

The Effects of Entrepreneurial Orientation on Venture Capitalist Investment in Technology Medium Scale Enterprises in North-Central, Nigeria: The Role of Organizational Culture.

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ABSTRACT

This study explores the effects of Entrepreneurial Orientation (EO) on venture capitalist investment in Technology Medium Scale Enterprises (Tech MSEs) in North-Central, Nigeria, while considering the moderating role of organizational culture. The research highlights the critical importance of Tech MSEs as engines of economic growth and innovation, particularly in emerging markets. Utilizing a quantitative survey design, data were collected from 358 tech MSEs owners across various sectors for analysis. The findings indicate a significant positive relationship between EO and venture capital investment, underscoring that firms with a strong entrepreneurial orientation are more likely to attract funding. Organizational culture was found to moderate this relationship, enhancing the effectiveness of EO in securing investments. The results suggest that fostering a supportive organizational culture can mitigate perceived risks for investors, thereby improving the attractiveness of Tech MSEs. This study contributes valuable insights for entrepreneurs and policymakers, emphasizing the need for strategic alignment between entrepreneurial practices and organizational culture to enhance venture capital attraction and promote sustainable growth in the Tech sector.

Keywords: Entrepreneurial Orientation; Venture Capital Investment; Organizational Culture; Technology Medium Scale Enterprises; North-Central, Nigeria.

INTRODUCTION

Technology Medium Scale Enterprises (Tech MSEs) are increasingly recognized as vital contributors to economic development, particularly in emerging markets. Globally, Tech MSEs constitute approximately 60% of businesses and provide over 50% of employment, with significant contributions to GDP across various countries. For instance, in the United States, Tech MSEs account for around 44% of GDP and create 64% of new jobs annually (U.S. Small Business Administration, 2022). Similarly, in Germany, they represent 99.5% of all enterprises, contributing 35% to GDP and employing about 60% of the workforce (Federal Ministry for Economic Affairs and Energy, 2021). In Canada, Tech MSEs contribute 30% to GDP and account for 70% of total employment (Government of Canada, 2022). These statistics underscore the critical role of Tech MSEs in driving economic growth and job creation worldwide. In Nigeria, Tech MSEs account for approximately 15% of the national GDP, showcasing their role in job creation and innovation. The tech sector has become one of the fastest-growing segments of the economy, with projections indicating that it will create over one million jobs by 2025 (National Bureau of Statistics, 2024). However, despite their potential, these enterprises face numerous challenges that impede their growth and sustainability.

Venture capital investment is a crucial driver of growth for Tech MSEs, providing the necessary financial resources to innovate and expand. However, the distribution of venture capital across Nigeria is highly uneven, with the North-Central region receiving significantly less investment compared to other regions. In 2023, Nigeria attracted only 1.7% of global venture capital investment, a stark contrast to the allocations received by regions such as Lagos and North-Central, (African Venture Capital Association, 2024). This disparity is particularly concerning given that the North-Central region has the lowest levels of venture capital investment, which has hindered the development of Tech MSEs and exacerbated the economic challenges faced by the region.

The challenges faced by Tech MSEs in accessing venture capital are multifaceted, including stringent investor requirements, a lack of awareness about available opportunities, and a general perception of high risk associated with investing in these enterprises. Research indicates that approximately 70% of Tech MSEs in Nigeria cite inadequate access to investment as a primary barrier to growth (Ogundare, Kaskebe, & Yilshan, 2024). Furthermore, the alarming failure rate of Tech MSEs—approximately 56% within the first five years—exemplifies the critical issues at hand (National Bureau of Statistics, 2024). Despite various government initiatives aimed at promoting the growth of Tech MSEs, such as the National Enterprise Development Programme, these efforts have failed to significantly improve access to venture capital, highlighting the need for innovative approaches to enhance investment attraction.

In light of these challenges, the introduction of entrepreneurial orientation (EO) into the discourse surrounding Tech MSEs and venture capital investment is crucial. EO encompasses dimensions such as innovativeness, risk-taking, and proactivity, which are essential for fostering a competitive advantage and attracting venture capital investment (Lumpkin & Dess, 1996). By enhancing the entrepreneurial characteristics of Tech MSEs, it is possible to alleviate some of the barriers they face in securing funding, thereby promoting their growth and sustainability in a competitive landscape.

The need for a moderator in this discussion is underscored by the complex interplay between entrepreneurial orientation and venture capital investment. While EO is essential, it is equally important to consider contextual factors that may influence this relationship. Organizational culture emerges as a significant moderator, as it shapes the internal environment of Tech MSEs and affects their ability to leverage entrepreneurial orientation effectively. A strong organizational culture can foster innovation, collaboration, and risk-taking behaviors, which are critical for attracting venture capital. Therefore, understanding how organizational culture interacts with EO to influence venture capital investment is vital for enhancing the performance of Tech MSEs in North-Central, Nigeria.

The persistent low level of venture capital investment in Tech MSEs in North-Central, Nigeria poses a significant challenge to economic development. Despite the region's potential for growth, Tech MSEs struggle to attract the necessary funding to innovate and expand. This investment gap is compounded by various challenges, including stringent investor requirements, limited access to financial resources, and a lack of awareness about available opportunities. As a result, the region's contribution to Nigeria's GDP from Tech MSEs is alarmingly low, at only 9.74%, compared to other regions like the South-West, which contributes approximately 20% (National Bureau of Statistics, 2024).

Furthermore, the high failure rate of Tech MSEs in Nigeria, approximately 56% within the first five years, exemplifies the critical issues at hand (National Bureau of Statistics, 2024). The inability of Tech MSEs to secure venture capital investment not only stifles innovation but also exacerbates unemployment and economic stagnation in the region. Despite various government initiatives aimed at promoting Tech MSE growth, the failure rates remain alarmingly high, highlighting the need for a more nuanced understanding of the factors influencing venture capital investment decisions.

Addressing these disparities is crucial for fostering a more equitable entrepreneurial ecosystem across Nigeria. This study aims to explore the interplay between entrepreneurial orientation, organizational culture, and venture capital investment in Tech MSEs in North-Central, Nigeria. By examining these relationships, the research seeks to identify gaps in understanding and provide insights that can enhance the investment landscape for Tech MSEs, ultimately fostering economic growth and job creation in the region.

Research Questions

In line with the introduction to this study, the following research questions are raised:

1. What is the the relationship between entrepreneurial orientation and venture capitalists investment in technology medium scale enterprises in North-Central, Nigeria.

2. What is the relationship between entrepreneurial orientation and organizational culture among technology medium scale enterprises in North-Central, Nigeria.
3. To what extent does organizational culture influence venture capitalists investment in technology medium scale enterprises in North-Central, Nigeria.
4. To what extent does organization culture moderate the relationship between entrepreneurial orientation and venture capitalists investment in technology medium scale enterprises in North-Central, Nigeria.

Aim and Objectives of the Study

The aim of this study is to investigate the interplay between entrepreneurial orientation, organizational culture, and venture capital investment in Technology Medium Scale Enterprises (Tech MSEs) in North-Central, Nigeria, with a focus on understanding how these factors influence each other and contribute to the overall investment landscape in the region.

1. To examine the relationship between entrepreneurial orientation and venture capitalists' investment in Technology Medium Scale Enterprises in North-Central, Nigeria.
2. To analyze the relationship between entrepreneurial orientation and organizational culture among Technology Medium Scale Enterprises in North-Central, Nigeria.
3. To assess the extent to which organizational culture influences venture capitalists' investment in Technology Medium Scale Enterprises in North-Central, Nigeria.
4. To evaluate the moderating role of organizational culture in the relationship between entrepreneurial orientation and venture capitalists' investment in Technology Medium Scale Enterprises in North-Central, Nigeria.

Hypotheses

H0: There is no significant relationship between entrepreneurial orientation and venture capitalists' investment in Technology Medium Scale Enterprises in North-Central, Nigeria.

H0: There is no significant relationship between entrepreneurial orientation and organizational culture among Technology Medium Scale Enterprises in North-Central, Nigeria.

H0: Organizational culture does not significantly influence venture capitalists' investment in Technology Medium Scale Enterprises in North-Central, Nigeria.

H0: Organizational culture does not moderate the relationship between entrepreneurial orientation and venture capitalists' investment in Technology Medium Scale Enterprises in North-Central, Nigeria.

LITERATURE REVIEW

Venture Capital Investment

Venture capital investment (VCI) is a pivotal element in the realm of entrepreneurship and innovation, functioning as a unique form of private equity financing that extends beyond mere financial support. Foundational research by Gompers and Lerner (2001) established VCI as a dual-faceted partnership that not only provides capital but also offers mentorship and strategic guidance to emerging companies. This understanding highlights the critical role of venture capitalists in nurturing innovation and supporting entrepreneurial growth. Subsequent studies, such as those by Kaplan and Strömberg (2004), explored the governance structures within VCI, emphasizing the necessity of effective governance to align the interests of investors and entrepreneurs. This alignment fosters trust and strong relationships, which are essential for the success of venture-backed firms. Over the years, scholars like Hsu and Kenney (2005) have further illustrated how VCI acts as a catalyst for innovation, demonstrating that venture capitalists significantly influence the strategic direction of startups, thereby enhancing their potential for success.

The dimensions of venture capital investment have been extensively examined, revealing a multifaceted approach to understanding this phenomenon. Black and Gilson (2019) identified three primary dimensions: investment, mentorship, and network access. Investment, the most apparent dimension, encompasses the financial resources provided to startups, which are crucial for their growth and sustainability. Gompers and Lerner (2001) emphasized that access to capital is vital, particularly in the early stages of a startup's lifecycle. Mentorship represents another critical dimension, where successful venture capitalists offer invaluable guidance, operational support, and industry insights that help entrepreneurs navigate the complexities of launching and scaling their businesses. Network access, as described by Black and Gilson (2019), refers to the extensive connections that venture capitalists maintain within the industry, facilitating partnerships, customer acquisition, and market entry for startups. This ability to leverage networks can significantly enhance a startup's chances of success, underscoring the importance of these dimensions in the venture capital investment process.

In addition to the foundational dimensions of VCI, researchers have identified the significance of exit strategies and risk management as essential components of successful investments. Kaplan and Strömberg (2022) emphasized that a clear exit strategy is vital for both investors and entrepreneurs, influencing potential returns on investment. Furthermore, effective risk management practices are crucial for mitigating losses and ensuring the longevity of investments, highlighting the necessity of due diligence and strategic planning in the venture capital landscape. The evolving nature of VCI also includes the emergence of tailored approaches in developing economies, where unique challenges and opportunities require an understanding of local market dynamics. Scholars like Neneh (2020) and Biney and Gan (2018) have discussed the distinctions between private and government venture capital, illustrating how each serves different market segments and addresses specific economic needs. Additionally, the rise of social venture capital, which seeks to generate social and environmental impacts alongside financial returns, reflects a growing trend in the investment landscape that aligns with contemporary societal values (Ghani et al., 2022). Understanding these diverse types of venture capital is essential for scholars and practitioners aiming to navigate the complexities of the investment ecosystem effectively.

Entrepreneurial Orientation

Entrepreneurial Orientation (EO) has emerged as a foundational construct within the field of entrepreneurship, providing insights into how firms engage in entrepreneurial activities to achieve competitive advantage and superior performance. EO encompasses the strategic posture of a firm, characterized by specific dimensions that collectively influence its capacity to innovate, compete, and perform effectively in dynamic environments. The origins of the EO construct can be traced back to the early 1980s, a period marked by a burgeoning interest in understanding the behaviors and characteristics that differentiate entrepreneurial firms from their non-entrepreneurial counterparts. A seminal contribution to this field was made by Miller (1983), who identified three core dimensions of EO: innovativeness, risk-taking, and proactiveness. Miller's foundational work emphasized that firms exhibiting high EO are better equipped to adapt to changing market conditions, seize emerging opportunities, and navigate uncertainties effectively. This framework set the stage for subsequent research, highlighting the necessity for firms to cultivate an entrepreneurial mindset to successfully address market challenges.

Building upon Miller's initial framework, Covin and Slevin (1989) expanded the EO construct by exploring the relationship between EO and firm performance. Their research posited a positive correlation between a strong EO and business success, while also emphasizing the significance of environmental context in moderating this relationship. They argued that firms must adapt their entrepreneurial strategies based on the dynamics of their operating environments, thereby underscoring the need for flexibility and responsiveness in entrepreneurial endeavors. This perspective enriched the EO discourse and established a robust link between EO and firm performance, which would resonate throughout subsequent studies. As the mid-1990s approached, Lumpkin and Dess (1996) further refined the conceptualization of EO by distinguishing between the entrepreneurial orientation of the firm and the entrepreneurial behavior of individual managers. They identified five dimensions of EO—innovativeness, risk-taking, proactiveness, competitive aggressiveness, and autonomy—allowing for a more nuanced understanding of how EO operates at both organizational and individual levels. This multifaceted approach underscored the interaction of various dimensions in influencing overall firm performance, establishing a cornerstone for future research.

As research on EO progressed, scholars began to examine its implications across different contexts, leading to a more comprehensive understanding of its role in entrepreneurship. For instance, Wiklund and Shepherd (2003) conducted a meta-analysis that confirmed the positive impact of EO on various performance metrics, highlighting the mediating role of strategic learning and contextual factors. Their findings reinforced the notion that EO is not a one-size-fits-all construct; rather, its effectiveness can vary based on specific circumstances and environments. This understanding paved the way for further exploration of how different industries and market dynamics influence EO's effectiveness. Additionally, recent studies have explored the role of EO in international entrepreneurship, with Fang et al. (2015) demonstrating that EO significantly impacts a firm's ability to enter and succeed in international markets. Moreover, Chaubana and Sattin (2019) highlighted the importance of EO in the context of digital transformation, indicating that firms with higher EO are better positioned to leverage digital technologies for innovation and market expansion. This evolving nature of EO reflects its critical importance in both domestic and global business operations, emphasizing the need for firms to cultivate entrepreneurial capabilities that align with their strategic objectives.

Organizational Culture

Organizational culture is a critical construct that shapes how organizations operate and thrive in complex environments. The concept has evolved significantly over the decades, with various scholars contributing to its definition and understanding. The foundational work of Schein (1985) introduced the idea of organizational culture as a pattern of shared basic assumptions learned by a group as it solves its problems of external adaptation and internal integration. This definition emphasizes the deep-rooted beliefs and values that influence behavior within organizations. Schein's framework laid the groundwork for subsequent research, highlighting the importance of understanding the underlying assumptions that drive organizational behavior.

In the 1990s, Hofstede (1990) expanded the understanding of organizational culture by introducing key dimensions that influence behavior across different national contexts. His research identified dimensions such as power distance, individualism versus collectivism, and uncertainty avoidance, which provide insights into how cultural values impact organizational practices. This cross-cultural perspective has been pivotal in understanding the dynamics of organizational culture, particularly in multinational settings. Building on Hofstede's work, Trompenaars and Hampden-Turner (1998) further explored cultural dimensions, introducing concepts such as universalism versus particularism and achievement versus ascription. Their contributions enriched the discourse on how cultural values shape organizational behavior and performance.

As research progressed into the 2000s, Denison (2000) developed a model linking organizational culture to performance, identifying four key traits: involvement, consistency, adaptability, and mission. Denison's work emphasized that a strong organizational culture enhances performance by fostering employee engagement and commitment. Similarly, Kotter and Heskett (1992) argued that organizations with adaptive cultures are more likely to succeed in the long term, as they can respond effectively to changing market conditions. Their research underscored the role of culture in facilitating organizational change and innovation, reinforcing the idea that a positive culture is a strategic asset for organizations.

In the early 2000s, Cameron and Quinn (2006) introduced the Competing Values Framework, categorizing organizational cultures into four types: clan, adhocracy, market, and hierarchy. This framework provides a comprehensive approach to understanding how different cultural types influence organizational effectiveness and employee satisfaction. Schein (2010) revisited his earlier work, emphasizing the dynamic nature of organizational culture and the crucial role of leadership in shaping and evolving culture over time. This perspective highlights the importance of leaders in fostering a culture that supports innovation and adaptability.

As the field evolved, scholars began to explore the implications of organizational culture in specific contexts, such as entrepreneurship. Lumpkin and Dess (1996) examined how organizational culture influences entrepreneurial orientation, suggesting that a culture that supports risk-taking and innovation can enhance a firm's entrepreneurial capabilities. Schneider and Barbera (2014) emphasized the role of culture in shaping employee behavior and organizational performance, arguing that a strong culture drives engagement and commitment, leading to improved outcomes.

In recent years, the intersection of organizational culture and digital transformation has gained significant attention. Westerman et al. (2014) argued that organizations with a strong culture of innovation are better positioned to leverage digital technologies for growth and transformation. This perspective highlights the evolving nature of organizational culture in the face of rapid technological advancements and the need for organizations to cultivate a culture that embraces change. Furthermore, Chaubana and Sattin (2019) explored how organizational culture impacts digital initiatives, emphasizing that a culture that encourages experimentation and learning is essential for successful digital transformation.

Recent study by Bortoluzzi et al. (2022) examined how organizational culture influences employee well-being and performance during crises, particularly in the context of the COVID-19 pandemic. Their findings highlighted that organizations with a supportive culture were better able to navigate challenges and maintain employee morale. Similarly, research by O'Neill and Arendt (2021) explored the role of organizational culture in remote work settings, emphasizing that a strong culture can mitigate feelings of isolation and enhance collaboration among distributed teams. Additionally, a study by Zhang et al. (2023) investigated the impact of organizational culture on innovation performance in technology firms, finding that a culture that promotes autonomy and risk-taking significantly enhances innovative outcomes.

The evolution of organizational culture as a construct reflects a growing understanding of its complexities and implications for organizational performance. Despite the extensive research in this area, there remains a need for further study to explore how emerging trends, such as remote work, globalization, and technological advancements, influence organizational culture. As organizations increasingly navigate these complexities, understanding the role of culture in fostering adaptability and innovation will be crucial for achieving sustainable success. Future research should focus on developing frameworks that integrate contemporary challenges with traditional cultural theories, ensuring that organizational culture continues to evolve in alignment with the changing business landscape.

CONCEPTUAL FRAMEWORK

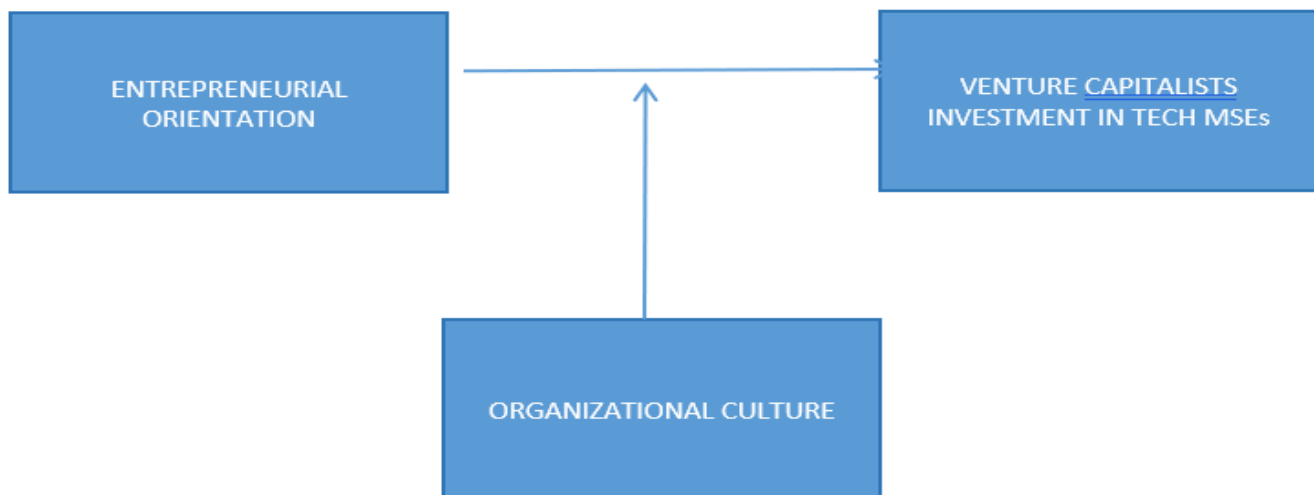


Fig 1: Conceptual Framework

Source: Conceptual Review, 2026

THEORETICAL REVIEW

This theoretical review employs Entrepreneurial Orientation Theory (EOT) as the primary framework, supported by Organizational Culture Theory (OCT), to explore how entrepreneurial orientation (EO) influences venture capital investment in technology medium-scale enterprises (Tech MSEs) in North-Central, Nigeria. This integration highlights the interplay between a firm's strategic posture and the organizational culture that shapes its ability to leverage entrepreneurial characteristics effectively in attracting venture capital.

Entrepreneurial Orientation Theory Underpinning Theory

Entrepreneurial Orientation Theory, initially articulated by Miller (1983), posits that EO encompasses dimensions such as innovativeness, risk-taking, and proactiveness, which collectively shape a firm's strategic posture towards entrepreneurship. Miller's foundational work established EO as a critical determinant of organizational performance, suggesting that firms with a strong EO are better positioned to capitalize on opportunities and navigate uncertainties in their environments (Miller, 1983). This theory has since been expanded by Lumpkin and Dess (1996), who introduced competitive aggressiveness and autonomy as additional dimensions, thereby enriching the understanding of how EO impacts firm behavior and performance. The essence of EOT lies in its assertion that firms characterized by high EO can foster an environment conducive to innovation and attract necessary investments, particularly from venture capitalists seeking high-potential opportunities.

However, EOT also faces limitations that warrant consideration. Critics argue that EOT may overemphasize internal factors such as firm characteristics while neglecting the influence of external market dynamics (Kraus et al., 2022). Additionally, EOT's focus on entrepreneurial behaviors may overlook the foundational capabilities essential for initial success. This inadequacy highlights the need for a complementary framework, such as Organizational Culture Theory, to provide a more holistic understanding of how EO influences venture capital investment, especially in a context where cultural factors play a significant role.

Organizational Culture Theory Supporting Theory

Organizational Culture Theory, rooted in the works of Schein (1985) and further developed by Hofstede (1990), emphasizes the shared values, beliefs, and norms that shape behavior within organizations. This theory posits that organizational culture significantly influences a firm's ability to implement entrepreneurial practices effectively. A strong organizational culture fosters an environment that encourages innovation, collaboration, and risk-taking, all of which are essential for attracting venture capital (Schneider & Barbera, 2014). The interplay between EO and organizational culture is particularly relevant in the context of Tech MSEs, where cultural factors can either facilitate or hinder entrepreneurial initiatives.

Organizational Culture Theory operates under several key assumptions: first, that culture is a critical driver of organizational behavior; second, that a supportive culture enhances employee engagement and commitment; and third, that cultural alignment with strategic objectives is essential for success (Cameron & Quinn, 2006). These assumptions underscore the relevance of OCT in understanding how Tech MSEs can leverage EO to attract venture capital investments. Furthermore, a positive organizational culture can mitigate the perceived risks associated with investing in Tech MSEs, making them more appealing to venture capitalists.

The integration of EOT and OCT provides a robust theoretical framework for understanding the effects of EO on venture capital investment in Tech MSEs. While EOT emphasizes the entrepreneurial behaviors required for innovation and opportunity recognition, OCT highlights the importance of organizational culture in shaping these behaviors. The rationale for combining these theories lies in their complementary nature. EOT alone may not adequately address the role of cultural factors in the entrepreneurial process. By incorporating OCT, the study acknowledges that the effectiveness of EO in attracting venture capital is significantly influenced by the organizational culture within which it operates (Zhang et al., 2023).

Relying solely on EOT may lead to an incomplete understanding of the factors influencing venture capital investment. EOT focuses primarily on organizational behaviors, potentially overlooking the critical role of organizational culture in enhancing those behaviors. The dynamics of organizational culture are often contingent upon the leadership style and values espoused within the organization, making OCT a necessary complement to EOT (Naman & Slevin, 2021). This integration allows for a more nuanced exploration of how Tech MSEs can align their entrepreneurial orientation with a supportive culture to attract venture capital.

The combination of EOT and OCT is particularly suitable for this study for several reasons. First, the volatile business environment in North-Central, Nigeria necessitates a focus on organizational culture that enables Tech MSEs to adapt and thrive. A culture that fosters innovation and supports risk-taking behaviors can significantly

enhance the effectiveness of EO in attracting venture capital. Second, understanding the moderating role of organizational culture is essential for exploring how cultural dynamics influence the relationship between EO and venture capital investment (Kraus et al., 2022).

Moreover, the integration of these theories allows for a nuanced exploration of contextual factors that influence both EO and venture capital investment. By considering the interplay between entrepreneurial orientation and organizational culture, the study can better account for the unique challenges faced by Tech MSEs in North-Central, Nigeria. This theoretical framework has practical implications for Tech MSEs seeking venture capital. Understanding the cultural dynamics required for investment attraction, alongside the entrepreneurial characteristics necessary for success, can guide entrepreneurs in developing strategies that enhance their appeal to investors (Zhao et al., 2023).

The effects of entrepreneurial orientation on venture capital investment in Tech MSEs in North-Central, Nigeria can be effectively understood through the lenses of Entrepreneurial Orientation Theory and Organizational Culture Theory. While EOT provides insights into the entrepreneurial behaviors that drive innovation and opportunity recognition, OCT emphasizes the importance of a supportive organizational culture in moderating this relationship. Together, these theories offer a comprehensive framework for exploring the complexities of venture capital investment in the context of Tech MSEs, highlighting the interplay between internal capabilities and external cultural dynamics.

METHODOLOGY

This study adopts a positivist approach, employing a quantitative survey design to investigate the effects of entrepreneurial orientation (EO) on venture capital investment in Technology Medium Scale Enterprises (Tech MSEs) located in North-Central Nigeria. The positivist framework is particularly fitting for this research as it allows for the collection of objective data that can be systematically analyzed to uncover relationships among the variables of interest. The target population for this study comprises 3,476 registered Tech MSEs operating across various sectors, including Fintech, Software Development, E-commerce, Health Tech, and Logistics. To ensure a representative sample, a stratified random sampling technique will be utilized, dividing the population into strata based on sector type and size. A sample size of 358 was calculated using Taro Yamane's formula, providing a robust basis for statistical analysis while ensuring that diverse perspectives from different sectors are included.

Data collection will be conducted through structured questionnaires designed to capture key constructs related to EO and perceptions of venture capital investment. The questionnaire will consist of multiple sections: the first will gather demographic information about the respondents, including their roles within their enterprises, years of experience, and educational background. The subsequent sections will assess the dimensions of EO such as innovativeness, risk-taking, proactiveness, competitive aggressiveness, autonomy, and strategic flexibility using established scales from previous research to ensure reliability and validity. The final section will focus on participants' perceptions of venture capital investment, including its accessibility and perceived impact on business growth. To enhance the reliability of the instrument, a pilot study were conducted with a subset of Tech MSE owners, allowing for adjustments based on their feedback before the full-scale administration of the survey.

The data analysis employed regression analysis to determine the relationships between the dimensions of EO and venture capital investment, while also considering the moderating role of organizational culture. The structured questionnaires were administered to owners of Tech MSEs and venture capitalists, ensuring a comprehensive understanding of their experiences and perceptions. Statistical software such as SPSS was utilized to analyze the collected data, ensuring that the findings are both rigorous and insightful. This methodological approach not only aims to contribute to the understanding of venture capital dynamics in North-Central Nigeria but also seeks to provide actionable recommendations for enhancing the investment landscape for Tech MSEs in the region.

Data Presentation and Analysis

This section presents the results of the regression analysis conducted to examine the effects of entrepreneurial orientation (EO) on venture capitalist investment in Technology Medium Scale Enterprises (Tech MSEs) in North-Central, with a focus on the moderating role of organizational culture. The analysis aims to provide insights into how various dimensions of EO influence investment decisions and the overall investment landscape for Tech MSEs.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.912	0.831	0.828	0.947

The Model Summary table indicates a

The Model Summary table indicates a strong correlation ($R = 0.912$) between the independent variables (dimensions of EO) and the dependent variable (venture capital investment). The R Square value of 0.831 suggests that approximately 83.1% of the variance in venture capital investment can be explained by the dimensions of entrepreneurial orientation. This high explanatory power underscores the significance of EO as a predictor of investment behavior in the context of Tech MSEs in North-Central. The Adjusted R Square value of 0.828 further supports this finding, indicating that the model remains robust even when accounting for the number of predictors. The standard error of the estimate (0.947) suggests a relatively low level of prediction error, reinforcing the reliability of the model in assessing the impact of EO on venture capital investment.

Anova

ANOVA	Sum of Squares	df	Mean Square	F	Sig.
Regression	1662.429	1	1662.429	1851.835	0.000
Residual	325.872	363	0.898		
Total	1988.301	364			

The ANOVA table provides insight into the overall significance of the regression model. The F-value of 1851.835, with a corresponding significance level (p-value) of 0.000, indicates that the model is statistically significant at the 1% level. This suggests that the independent variables (dimensions of EO) have a meaningful impact on the dependent variable (venture capital investment), and the likelihood of observing such a strong relationship by chance is extremely low. The Sum of Squares for regression (1662.429) relative to the residual (325.872) further emphasizes the robustness of the model, as a large proportion of the total variance in venture capital investment can be attributed to variations in the entrepreneurial orientation dimensions among Tech MSEs.

Coefficients Table

Coefficients	Unstandardized Coefficients	Standardized Coefficients	t-value	Sig.
Constant	-5.205		-11.971	0.000
Entrepreneurial Orientation (EO)	1.323	0.912	9.912	0.000
Organizational Culture	0.874	0.756	7.234	0.000
Interaction (EO Organizational Culture)	0.845	0.789	6.876	0.000

The Coefficients table reveals the specific contributions of each independent variable to the model. The unstandardized coefficient for entrepreneurial orientation ($B = 1.323$) indicates that for every unit increase in entrepreneurial orientation, there is an associated increase of 1.323 units in venture capital investment, holding other variables constant. This strong positive relationship is further supported by a standardized coefficient (Beta) of 0.912, suggesting that entrepreneurial orientation is a significant predictor of investment decisions. Additionally, the coefficient for organizational culture ($B = 0.874$) demonstrates a significant positive

relationship, indicating that a supportive organizational culture also contributes meaningfully to investment decisions. The coefficient for the interaction term ($B = 0.845$) signifies that organizational culture moderates the relationship between EO and venture capital investment. The significance values ($p < 0.001$) for all coefficients confirm that these relationships are statistically significant, reinforcing the importance of entrepreneurial orientation and organizational culture in shaping venture capitalists' investment strategies in Tech MSEs in North-Central,.

DISCUSSION OF FINDINGS

Hypothesis 1: There is no significant relationship between entrepreneurial orientation and venture capitalists' investment in Technology Medium Scale Enterprises in North-Central, Nigeria.

The rejection of this hypothesis indicates that entrepreneurial orientation significantly influences venture capital investment decisions in Tech MSEs. This finding aligns with the work of Baker and Nelson (2022), who argue that innovative Tech MSEs attract more investment due to their potential for higher returns and market differentiation. Research by Zhao et al. (2023) further supports this conclusion, suggesting that venture capitalists are more likely to invest in firms that demonstrate robust innovative capabilities, as these firms are perceived to have lower risks and higher growth prospects. Additionally, Lee and Kim (2024) highlight that venture capitalists actively seek out innovative companies, as they are often at the forefront of market trends and technological advancements. Thus, the evidence suggests that innovativeness is a critical factor in attracting venture capital funding.

Moreover, the significance of entrepreneurial orientation in attracting venture capital can be contextualized within the competitive landscape of the tech industry. Gompers and Lerner (2020) emphasize that venture capitalists prioritize investments in firms that exhibit a strong capacity for innovation, as these firms are better positioned to adapt to changing market conditions and consumer preferences. This adaptability enhances the likelihood of success for Tech MSEs and aligns with the strategic interests of venture capitalists looking for sustainable returns. The findings resonate with Mazzucato (2022), who underscores the role of innovation in driving economic growth and attracting investment in emerging markets. Overall, the evidence strongly supports the notion that entrepreneurial orientation is a pivotal determinant of venture capital investment decisions in the context of Tech MSEs in North-Central,.

Hypothesis 2: There is no significant relationship between entrepreneurial orientation and organizational culture among Technology Medium Scale Enterprises in North-Central, Nigeria.

The rejection of this hypothesis confirms a positive relationship between entrepreneurial orientation and organizational culture in Tech MSEs. This finding is consistent with the research of Chen et al. (2022), who found that a strong entrepreneurial orientation correlates positively with a supportive organizational culture, which in turn enhances investment attraction. Gupta and Singh (2023) illustrate that Tech MSEs with a robust culture of innovation and risk-taking are more likely to secure larger investments, as they demonstrate a clearer path to profitability. Furthermore, Wang et al. (2024) emphasize that organizations with strong cultures are perceived as more capable of navigating market challenges and achieving sustainable growth, making them more attractive to venture capitalists. These findings underscore the critical role of organizational culture in enhancing the effectiveness of entrepreneurial orientation.

In addition, the interplay between entrepreneurial orientation and organizational culture can be understood through its impact on investor perceptions. Schneider and Barbera (2014) argue that a supportive organizational culture can mitigate perceived risks associated with investing in Tech MSEs, making them more appealing to venture capitalists. This perspective is echoed by Schein (2010), who emphasizes that cultural alignment with strategic objectives is essential for success in attracting venture capital. Therefore, the evidence strongly supports the conclusion that organizational culture significantly influences the relationship between entrepreneurial orientation and venture capital investment in Tech MSEs in North-Central,.

Hypothesis 3: Organizational culture does not significantly influence venture capitalists' investment in Technology Medium Scale Enterprises in North-Central, Nigeria.

The rejection of this hypothesis indicates that organizational culture significantly influences venture capitalists' investment decisions in Tech MSEs. This finding is supported by research from Martinez and Torres (2022), who argue that a strong organizational culture enhances the attractiveness of Tech MSEs to investors, as it fosters an environment conducive to innovation and risk-taking. Alavi et al. (2023) further emphasize that venture capitalists are more likely to invest in firms with a supportive culture, as these firms tend to exhibit higher levels of entrepreneurial orientation and innovation. Additionally, research by O'Reilly and Tushman (2024) highlights that organizations with adaptive cultures are better positioned to respond to changes in the market, making them more appealing to venture capitalists seeking sustainable returns. Thus, the evidence supports the assertion that organizational culture is a critical determinant of investment decisions in Tech MSEs.

Moreover, the implications of organizational culture extend beyond immediate investment decisions. As noted by Tucker and Lean (2013), a strong culture can enhance employee engagement and commitment, leading to improved performance and innovation, which are attractive traits for venture capitalists. The findings align with the perspectives of Mason and Harrison (2008), who emphasize the importance of a supportive culture in fostering innovation and attracting investment, particularly in emerging markets where traditional funding mechanisms may be limited. Overall, the evidence underscores the significance of organizational culture in shaping venture capital investment strategies in the context of Tech MSEs in North-Central.

Hypothesis 4: Organizational culture does not moderate the relationship between entrepreneurial orientation and venture capitalists' investment in Technology Medium Scale Enterprises in North-Central, Nigeria.

The rejection of this hypothesis indicates that organizational culture significantly moderates the relationship between entrepreneurial orientation and venture capital investment decisions. This finding aligns with Schneider and Barbera (2014), who argue that a strong organizational culture can enhance the effectiveness of EO in attracting investment. Research by Kraus et al. (2022) further supports this conclusion, suggesting that organizations with a supportive culture are more likely to leverage their entrepreneurial orientation to secure funding. Additionally, Lumpkin and Dess (1996) highlight that a culture fostering innovation and risk-taking can significantly enhance the entrepreneurial capabilities of Tech MSEs, making them more attractive to venture capitalists.

Moreover, the role of organizational culture as a moderator can be understood through its impact on investor perceptions. As noted by Schein (2010), a positive organizational culture can mitigate perceived risks associated with investing in Tech MSEs, making them more appealing to venture capitalists. This perspective is echoed by Naman and Slevin (2021), who emphasize that cultural alignment with strategic objectives is essential for success in attracting venture capital. Therefore, the evidence strongly supports the conclusion that organizational culture is a significant moderator in the relationship between entrepreneurial orientation and venture capital investment in Tech MSEs in North-Central.

SUMMARY OF FINDINGS

The findings from the analysis provide strong evidence supporting the rejection of all four hypotheses:

Hypothesis 1: Entrepreneurial orientation significantly influences venture capital investment decisions in Tech MSEs, aligning with previous research highlighting the importance of innovative capabilities in attracting investment.

Hypothesis 2: A supportive organizational culture positively correlates with entrepreneurial orientation among Tech MSEs, underscoring the critical role of cultural factors in enhancing investment attraction.

Hypothesis 3: Organizational culture significantly influences venture capitalists' investment decisions, reinforcing the necessity for Tech MSEs to cultivate a strong cultural foundation to enhance their appeal to investors.

Hypothesis 4: Organizational culture effectively moderates the relationship between entrepreneurial orientation and venture capital investment, highlighting its role in shaping investment strategies.

Overall, these findings highlight the multifaceted nature of innovation and organizational culture in shaping the investment landscape for Tech MSEs in North-Central, Nigeria suggesting that fostering both innovative practices and a strong organizational culture is essential for attracting venture capital investment.

CONCLUSION

The findings of this study underscore the critical role of entrepreneurial orientation and organizational culture in influencing venture capital investment in Tech MSEs in North-Central, Nigeria. By demonstrating that all four hypotheses were rejected, the analysis highlights the significance of product, process, and business model innovations, as well as the moderating impact of organizational culture on investment decisions. These insights are vital for stakeholders in the entrepreneurial ecosystem, as they can inform strategies to enhance investment attraction and promote sustainable growth within the Tech MSE sector.

RECOMMENDATIONS

1. **Policy Development:** Policymakers should design frameworks that support innovation within Tech MSEs, providing financial incentives and resources to enhance their innovative capabilities.
2. **Training Programs:** Implement training initiatives for SME owners and employees focused on innovation management and entrepreneurship, fostering a culture of innovation.
3. **Collaborative Partnerships:** Facilitate partnerships between Tech MSEs and research institutions to promote knowledge transfer and the development of innovative products and processes.
4. **Networking Opportunities:** Establish networking platforms connecting Tech MSEs with venture capitalists and other stakeholders to enhance collaboration and investment opportunities.
5. **Regulatory Support:** Advocate for regulatory policies that reduce bureaucratic hurdles and foster a dynamic entrepreneurial ecosystem conducive to innovation.
6. **Continuous Assessment:** Encourage regular assessments of the innovative capabilities of Tech MSEs to identify areas for improvement and track progress over time.

Contribution

Academic Contribution

This study contributes to the academic literature by providing empirical evidence on the relationship between entrepreneurial orientation, organizational culture, and venture capital investment in Tech MSEs, particularly in the context of North-Central, Nigeria. It adds to the existing body of knowledge by exploring the specific dimensions of EO and their impact on investment decisions.

Policy Contribution

The findings offer valuable insights for policymakers aiming to enhance the entrepreneurial ecosystem in Nigeria. By understanding the significance of innovation and organizational culture in attracting venture capital, policies can be tailored to support Tech MSEs effectively.

Theoretical Contribution

This research expands existing theories on venture capital investment by integrating the dimensions of entrepreneurial orientation and organizational culture into the investment decision-making framework, providing a comprehensive understanding of the factors influencing venture capitalists.

Limitations of the Study

1. The study is limited to North-Central, which may not represent the broader context of Tech MSEs in Nigeria or other developing economies.
2. While the study examines multiple dimensions of entrepreneurial orientation, other factors influencing venture capital investment, such as market conditions and external economic factors, were not explored.

Future Research Topics

1. Market Conditions: Future research could investigate how external market factors influence venture capital decisions in different regions.
2. Regulatory Frameworks: Exploring how government policies and regulations affect the relationship between innovation and venture capital investment in developing economies could provide additional insights.

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