmental, and social goals (Mahardhani, 2023).

Conceptual Framework

This study examines the interconnected relationships provided in the conceptual model (Figure 2.1) to determine the direct and combined effects of key components important to the sustainability of SMEs. The three key hypotheses (H01, H02, and H03) drive the investigation into how innovation strategy, organizational culture, and the combined effect of innovation practices contribute to the sustainability of manufacturing SMEs.

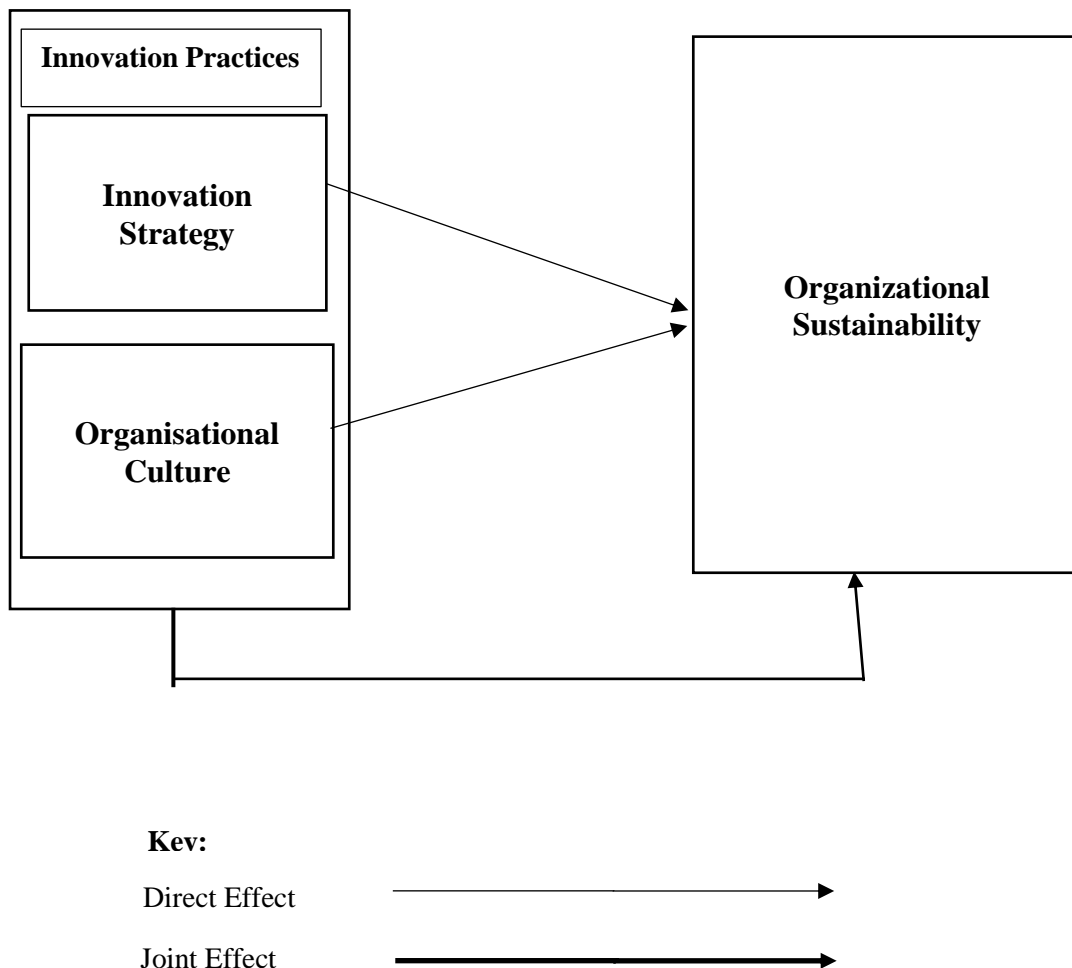


Figure 2.1: Conceptual Framework of the study

Adam and Alarifi (2021) study examined the impact of innovation practices on the survival of small and medium-sized businesses (SMEs) during the COVID-19 era. The research, involving 259 SME managers in Saudi Arabia, found that innovative strategies improved performance and survival chances. Valmohammadi (2012) study found a link between innovation practices and organizational performance in Iranian businesses. A survey of 87 firms identified drivers and impediments to successful implementation of innovative techniques. The most common type of innovation was creating new domestic target groups.

Azeem et al. (2021) study on organizational culture, knowledge sharing, innovation, and competitive advantage found that these factors positively impact competitive advantage. The study also highlighted the importance of organizational culture for business operational success and knowledge-sharing among the workforce, highlighting its role in acquiring advanced manufacturing capabilities and connecting them to high-level business processes. Malesios, De, Moursellas, Dey, and Evangelinos (2021) conducted a systematic review of 58 studies on SMEs' sustainability performance assessment. They found that SMEs are crucial contributors to GDP and employment, but their sustainability is a challenge due to their focus on financial gain over social and ecological concerns.

Theoretical Review

Agency Theory

Propounded by Jensen and Meckling (1976), when it comes to companies and concerns about corporate control, agency theory sees corporate governance systems, particularly the board of directors, as an important monitoring device that guarantees that any difficulties caused by the principal-agent relationship are mitigated (Kumar, 2010). Managers are likely to be the owners' agents, but they must be supervised, and institutional frameworks must provide certain checks and balances to ensure that they do not misuse their position. The costs of abusing their position, and also the costs associated with monitoring and regulating them to avoid exploitation, are referred to as agency costs (Kim, 2010). The agency theory serves as the underpinning theory as it applies to corporate governance in the banking sector. This theory connotes how the alignment of the audit committees, board composition, and size successively improve banks performance (Ademola, Kazeem & Ajayi, 2022).

Empirical Review

Gull, Abid, Hussainey, Ahsan and Haque (2023) examined the impact of corporate governance reforms on the risk disclosure quality in Pakistan. The authors use a manual content analysis method to a sample of non-financial companies listed on the PSX-100 index for 2009–2015. Pooled ordinary least squares and the system GMM estimations were used for analysis. They found that corporate governance reforms have a positive impact on risk disclosure quality. The results indicate that certain corporate governance practices such as CEO duality and board independence are associated with risk disclosure quality. Interestingly, the findings also highlight the effectiveness of corporate governance reforms by showing that the revised code positively moderates the corporate governance practices and risk disclosure relationship.

Kabara et al. (2023) investigated the moderation influence of CG regulatory compliance on the relationship between board diversity and voluntary disclosure (VD) of Nigerian listed firms. In this ex post facto design, 67 companies listed on the Nigerian stock exchange between 2012 and 2017 are used as a sample. The GMM approach was used. The study found that the interplay of board gender and ethnic diversity with regulatory code compliance has a very good effect on the firms' voluntary disclosure. The outcome also showed a positive and substantial link between ethnic diversity and voluntary disclosure.

In the developing nation of Indonesia, Mahmudah, Yustina, Dewi, and Sutopo (2023) investigated the impact of voluntary disclosure (CSR and carbon disclosure on business

value). Researchers believe that because voluntary disclosure is still not widely practiced in developing nations, investors react negatively to it. Regression analysis was used to test the hypothesis utilizing a total of 72 observations from businesses in the energy sector. The study's findings demonstrate that voluntary disclosure has a detrimental impact on corporate value. In Indonesia, the amount of voluntary disclosure is still low, consisting mostly of following legal requirements, and it is still seen as an expense that detracts from a company's value. This study suggests that the government should enact rules and take other quick action to lessen the effects of climate change.

Using a thorough earnings quality model, Efenyumi and Okoye (2022) assessed the effects of RMC characteristics (independence and diligence) on the earnings quality of listed businesses with 70 enterprises during a ten-year period (2012–2021). The RMC features have no discernible influence on the listed enterprises' profitability reporting, according to the OLS analysis employed to analyze the hypothesis. In conclusion, the absence or near absence of an effective risk policy, planning, and determination of the company's risk appetite and tolerance, regular performance of risk assessment and monitoring, and loss investments by investors in the event of corporate failure due to the board's blindness to opportunities and rewards are detrimental to the growth and survival of firms.

The corporate governance and company performance in Nigerian publicly traded companies were the primary focus of Egiyi (2022). The study conducted ex post facto research to analyze data from 20 manufacturing listed businesses. Using System GMM, the data, which covered the years 2010 through 2020, was assessed. The success of the company was assessed using profit margin and return on assets. A company's profitability can be significantly impacted by corporate governance indicators, including board size, audit committee size, and audit quality, according to the study's findings. The conclusions recommended that legislation on institutional and governmental ownership be created by the government and the relevant authorities to act as a regulator and, in the long term, enhance corporate performance.

Oloyede (2022) evaluated the effects of corporate governance mechanisms on financial performance metrics such Return on Equity (ROE) and Return on Assets (ROA), including board independence, board size, board effectiveness, and board gender diversity. The study used a quantitative approach to its investigation. Additionally, data from the chosen microfinance banks' annual reports from 2017 to 2021 were gathered. Data collected in the field were analyzed using a multiple regression model. The study's conclusions showed that, while board effectiveness has a significant relationship with corporate financial performance (ROA and ROE), other corporate governance mechanisms, such as board independence, board size, and board gender diversity, have a negligible relationship.

In Nigeria, the relationship between voluntary risk management disclosures and organizational sustainability was studied by Omaliko and Onyeogubalu (2022). Because it illustrates how much voluntary risk management disclosures affect organizational sustainability, the study is important. Specifically, organizational sustainability was also thoroughly covered. Strategic risk management disclosure (SRMD), technological risk management disclosure (TRMD), empowerment risk management disclosure (ERMD), and operational risk management disclosure (ORMD) were all covered. Thus, the study

draws the conclusion that organizational sustainability in Nigeria was guaranteed by voluntary risk management disclosures. According to the study's conclusions, a poorly executed risk management policy would have a negative impact on the organizational sustainability and even result in the organization's dissolution.

Based on the review, it can be seen that not much research have been conducted on the link between corporate governance mechanisms and voluntary risk management disclosure in listed nonfinancial firms in Nigeria a gap in literature that has necessitated this study.

Munther (2019) used the size of the board of directors, the size of the audit committee, the family ownership ratio, and their effects on the amount of voluntary disclosure of companies registered with the Amman Stock Exchange (ASE) to analyze the effects of corporate governance (CG) standards. From 2016 to 2017, content analysis was used to gather the necessary data from a number of industries, including the financial, insurance, services, and industrial sectors. The findings showed a bad correlation between the extent of voluntary disclosure, the size of the audit committee, and the family ownership percentage. However, the analysis revealed a substantial positive association between the extent of voluntary disclosure and the size of the board of directors. The findings also revealed a substantial positive association between the CG guidelines (size of the board of directors, size of the audit committee, and family ownership percentage) and the level of voluntary disclosure of the businesses listed with ASE.

After the 2011 Corporate Governance (CG) reform, Kakanda, Salim, and Chandren (2017b) looked at the risk management procedures of listed financial services firms in Nigeria. In order to accomplish the study's goal, a content analysis of the annual reports of 45 sampled companies, covering the years 2012 to 2015, was done. The study discovered that the sampled organizations' risk management procedures are significantly disclosed, particularly in connection to their risk management committee structure and responsibilities, risk management policies, availability and function of the audit committee, and capital/market risks. There was no discernible difference between banks and nonbanks in the sample firms' reluctance to disclose their operational and environmental risks. While noting a substantial difference between banks and nonbanks in the disclosure of their risk management methods, the sample firms continued to be reticent in disclosing their environmental risk and operational risk, indicating a high adherence to the 2011 CG code in Nigeria.

Methodology

The cross-sectional research approach was used for this study, and structured questionnaires were used to collect quantitative data. The study population consists of 49 registered manufacturing SMEs in Lagos State, Nigeria, as reported by the Manufacturers Association of Nigeria (MAN, 2021). The population consists of various manufacturing sub-sectors located in Amuwo Odofin and Isolo Industrial Estate, Lagos State, located in the southwestern region of Nigeria, is classified as one of the country's six geopolitical zones. It is characterized by its metropolitan and cosmopolitan environment. The selection of small and medium-sized manufacturing enterprises in Lagos State, Nigeria was influenced by the urban and cosmopolitan characteristics of the state.

Using Yamane's (1967) sample size selection technique, an estimated sample size of 44 was calculated. The sample size was increased to 57 applying Quinlan et al. (2015) 30% attrition rate in order to account for the potential consequences of a low response rate or non-response. Furthermore, at least two owners/senior management of the chosen companies provided responses to the questions amounting to 114 respondents. This is because they are responsible for carrying out the company's innovation practices, policies, and guiding principles, which may ensure the company's competitiveness and sustainability in terms of its unique innovation methods.

Furthermore, a significant majority of these small and medium enterprises have their main administrative center located in Lagos (SMEDAN, 2021). Data for this study was gathered using survey. As part of the data collecting procedure for this research, copies of a structured questionnaire will be provided to the responded. The multi-item measures that were used in this study were previously validated. This addresses the two main concepts: sustainability and innovative practices. Innovation strategy and organizational culture will be the two dimensions used to measure innovation practices. We adopted Nybakk, Crespell and Hansen's (2011) four-dimensional innovation strategy scale. The following aspects will be rated: research and development, business system innovation, manufacturing process innovation, and product innovation. The five-item organizational culture (OC) measurement scale will be adapted from Nimfa et al. (2021) and Tang et al. (2000). The three components that measures the sustainability are economic, social, and environmental sustainability developed using a 15-item scale adapted from studies by Chow and Chen (2012) and Bansal (2005). A five-point Likert scale (1 = strongly disagree, 5 = strongly agree) will be used to rate each item on the questionnaire.

Result and Discussion

Table 1: Respondent Table

State of Questionnaire	Total	Percentage (%)
Administered	114	100
Completed and Returned	102	89
Not returned/Invalid	12	11

Source: Field Survey, 2024

A total of 114 sets of questionnaires were distributed to study participants, and only 102 copies were returned to the researcher, with 12 copies not returned, as indicated in Table 1.

Table 2: Demographic Information

Biographic Information	Category	N	Percentage (%)
Gender	Male	83	81.4
	Female	19	18.6
Total		102	100
Age	20-29		
	30-39	10	9.8
	40-49	66	64.7
	50-59	26	25.5
Total		102	100

Marital Status	Single	10	9.8
	Married	92	90.2
	First Degree	89	87.3
	Master degree	13	12.7
Total		102	100
Staff Status	Owner/Top Manager	11	10.8
	Middle level Manager	91	89.2
Total		102	100
Industry Type	Food, beverages and Tobacco	44	43.1
	Chemicals and Pharmaceuticals	18	17.6
	Electrical and Electronics	8	7.8
	Textile, Wearing Apparel, carpets, Leather/Leather Footwear	13	12.7
	Domestics and Industrial plastics, Rubber and Foam	17	16.7
	Basic Metals, Iron and Steel and Fabricated Metal Products	1	1.0
	Pulp, paper and paper products	1	1.0
		102	100
Age of business	1-5	3	2.9
	6-10	12	11.8
	11-15	55	53.9
	16-20	12	11.8
	21-25	14	13.7
	26-30	6	5.9
Total		102	100
Number of Employees	1-50	11	10.8
	51-100	50	49.0
	101-150	28	27.5
	151-200	13	12.7
Total		102	100
Business status	Sole Proprietorship	11	10.8
	Partnership	9	8.8

	Limited Liability	77	75.5
	Joint Venture	5	4.9
Total		102	100

Source: Field survey 2024

The gender breakdown in table 2 shows that male respondents make up 81.4% of the total, with females accounting for 18.6%. The bulk of respondents (64.7%) are between the ages of 30-39, with 40-49 accounting for 25.5%. The marital status distribution shows a substantial number of married respondents (90.2%), with singles accounting for 9.8%. The educational background shows a greater number of respondents with a first degree (87.3%) than those with a master's degree (12.7%). The bulk of respondents work in middle-level management role (89.2%), with only 10.8% working as owners or senior managers. The distribution by industrial type is wide, with food, beverages, and tobacco accounting for the biggest share (43.1%), followed by chemicals and pharmaceuticals (17.6%). The majority of firms surveyed have been in existence since 11-15 (53.9%). The distribution by employee count reveals a diverse representation, with a considerable fraction of enterprises employing 51-100 people (49.0%). 75.5% of enterprises operate as limited liability companies.

Correlations

The result of the bivariate correlation analysis is shown below:

Table 3: Mean, Standard Deviation and Correlation

Variables	Mean	Standard Deviation	1	2	3
Organisational Sustainability	4.63	.408	1		
Innovation Strategy	4.68	.390	.627**	1	
Organisational Culture	4.62	.480	.605**	.682**	1

**P<0.01 level (2-tailed).

Test of Hypotheses

Hypothesis One

H₀: Innovation Strategy has no significant effect on sustainability of manufacturing SMEs in Lagos, Nigeria.

The Pearson correlation coefficient between Innovation Strategy and Organizational Sustainability as depicted from table 3 above is 0.627, with a significant p-value of 0.000 (at the 0.01 level, two-tailed). This high positive connection implies that increasing Innovation Strategy leads to a significant improvement in Organizational Sustainability. The results reject the null hypothesis (H₀₁), implying that there is a strong positive link between Innovation Strategy and Organizational Sustainability. This is consistent with the literature on innovation and sustainability, where experts suggest that businesses that adopt innovative strategies are better positioned to achieve long-term sustainability (Smith & Brown, 2018; Patel et al., 2020).

Hypothesis Two

H₀: Organisational culture has no substantial impact on the sustainability of manufacturing SMEs in Lagos, Nigeria.

The Pearson correlation coefficient between Organizational Culture and Organizational Sustainability as depicted from table 3 above is 0.605, with a significant p-value of 0.000 (at the 0.01 level, two-tailed). This demonstrates a significant positive association, implying that a positive and strong organizational culture is linked to higher levels of organizational sustainability. Contrary to the null hypothesis (H02), the findings support the idea that organisational culture has a major impact on the sustainability of manufacturing SMEs. This is consistent with previous research highlighting the critical impact of corporate culture in establishing sustainable business practices (Dangelico & Pujari, 2010; Delmas & Toffel, 2014).

Regression Analysis

Table 4: Regression Table

Variables	B	Beta	t	Sig	R	R square	Adjusted R Square	F	Sig
Constant	1.356		3.658	.000					
Innovation Strategy	.420	.402	3.952	.000	.672	.452	.441	40.866	.000 ^b
Organizational Culture	.282	.331	3.256	.002					

Dependent Variable: Organisational Sustainability

The findings of the multiple regression analysis, shown in Table 4, shed light on the relationships between the independent variables (Innovation Strategy and Organizational Culture) and the dependent variable (Organizational Sustainability) for manufacturing SMEs in Lagos, Nigeria.

The model's multiple correlation coefficient (R) is 0.672, indicating that the independent and dependent variables have a moderately strong positive association. The coefficient of determination (R Square) is 0.452, indicating that the model accounts for 45.2% of the variance in Organizational Sustainability. The adjusted R Square (which takes into account the number of predictors in the model) is 0.441. This means that the model explains 44.1% of the variation in Organizational Sustainability, taking into account the number of factors.

The ANOVA presents an F-ratio of 40.866, which is significant at the 0.000 level. This means that the whole model is statistically significant, and the independent variables have a meaningful impact on organizational sustainability.

The unstandardized coefficients for Organizational Culture and Innovation Strategy are 0.282 and 0.420, respectively. These coefficients describe the change in the dependent variable due to a one-unit change in the corresponding independent variable. Both factors are statistically significant ($p < 0.05$), demonstrating that Innovation Strategy and Organizational Culture positively impact Organizational Sustainability.

Discussion of Findings

The findings indicate that Innovation Strategy and Organizational Culture are critical factors in affecting the sustainability of manufacturing SMEs in Lagos. The positive

coefficients for both variables indicate that when Innovation Strategy and Organizational Culture improve, Organizational Sustainability is likely to rise. This is consistent with current literature that emphasizes the importance of innovation and a supportive corporate culture in achieving long-term sustainability objectives (Azeem et al., 2021; Bansal, 2003).

The high F-ratio supports the idea that the combined effect of Innovation Strategy and Organizational Culture is critical in explaining variation in Organizational Sustainability. The findings are consistent with Schumpeter's Theory of Innovation, highlighting the multifarious nature of innovation, which includes new goods, improved production techniques, and market expansion (J.A. Schumpeter, 1883-1950).

It is important to point out that, while the model is statistically significant, other undiscovered variables may account for the remaining 55.9% of the variance in Organizational Sustainability. Future studies could go into these variables to provide a more complete understanding.

Finally, the study presents empirical evidence that Innovation Strategy and Organizational Culture have a favorable impact on the sustainability of manufacturing SMEs in Lagos State. These findings provide valuable insights for managers and policymakers seeking to improve the long-term survivability of SMEs in Nigeria's dynamic business climate.

The Resource-Based View (RBV) hypothesis, which emphasizes the effective use of internal resources for long-term competitive advantage, lends credence to the beneficial association between Innovation Strategy and organizational sustainability. The study's findings are consistent with the RBV framework, indicating that manufacturing SMEs can benefit from strategically implementing innovation techniques to improve their economic, environmental, and social performance (Dwikat, Arshad & Mohd Shariff, 2022).

Previous research by Terziovski (2010) and Kalay & Gary (2015) supports the idea that pursuing a well-defined innovation strategy is critical for long-term growth. The study's findings add to this body of research by focusing especially on manufacturing SMEs in Lagos, Nigeria, and emphasizing the strategic importance of innovation for their long-term viability.

Conclusion and Recommendations

In conclusion, this study investigated the link between innovative practices, organizational culture, and the sustainability of manufacturing SMEs in Lagos, Nigeria. The findings, which are based on strong theoretical frameworks, show that both Innovation Strategy and Organizational Culture have a large positive impact on organizational sustainability. Furthermore, the study emphasizes the combined impact of these variables on the sustainability of manufacturing SMEs. The findings add new insights to the current research, stressing the strategic importance of innovation and a positive corporate culture in creating long-term competitive advantage. The study's practical consequences provide direction for strategic decision-making and cultural development in manufacturing SMEs.

The empirical data justifies rejecting the null hypothesis. The findings show that Innovation Strategy has a considerable beneficial impact on the sustainability of manufacturing SMEs in Lagos, Nigeria. Similarly, Organizational Culture plays an important role in improving organizational sustainability. The combined influence of innovation strategy and organizational culture adds greatly to these SMEs' long-term competitive advantage. This study, carried out in Lagos, Nigeria, adds value to the current

literature and provides practical insights for stakeholders looking to promote sustainability in the industrial sector.

Based on the results, the following recommendations are made:

1. Manufacturing SMEs in Lagos should deliberately incorporate innovation into their business operations. This entails ongoing investment in R&D, technological adoption, and a proactive response to market developments.
2. Company leaders should foster a culture that emphasizes innovation, sustainability, and employee participation. Leadership training programs, communication tactics, and incentive systems may all help to create a culture that promotes sustainable behaviors.
3. Small and medium-sized enterprises (SMEs) can benefit from industry collaboration and networking activities. Collaborative initiatives can result in information exchange, cooperative innovation projects, and the development of industry-wide sustainability standards.

Further research could look at comparable dynamics in different situations to improve the external validity of the findings. Furthermore, longitudinal studies may give a better understanding of the long-term influence of innovative processes and organizational culture on sustainability.

In conclusion, the study's findings make a major contribution to the current research on the effects of innovative practices on the sustainability of manufacturing SMEs. The study, which examines the unique setting of Lagos, Nigeria, provides practical insights for practitioners, policymakers, and scholars interested in promoting sustainable practices in the manufacturing sector.

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