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Entrepreneurial Orientation and the Performance of Small and Medium-Sized Manufacturing Enterprises in Nairobi County, Kenya

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Abstract

The study aimed to evaluate the influence of entrepreneurial orientation on the performance of small and medium-sized manufacturing enterprises (SMEs) in Nairobi City County, Kenya, and examined the moderating effect of environmental dynamism on this relationship. Employing a positivist philosophy and a cross-sectional research design, the study targeted 425 SMEs registered by the Kenya Association of Manufacturers. Stratified random sampling was used to select respondents, and data were collected through self-administered questionnaires and secondary sources. Descriptive statistics and multiple regression analysis were applied, with qualitative data undergoing content analysis. The findings showed that entrepreneurial orientation significantly influences SME performance, explaining 40.3% of the variance, as indicated by an R^2 of 0.403 and a significant F-statistic of 79.75 ($p < 0.001$). The beta coefficient of 0.235 confirmed a positive relationship between entrepreneurial orientation and performance. This study contributes to theory by empirically validating the moderating role of environmental dynamism and offers practical and policy insights for enhancing SME performance through entrepreneurial strategies.

Keywords: *Entrepreneurial orientation, Small and medium-sized manufacturing enterprise, performance*

1.1 Background of The Study

Technological entrepreneurship entails creating, exploiting, and developing new market opportunities. It defines the possibilities of creating new products, introducing them to the market, and selling them at a higher price than production costs (Rambe,2022). The concept denotes the potential in technological opportunities to create successful businesses effectively and is not only concerned with discovering pre-existing alternatives by discerning people and thinking about the future of their process, instead, it also encompasses creating new options by re-combining and transmuting existing resources whereby these processes can be manifested in diverse ways depending on the initial conditions and future dynamics (Mayo, 2022).

Technological entrepreneurship focuses on humans' role in shaping new technologies. It involves the innovative application of science and technology by an individual or group who create and manage a business and take financial risks to achieve their goals and prospects (Dwivedi *et al.*, 2021). The critical role of technology in the growth of entrepreneurship was the first step towards working on the analysis of commercialization logic and explaining the fundamental mechanisms for understanding the nature of technological entrepreneurship (Shirish *et al.*, 2023)

Individuals and corporate's purpose is to get involved in new businesses with the novel market based on various strategies, including technological entrepreneurship which concretizes the approaches used to explore and implement technology-oriented opportunities in the market. Hence, the central objective of the firms revolves around thriving in new businesses rather than merely earning money Ghauri *et al* (2022). Additionally, technological entrepreneurship focuses on shared experiences and the production of new products, assets, and features that are complex to advance scientific and technical knowledge and property rights of the firm's assets (Setini., 2020).

1.2 Statement of the Problem

Although the manufacturing sector has enormous potential to transform the economy, it has only seen modest growth over the years, with its GDP contribution declining from 9.3% in 2016 to 7.2% in 2022 (Kariuki, 2023). The manufacturing sector's overall output is expected to reach $8.88 billion in 2023, a 9.89% increase from 2021, and $8.08 billion in 2021, a 5.59% increase from 2020. This growth pales compared to the 10% yearly growth rate that Vision 2030 anticipates. As of the end of 2022, 46.3% of small enterprises closed down, according to a Micro Small and Medium Enterprises (MSMEs) study, raising questions about the sector's sustainability (Akoth & Mutabazi, 2023).

According to Obialor (2023), the statistics point to challenges that prevent SMEs in the manufacturing sector from attaining production efficiency, affecting the quality of products, and limiting their sales growth. Nikraftar *et al.*, (2022) argue that despite the growing tendency toward technological entrepreneurship and SMEs attracting significant attention among the media and policymakers, there is still little research-based knowledge available on these factors. It is therefore necessary to conduct further studies in this area, given that technological entrepreneurship is a relatively new research topic. These studies focused mainly on technology and digital applications in entrepreneurship, but do not thematically classify the technological entrepreneurship dimension as entrepreneurial orientation.

Gebrekidan *et al.,* (2023) stated that SMEs the world over contribute tremendously to economic growth and job creation and the business Innovation Model influences venture growth indirectly through technology entrepreneurship. The SMEs facing the problems of resource scarcity and poor strategy development, designing an appropriate business innovation model is an opportunity that can be used as an input to the adoption of technology entrepreneurship. Small enterprises should exploit existing technological opportunities by developing a technology-oriented business innovation model and integrating it with technology entrepreneurship, hence the knowledge gap that this study seeks to address.

1.3 Specific Objectives

i). To evaluate the influence of entrepreneurial orientation on the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya

ii). To establish the moderating effect of environmental Dynamism on the relationship between entrepreneurial orientation and performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya.

1.4 Research Hypotheses

i). H_{01}: Entrepreneurial orientation has no significant influence on the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya.

ii). H_{02}: The moderating effect of environmental dynamism has no significant moderating influence on technological entrepreneurship and the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya.

2.1 Theoretical Literature Review

Entrepreneurship Innovation Theory, introduced by Schumpeter (1949), underscores the critical role of innovation in driving economic development and transforming industries. According to the theory, innovation involves introducing new products, improving existing ones, adopting novel production or sales techniques, exploring new markets, sourcing new raw materials, or disrupting existing monopolistic structures (Awan & Sroufe, 2022). Creativity and entrepreneurial spirit, as per this theory, are innate qualities that individuals can harness to achieve success. Entrepreneurs, despite facing repeated failures, exemplify resilience and persistence, demonstrating that innovation is accessible to all and not restricted to an elite few. Their breakthroughs not only redefine industries but also fundamentally alter societal interactions with the external world (Yoo & Yi, 2022).

The theory highlights entrepreneurs as trailblazers who challenge the status quo, driven by a relentless desire for novelty and a distaste for predictability. They are characterized by their adventurous and independent nature, which fuels their quest for innovation and their ability to perceive opportunities amidst obstacles (Pitel, 2022). Entrepreneurs value persistence, resilience, and creativity, treating failures as learning opportunities and symbols of honor. This mindset distinguishes them, enabling them to define success and excellence in unconventional ways (Fernhaber & Zou, 2022). Through their efforts, entrepreneurs catalyze the process of "creative destruction," a term that describes the continuous transformation of economic structures, where old systems are destroyed and new ones emerge, fostering structural changes that drive development (Hoppner, 2022).

Entrepreneurship Innovation Theory posits that entrepreneurs play a pivotal role in revolutionizing production patterns by leveraging inventions or untested technological possibilities. This involves creating new goods, enhancing existing ones, opening new markets, or restructuring industries (Bradley et al., 2022). Entrepreneurs are not static figures; their role ceases once a firm is established and operational, transitioning them from innovators to leaders (Kusa et al., 2021). Despite the risks and uncertainty, profit is attributed to entrepreneurs, even if they do not always reap its benefits. Their motives extend beyond financial gain to include a desire for independence, a competitive spirit, and the intrinsic joy of creation (Babin & Harris, 2023).

In contemporary economies, the complexity of innovation requires collaboration among multiple actors rather than reliance on individual entrepreneurs. Knowledge-based economies thrive on dynamic technological advancements, which demand cognitive skills to foster and disseminate innovation (Akpan et al., 2022). Consequently, the concepts of entrepreneurship and innovation remain universal and continue to evolve within the framework of modern economic theories. As global capitalism faces significant challenges, the relevance of Entrepreneurship Innovation Theory is more pronounced than ever, emphasizing the role of technological entrepreneurship in driving economic resilience and growth. This theory forms the foundation for studying how entrepreneurship and innovation can shape and sustain economic development in the modern world.

2.2 Empirical review

One of the most popular conceptualizations of firm-level entrepreneurship is the entrepreneurial orientation (EO), which is characterized by a tendency to act independently, a willingness to experiment and take risks, a tendency to be aggressive toward rivals, and a tendency to be proactive about market opportunities (Hussain *et al.,* 2021). It is a multidimensional construct made up of two non-interchangeable dimensions namely managerial risk aversion and entrepreneurial behavior, where both dimensions are fundamentally necessary for EO to exist. It describes how the new entrance is carried out by crucial entrepreneurial activities including creativity, independence, risk-taking, proactivity, and strong competition that unmistakably have a relationship with business performance (Muazu *et al.,* 2023).

Innovation aggressiveness and entrepreneurial orientation are connected ideas that have an impact on inter-enterprise connections, which may be associated with entrepreneurial orientation aspects (Bambang *et al.,* 2021). Collaboration with other enterprises is especially necessary when it comes to the idea of proactiveness, being the enterprise's initiative and activities to affect the environment and rich resource availability, one of the cornerstones of collaboration, tends to promote enterprise initiative.

The relationship between risk-taking and entrepreneurial behavior characteristics indicates how prepared entrepreneurs are to make important and dangerous decisions, which might result in a high percentage of failures. A firm’s willingness to commit and invest important resources in a new endeavor even when the outcome might be negative is a sign of a risk-taking attitude (Fisher & Neubert, 2023). A proactive enterprise takes advantage of opportunities to affect the environment by setting trends and generating demand thus becoming a front-runner in a cutthroat market. Proactive enterprises use resources strategically to dominate their markets, identify market opportunities, and establish fresh market niches that demand experimentation and innovation. Due

to their ability to spot possibilities well in advance of their competitors and quickly adjust to changing market conditions, proactive enterprises outperform their competitors.

2.3 Conceptual framework

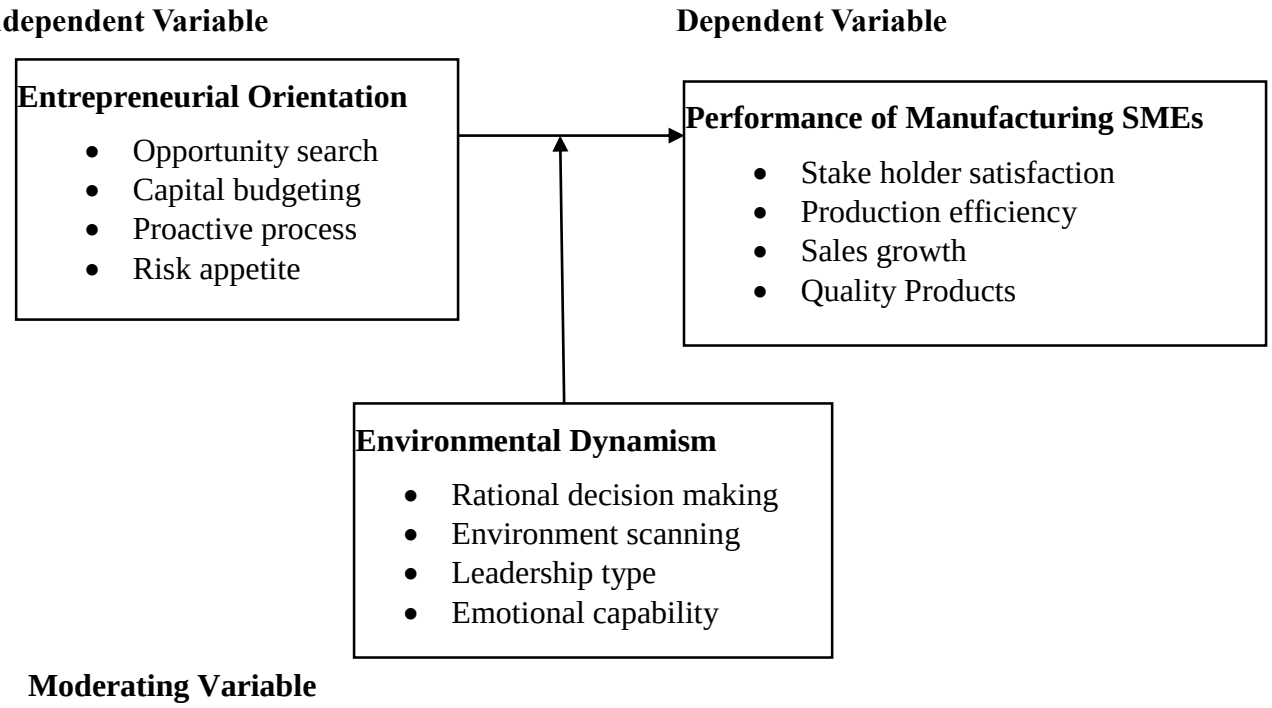

Figure 1: Conceptual Framework

Entrepreneurial Orientation refers, to processes, practices, and decision-making styles that enable enterprises to exploit opportunities other enterprises cannot exploit (Sattar, 2022). (Susanto *et al.*, 2023) noted SMEs had been struggling to sustain their performance in a highly competitive environment and the study found that entrepreneurial orientation had a significant and positive effect on SMEs' performance. Still, the outcomes were conditional on the role of social media and marketing capabilities. (Hossain *et al.,* 2023) the study revealed that entrepreneurial orientation had a positive and significant effect on SMEs' export performance and also found the mediation effect of product, customer, and brand differentiation strategies between entrepreneurial orientation and export performance. Saleh *et al.,* (2023) aver entrepreneurial orientation on new venture performance showed that entrepreneurial orientation had a positive direct and indirect effect through opportunity exploitation on new venture performance. Furthermore, opportunity exploitation positively affected new venture performance and partially mediated the nexus between entrepreneurial orientation and venture performance.

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3.0 Research Methodology

This study employed a cross-sectional survey research design, providing a systematic and cost-effective framework for data collection and analysis to achieve its objectives (Sachin & Rajesh, 2022; Hoerl & Snee, 2020). The study targeted 425 small and medium-sized manufacturing enterprises (SMEs) in Nairobi City County, listed as members of the Kenya Association of Manufacturers, encompassing various sectors such as building, mining, agriculture, pharmaceuticals, and textiles. The accessible population included enterprise owners or, in their absence, suitable managers. Data were collected using questionnaires and analyzed through both quantitative and qualitative methods. Quantitative analysis, conducted using SPSS version 26, employed inferential statistics, such as factor and correlation analysis, to examine relationships between variables, while qualitative data were analyzed through conceptual and relational content analysis to identify and explore themes. Findings were presented using pie charts, bar graphs, and tables, enabling comprehensive conclusions and recommendations aligned with the study's objectives.

4.0 Research Results And Discussion

The purpose of the study was to evaluate the influence of entrepreneurial orientation on the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya.

4.1 Descriptive statistics

4.1.1 Entrepreneurial Orientation

These findings are shown in the Table 1 below

Table 1: Entrepreneurial Orientation

Statement	SD (%)	D (%)	ND (%)	A (%)	SA (%)	Mean	Std. Dev.
Our firm is always open to new ways of engaging to seek novel solutions.	0	2.5	28.3	51.7	17.5	3.84	.733
New product lines have always been introduced by our firm.	0	4.2	22.5	44.2	29.2	3.98	.830
Our firm is usually keen on the business activities of competitors.	0	6.7	22.3	51.9	19.2	3.83	.813
When there is uncertainty, our firm adopts a wait-and-see posture.	1.7	9.2	20	44.2	25	3.82	.970
Our firm always endeavours to adopt new operating technologies.	0	9	27.7	40	23.3	3.77	.912
In dealing with competition, our firm always initiates actions to which the competition responds.	0	12.5	35.8	38.3	13.3	3.52	.879
Our firm always has a strong propensity for high-risk business undertakings.	0	5	29.2	46.7	19.2	3.80	.805

Our firm has adopted a trait of incremental pursuit for competitiveness.	0	7.5	39.2	33.3	20	3.66	.884

n = 120 *Mean = (Strongly Disagree = 1 – 1.8; Disagree = 1.9 – 2.6; Neither Agree nor Disagree = 2.7 – 3.4; Agree = 3.5 - 4.2; Strongly Agree = 4.3 – 5.0)

The study revealed a high level of agreement among respondents on entrepreneurial orientation practices in their firms. Most respondents (73.4%) agreed that new product lines were always introduced, with a mean score of 3.98 (SD = 0.830). Similarly, 69.2% agreed that their firms actively engaged stakeholders to find innovative solutions (M = 3.84, SD = 0.733). There was notable concurrence (71.1%) that firms were keen on monitoring competitors' activities (M = 3.83, SD = 0.813). Additionally, 69.2% of respondents indicated that their firms adopted a cautious approach during uncertainty, while 65.9% agreed on a strong propensity for high-risk business ventures (M = 3.80, SD = 0.805). However, less agreement (51.6%) was observed on firms initiating competitive actions (M = 3.52, SD = 0.879).

Responses to open-ended questions highlighted other aspects of entrepreneurial orientation. About 15% of respondents noted that firms focused on discovering and leveraging their inner potential, 43.5% reported the use of proactive business plans to guide operations, and 30% emphasized identifying resource needs early to avoid operational disruptions. These insights demonstrate diverse approaches adopted by firms to enhance entrepreneurial orientation and align with the proactive and innovative traits emphasized in the theory.

The findings align with Ameer and Khan (2022), who found that micro, meso, and macro-level factors enhance the adoption of green entrepreneurial orientation, as well as Adam et al. (2022), who showed that entrepreneurial orientation positively impacts knowledge management and business performance. Similarly, Alam (2022) highlighted the significance of risk-taking, proactiveness, and innovativeness as key elements of entrepreneurial orientation, while Arabeche et al. (2022) identified a strong relationship between entrepreneurial orientation and SME performance, mediated by organizational culture. These studies reinforce the centrality of entrepreneurial orientation in fostering competitiveness and performance.

The study noted less convergence on firms' competitiveness and incremental pursuits for market advantage, findings that align with Susanto et al. (2023), who observed that the outcomes of entrepreneurial orientation depend on factors like social media and marketing capabilities. However, these results contrast Onyango et al. (2023), who demonstrated a positive relationship between entrepreneurial orientation and SME competitiveness. The varying outcomes suggest that entrepreneurial orientation's influence on performance is context-dependent and influenced by external mediating factors.

4.1.2 Environmental Dynamism and Performance of Small and Medium size Manufacturing Enterprises

This study's respondents gave their positions on the degree of agreement or disagreement about various statements that relate to environmental dynamism as presented in Table 2 ;

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Table 2: Environmental Dynamism

Statement	SD (%)	D (%)	ND (%)	A (%)	SA (%)	Mean	Std. Dev.
In our firm, we match up with changes in the technological space.	0	0	39.1	46.7	14.2	3.75	.689
Our firm seeks to align to actions that happen in the marketplace.	0	0	25	47.5	27.5	4.03	.727
Our firm always responds to changes in customer demands.	0	0	16.7	58.3	25	4.08	.643
Our firm keeps monitoring changes in market trends and innovations.	0	.8	30.8	45	23.3	3.91	.756
Decision-making in our firm varies based on the obtaining dynamics.	0	0	27.5	43.3	29.2	4.02	.756
Our firm ensures that changes in customer preferences are attended to.	0	6.7	34.2	40	19.2	3.72	.852
Our firm usually aligns production to changes in the materials supply chain.	0	0	41.7	42.5	15.8	3.74	.716
Technological complexity contributes to our firm's innovativeness.	0	0	30.8	40.8	28.4	3.98	.772

n = 120 *Mean = (Strongly Disagree = 1 – 1.8; Disagree = 1.9 – 2.6; Neither Agree nor Disagree = 2.7 – 3.4; Agree = 3.5 - 4.2; Strongly Agree = 4.3 – 5.0)

The findings in Table 2 showed strong convergence in respondents' opinions, with all standard deviations below 2, indicating responses clustered around the mean. A significant majority (83.3%) agreed that firms consistently responded to changes in customer demands (M = 4.08, SD = 0.643). Similarly, 75% concurred that firms aligned actions with market dynamics (M = 4.03, SD = 0.727), and 72.5% agreed that decision-making adapted to prevailing conditions (M = 4.02, SD = 0.756). While 69.2% affirmed that technological complexity contributed to innovation, 68.3% agreed that firms monitored market trends (M = 3.91, SD = 0.756). However, the lowest convergence was observed in firms addressing changes in customer preferences, with 59.2% agreeing, 34.2% ambivalent, and 6.7% disagreeing (M = 3.72, SD = 0.852).

Open-ended responses revealed that market turbulence significantly impacted firms' performance. Statutory regulations were highlighted by 58% of respondents as a major factor affecting operations, while 10% cited excessive levies and regulatory overreach as inhibitors of a free business environment. Additionally, 23% noted that technological advancements impacted daily operations, with many SMEs lacking adequate money transfer technologies. These insights

highlight the interplay between regulatory, technological, and operational challenges in navigating market turbulence.

The findings align with Feng et al. (2022), who found that environmental dynamism moderated the relationship between customer collaboration and quality performance. Similarly, Suder and Okręglicka (2023) observed a partial positive moderating effect of environmental dynamism on the entrepreneurial orientation-performance link. Chaudhuri et al. (2023) noted that environmental dynamism and product-service innovation capability enhanced the adoption of green supply chain technology, positively impacting performance. These findings also agree with Mutisya and K'Obonyo (2023), who identified a significant joint effect of enterprise ambidexterity, design, and environmental dynamism on the performance of large manufacturing firms in Kenya.

In contrast, Ahmed et al. (2022) and Chirchir (2022) found environmental dynamism to have a negative moderating effect on the relationship between digital platform capability, intellectual capital, and supply chain integration on firm performance. However, the study's findings correspond with Oyerinde et al. (2023), who identified a positive relationship between technological innovation and SME sales growth. Similarly, Jiang and Vannasathid (2023) reported that various capabilities, such as resource allocation and strategic planning, positively influenced SME financial performance. Mukherjee et al. (2024) and Cheruiyot and Manga (2023) further affirmed the positive association between adopting technological innovations, entrepreneurial orientation, and improved enterprise performance. These results underscore the significance of entrepreneurial and technological adaptations in enhancing firm performance amidst dynamic market conditions.

4.1.3 Performance of Small and Medium size Manufacturing Enterprises

Respondents provided their extent of agreement or disagreement about the various statements regarding the enterprise performance of small and medium-sized manufacturing enterprises and the results are shown in Table 3;

Table 3: Performance of small and medium size manufacturing enterprises

Statement	SD (%)	D (%)	ND (%)	A (%)	SA (%)	Mean	Std. Devn.
Our firm always strives to realize customer satisfaction.	0	0	36.7	40	23.3	3.87	.766
Our firm usually works towards attaining customer retention.	1.7	16.7	40	27.5	14.2	3.36	.977
In our firm, we continuously adopt steps to garner production efficiency.	5.0	14.2	35	30	15.8	3.37	1.070
Our firm has put in place mechanics to ensure effectiveness of all staff in their roles.	0	8.3	40.8	43.3	7.5	3.50	.756
Our firm encourages staff members to improve productivity in their roles.	0	1.7	35.8	46.7	15.8	3.77	.730
High-quality goods are always offered to the marketplace by our firm.	0	0	48.3	42.5	9.2	3.61	.652
Our firm works continuously to grow sales volumes.	0	.8	36.7	45.8	16.7	3.78	.724
Our firm continually sets profitability targets.	0	.8	49.2	40.8	9.2	3.58	.668

n = 120 *Mean = (Strongly Disagree = 1 – 1.8; Disagree = 1.9 – 2.6; Neither Agree nor Disagree = 2.7 – 3.4; Agree = 3.5 - 4.2; Strongly Agree = 4.3 – 5.0)

The results in Table 3 indicate that respondents' opinions showed strong convergence, as evidenced by standard deviation values below 2. The highest convergence was on the statement that firms strive to achieve customer satisfaction, with 63.3% of respondents agreeing and 36.7% neither agreeing nor disagreeing (M = 3.87, SD = 0.766). Similarly, 62.5% agreed that firms work continuously to grow sales volumes (M = 3.78, SD = 0.724). On encouraging staff productivity, 62.5% agreed, while 35.8% were neutral, and 1.7% disagreed (M = 3.77, SD = 0.730). However, relatively lower agreement was noted on firms offering high-quality goods (51.7% agreement, M = 3.61, SD = 0.652) and setting profitability targets (50% agreement, M = 3.58, SD = 0.668).

Notable divergence in opinions was observed on firms working toward customer retention (M = 3.36, SD = 0.977) and adopting strategies to capture market share (M = 3.37, SD = 1.070). These findings contrast with Alam (2022), who emphasized the significant influence of supply chain management practices such as customer relationships on enterprise performance. The divergence may indicate variability in practices or perceptions among SMEs in the study. Despite this, the findings align with Kamal et al. (2023), who found that innovation capability mediates the relationship between incremental innovations and business performance, and with Tsou and Chen

(2023), who reported the positive role of digital technology usage in enhancing firm performance through digital transformation strategies.

The study's findings correspond with Oyerinde et al. (2023), who demonstrated that technological innovations, including marketing and entrepreneurial innovativeness, positively affect SME sales growth. Similarly, Jiang and Vannasathid (2023) found that capabilities such as strategic planning and resource allocation positively influence SMEs' financial performance. Mukherjee et al. (2024) reported that integrating the Industrial Internet of Things significantly improves SME performance, while Cheruiyot and Manga (2023) highlighted the favorable association between entrepreneurial orientation and micro and small enterprise performance. These studies underscore the vital role of innovation and entrepreneurial orientation in driving SME performance.

4.2 Regression Analysis

The regression analysis aimed to evaluate the influence of entrepreneurial orientation on SME performance in Nairobi City County, Kenya, with performance measured through stakeholders' satisfaction, production efficiency, sales growth, and product quality. Entrepreneurial orientation was assessed via opportunity search, capital budgeting, proactive processes, and risk appetite. The study hypothesized a positive relationship between entrepreneurial orientation and SME performance. The findings provide empirical support for the theoretical links between entrepreneurial practices and performance, further validating the critical role of entrepreneurial orientation in enhancing SMEs' competitive edge and operational success.

Table 4: ANOVA of the influence of entrepreneurial orientation on the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.742	1	5.742	79.75	0.000[b]
Residual	8.508	118	0.072		
Total	**14.25**	**119**			

In **Table 4** the ANOVA was used to show the overall model significance. Since the p-value is less than 0.05, it indicates that there is a significant relationship between entrepreneurial orientation on the performance of small and medium-sized manufacturing ($F = 79.75$ and p-value <0.05).

Table 4: Regression Coefficients of the Influence of Entrepreneurial Orientation on Performance of Small and Medium-sized manufacturing enterprises in Nairobi City County, Kenya. The following regression model was fitted $Y = 3.154 + 0.219\ X_1$ (*X1 is* entrepreneurial orientation).

The survey findings showed that entrepreneurial orientation positively influenced the performance of small and medium-sized manufacturing enterprises ($\beta_1 = 0.219$, $t = 3.154$, p-value = 0.000). The findings from regression analysis indicated that entrepreneurial orientation had a significant influence on the performance of small and medium-sized manufacturing enterprises. The model indicated that there was a .219-unit improvement in the performance index of small and medium-

sized manufacturing enterprises. Pearson's product-moment correlation coefficient for entrepreneurial orientation and performance of small and medium-sized manufacturing enterprises ($r = .635$, p-value = 0.000) was significant at 0.05 level of significance

The coefficient results showed that the constant had a coefficient of 0.219 suggesting that if entrepreneurial orientation was held constant at zero, the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya would be at 0.219 units. In addition, results showed that the entrepreneurial orientation coefficient was 0.219 indicating that a unit increase in entrepreneurial orientation would result in a 0.219-unit improvement in the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya. It was also noted that the P-value was 0.000 which is less than the set 0.05 significance level indicating that entrepreneurial orientation was significant. Based on these results, the study rejected the null hypothesis and concluded that entrepreneurial orientation has a positive significant influence on the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya.

Moreover, the study findings have a strong effect on entrepreneurial orientation. The study found that customers of small and medium-sized enterprises usually provided feedback on their product quality expectations, which gave the enterprises an upper hand in managing the quality aspects of their manufacturing businesses. The study avers that small and medium-sized manufacturing enterprises always endeavored to create long-lasting relationships with customers to sustain their businesses because of impeccable relationship management with customers. The study also established that small and medium-sized enterprises maintained external visibility for better liaisons with stakeholders and being visible promoted their brand standing and helped in widespread publicity. Additionally, this study found that small and medium-sized manufacturing enterprises pursued better governance and alignment of incentives for them to have better internal systems that are accountable, transparent, and have integrity.

The findings of this study align with Arabeche et al. (2023), who identified a strong link between entrepreneurial orientation and SME performance, with organizational culture as a partial mediating factor in emerging economies. Similarly, Salih et al. (2024) found that aspects of entrepreneurial orientation, such as proactiveness, risk-taking, and flexibility, significantly enhance organizational performance and social engagement. Additionally, the study agrees with Sigey et al. (2023), who observed that entrepreneurial orientation positively but insignificantly influenced SME performance in Kenya, with its impact further diminished in the presence of information technology capability. These findings also correspond with Cheruiyot and Mang'ana (2023), who reported a significant and favorable relationship between entrepreneurial orientation and the performance of micro and small enterprises.

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Table 5: Moderated Coefficient[s]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
1	(Constant)	2.420	.604		4.008	.000
	Entrepreneurial Orientation	.207	.063	.193	3.285	.001
2	(Constant)	2.192	.629		3.483	.001
	Entrepreneurial Orientation*Int1	.250	.080	.257	3.125	.002

a. Dependent Variable: Performance

Table 5 shows moderated coefficients and the fitted moderated regression model was;

$Y = 2.192 + 0.250X_1*M$

The model equation shows that when the moderated variables entrepreneurial orientation * environmental dynamism; and * environmental dynamism are held to a constant zero, the performance of small and medium-sized enterprises would be at a constant value of 2.192.

Where;

Y =Performance of Manufacturing SMEs

X_1= Entrepreneurial Orientation

M_5= Environmental Dynamism

β_0 = Constant

β_1, = Beta coefficients and

ε = Error term

The findings also indicated that moderated entrepreneurial orientation had a positive influence on the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya ($\beta = 0.250$, p-value = 0.002) and the influence was significant since the p-value was less than the designated significance level of 0.05. The introduction of environmental dynamism as a moderating variable on entrepreneurial orientation explained 0.250 units of performance of small and medium-sized manufacturing enterprises compared to 0.207 explained when the variable was not moderated, hence environmental dynamism had a positive influence on entrepreneurial orientation and performance of small and medium-sized manufacturing enterprises.

5.0 Conclusions

This study has illuminated a crucial relationship between entrepreneurial orientation on the performance of small and medium-sized manufacturing enterprises in Nairobi City County, Kenya.

The information derived from the findings shows that entrepreneurial orientation plays an important role in an enterprise's growth as it has been exhibited that firms with strong relationships with their stakeholders, customers, and employees strive for a good working environment and hence better returns. These findings are cherished intuition for entrepreneurs, managers, policymakers, stakeholders within the sector, and existing knowledge.

6.0 Recommendations

The study recommends that small and medium-sized manufacturing enterprises (SMEs) establish strong customer relationships through effective customer relationship management to sustain their businesses. SMEs should also build alliances with technology intermediaries to enhance performance by leveraging technological advancements for improved efficiency and effectiveness. Promoting trust and interdependence among stakeholders is vital for fostering collaboration within the business ecosystem. Additionally, SMEs should promptly address changes in customer preferences, align production processes with supply chain dynamics, and adopt technological advancements to sustain and improve performance. Lastly, it is recommended that SMEs align their operations with market and supply chain changes to maintain optimal balance and continuity in their activities..

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