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STRATEGIC CAPABILITIES AND ORGANIZATIONAL PERFORMANCE: THE ROLE OF ENTREPRENEURIAL ORIENTATION, MARKET ORIENTATION, AND LEADERSHIP QUALITIES AMONG BUMIPUTERA SMES IN SABAH, MALAYSIA

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ABSTRACT
Small and medium enterprises (SMEs) play a crucial role in Malaysia's economic development, particularly in regions such as Sabah where SMEs contribute significantly to employment generation and local economic growth. However, many SMEs continue to face challenges in sustaining organizational performance due to limited strategic capabilities and managerial resources. Drawing on the Resource-Based View (RBV), this study examines the relationships between Entrepreneurial Orientation (EO), Market Orientation (MO), Leadership Qualities (LQ), and Organizational Performance (OP) among Bumiputera SMEs in Sabah, Malaysia. A quantitative research design was adopted using survey data collected from 513 SME owners across 22 districts in Sabah. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the hypothesized relationships. The findings reveal that entrepreneurial orientation significantly influences all dimensions of market orientation, including customer orientation, competitor orientation, inter-functional coordination, and profit orientation. Market orientation was found to positively affect organizational performance and mediates the relationship between entrepreneurial orientation and performance. Furthermore, leadership qualities moderate selected relationships between market orientation and organizational performance, particularly strengthening the effect of customer orientation on firm performance. These results suggest that SMEs that effectively integrate entrepreneurial initiatives with strong market orientation and leadership capabilities are better positioned to achieve sustainable organizational performance. The study contributes to the entrepreneurship and strategic management literature by providing empirical evidence from the context of Bumiputera SMEs in Sabah and offers practical insights for policymakers and SME development programs aimed at strengthening entrepreneurial ecosystems in emerging regional economies.

JEL classification: *L26, M13, M21*
Keywords: *entrepreneurial orientation; leadership qualities; market orientation; organizational performance; SMEs in Sabah*

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1. INTRODUCTION

Small and Medium Enterprises (SMEs) play a crucial role in economic development by contributing to employment generation, innovation, and regional economic growth. In Malaysia, SMEs represent a significant proportion of business establishments and serve as an important driver of national productivity and competitiveness. Despite their economic importance, many SMEs face persistent challenges related to limited resources, market competition, and strategic capability development. These challenges are particularly evident among Bumiputera-owned SMEs, which often encounter structural constraints that limit their growth potential and long-term sustainability. Consequently, understanding the strategic capabilities that influence SME performance has become an important area of academic and policy interest.

Recent scholarly literature emphasizes that organizational performance in SMEs is strongly influenced by the alignment of strategic orientations and leadership capabilities. Among the most widely studied constructs in this domain are Entrepreneurial Orientation (EO), Market Orientation (MO), and Leadership Qualities (LQ). These constructs represent complementary organizational capabilities that enable firms to innovate, respond to market changes, and maintain competitive advantage in dynamic environments. SMEs that successfully integrate entrepreneurial initiatives with market intelligence and effective leadership are more likely to achieve superior performance outcomes (Hamzah, 2025; Nguyen et al., 2025).

Entrepreneurial orientation refers to a firm's strategic posture characterized by innovativeness, proactiveness, and risk-taking behavior. Firms that exhibit strong entrepreneurial orientation are more inclined to pursue new opportunities, experiment with innovative products or services, and adopt proactive strategies to outperform competitors. Prior research indicates that EO enhances firm adaptability and competitiveness by enabling organizations to explore emerging opportunities and respond effectively to environmental uncertainty (Sarwoko et al., 2023). In the context of SMEs, entrepreneurial orientation also facilitates strategic experimentation and innovation, which are essential for sustaining growth and improving organizational performance.

Complementing entrepreneurial orientation, Market Orientation (MO) represents a firm's capability to generate and utilize market intelligence related to customers and competitors. Market-oriented firms actively monitor market trends, identify customer needs, and coordinate internal activities to deliver superior value. This orientation enables organizations to align their strategies with changing market demands and competitive conditions. Empirical studies have demonstrated that MO contributes significantly to improved firm performance by strengthening customer satisfaction, brand loyalty, and competitive positioning (Nguyen et al., 2025). When entrepreneurial initiatives are supported by strong market intelligence, SMEs are better positioned to innovate and maintain sustainable growth.

Recent research also highlights the synergistic relationship between EO and MO. Rather than functioning independently, these strategic orientations operate as complementary capabilities that jointly influence organizational performance. Firms that simultaneously pursue innovation while maintaining strong customer and competitor awareness are more capable of developing sustainable competitive advantages (Sarwoko et al., 2023). This integration allows SMEs to balance opportunity-seeking behaviors with market-driven strategies, thereby improving strategic decision-making and resource allocation.

In addition to strategic orientations, Leadership Qualities (LQ) play a critical role in shaping organizational outcomes. Leadership influences how effectively entrepreneurial and market-oriented strategies are implemented within organizations. Strategic and transformational leadership styles have been widely identified as important drivers of innovation, organizational learning, and strategic alignment. Leaders who demonstrate strong ethical values, communication skills, and strategic vision are better able to motivate employees and foster a supportive organizational environment that encourages innovation and collaboration (AlSafadi & Aljubran, 2026). Furthermore, transformational leadership behaviors have been shown to strengthen the relationship between entrepreneurial orientation and business performance by inspiring employees and facilitating strategic change within organizations (Jayasooriya et al., 2025).

The interaction between EO, MO, and leadership qualities ultimately shapes Organizational Performance (OP). Contemporary research increasingly supports a holistic perspective in which these factors are viewed as interconnected strategic capabilities rather than isolated constructs. SMEs that integrate entrepreneurial orientation, market orientation, and effective leadership are more likely to achieve improved innovation performance, market competitiveness, and financial outcomes (Nguyen et al., 2025; Hamzah, 2025). Leadership qualities may also act as moderating mechanisms that strengthen the positive effects of market orientation on organizational performance by enhancing strategic coordination and decision-making.

For Bumiputera SMEs in Sabah, these strategic capabilities are particularly important. SMEs operating in emerging economies often face resource limitations, intense competition, and rapidly changing market environments. Therefore, the ability to combine entrepreneurial initiatives with market intelligence and effective leadership becomes essential for sustaining growth and improving organizational performance. Developing these capabilities can help Bumiputera SMEs strengthen their competitiveness, expand market opportunities, and achieve long-term business sustainability.

Despite the growing importance of these constructs, empirical research examining the combined influence of EO, MO, and leadership qualities on organizational performance among Bumiputera SMEs in Sabah remains limited. Much of the existing literature focuses on SMEs in developed economies or examines these variables in isolation. This study seeks to address this gap by integrating these constructs within a unified framework grounded in the Resource-Based View (RBV), which emphasizes the role of valuable, rare, and inimitable resources in generating competitive advantage (Barney, 1991; Grant, 1996).

Accordingly, the purpose of this study is to examine the direct and indirect relationships between entrepreneurial orientation, market orientation, and organizational performance, while also assessing the moderating role of leadership qualities within this framework. Specifically, this study investigates:

a. The influence of entrepreneurial orientation on market orientation among SMEs.

b. The mediating role of market orientation in the relationship between entrepreneurial orientation and organizational performance.

c. The moderating role of leadership qualities in strengthening the relationship between market orientation and organizational performance.

The scope of this study is limited to Bumiputera SME owners operating in Sabah, Malaysia, covering businesses across multiple sectors including services, retail, food production, and manufacturing. Large enterprises and non-Bumiputera firms are excluded from the analysis. By focusing on internal strategic capabilities, this research aims to provide both theoretical insights and practical implications for SME owners, policymakers, and researchers seeking to enhance the competitiveness and sustainability of Bumiputera SMEs.

2. LITERATURE REVIEW

2.1 Entrepreneurial orientation (EO)

Entrepreneurial Orientation (EO) has emerged as one of the most influential strategic constructs in research on entrepreneurship and small business management. EO reflects the strategic posture of an organization characterized by innovativeness, proactiveness, and risk-taking behavior that enables firms to identify and exploit emerging opportunities in dynamic markets (Lumpkin & Dess, 1996; Wales et al., 2013). Firms that demonstrate strong entrepreneurial orientation tend to pursue innovative strategies, actively seek new market opportunities, and take calculated risks to achieve competitive advantage.

The conceptualization of EO has evolved over time. Early studies primarily focused on three core dimensions: innovativeness, risk-taking, and proactiveness (Covin & Slevin, 1989). However, subsequent research expanded the construct to include two additional dimensions — competitive aggressiveness and autonomy — which together represent a broader strategic posture that influences firm behavior and performance (Lumpkin & Dess, 1996). Recent studies continue to emphasize these dimensions while exploring how EO operates in different organizational contexts, including family businesses, technology-based firms, and small and medium enterprises (Clark et al., 2024).

Empirical evidence consistently demonstrates that EO contributes positively to firm performance, particularly in dynamic and competitive environments. Firms with higher levels of EO are more capable of introducing innovative products, adapting to market changes, and achieving higher growth rates compared to more conservative organizations (Sarwoko et al., 2023). Moreover, EO enables firms to respond proactively to environmental uncertainty by encouraging experimentation and opportunity recognition. This capability is particularly important for SMEs operating with limited resources and relying on entrepreneurial initiatives to sustain growth.

Recent studies have also highlighted the importance of contextual factors in shaping the EO – performance relationship. Environmental dynamism, technological change, and market turbulence can strengthen or weaken the impact of EO on organizational outcomes (Nguyen et al., 2025). Additionally, scholars increasingly recognize that EO may operate at multiple levels within organizations, including both firm-level and individual-level entrepreneurial orientation (Clark et al., 2024). This perspective reflects a growing interest in understanding how entrepreneurial behavior among leaders and employees contributes to strategic decision-making and innovation.

For SMEs, EO is a critical driver of competitiveness and business sustainability. Entrepreneurially oriented SMEs are more likely to adopt innovative practices, explore new markets, and implement proactive strategies that improve long-term performance. Therefore, EO remains a fundamental strategic capability that enables SMEs to adapt and thrive in rapidly changing economic environments.

2.2 Market orientation (MO)

Market Orientation (MO) represents a strategic organizational capability that emphasizes the generation, dissemination, and responsiveness to market intelligence related to customers and competitors (Jaworski & Kohli, 1993; Narver & Slater, 1990). Firms that adopt a strong market orientation prioritize customer needs, continuously monitor competitor actions, and coordinate internal activities to deliver superior value to the market.

The literature identifies three core components of market orientation: customer orientation, competitor orientation, and inter-functional coordination (Narver & Slater, 1990). Customer orientation focuses on understanding and satisfying customer needs, while competitor orientation involves analyzing competitors' strategies and capabilities. Inter-functional coordination ensures that different departments within the organization collaborate effectively to create value for customers.

Market orientation has been widely recognized as a key determinant of business performance. Firms that possess strong market intelligence capabilities are better able to identify market opportunities, anticipate customer demands, and adapt their strategies accordingly (Morgan & Vorhies, 2018). This capability allows organizations to develop innovative products, improve service quality, and strengthen their competitive positioning.

Recent research also highlights the role of market orientation in facilitating innovation and new product development. Market-oriented firms are more capable of balancing exploratory innovation (developing new ideas and technologies) and exploitative innovation (improving existing products and processes), thereby enhancing organizational adaptability and long-term competitiveness (Zhao et al., 2021). Additionally, market orientation has been shown to contribute positively to financial performance indicators such as sales growth, profitability, and return on assets (Nguyen et al., 2025).

The relationship between market orientation and performance is often mediated by organizational capabilities such as service quality, innovation capability, and knowledge management (Talaja et al., 2017). In dynamic business environments, market orientation enables firms to gather relevant market information and translate it into strategic decisions that improve organizational performance.

For SMEs, market orientation is particularly important because smaller firms often operate in highly competitive markets where customer relationships and responsiveness determine success. SMEs that develop strong market orientation capabilities can better understand market trends, respond quickly to customer feedback, and strengthen their competitive advantage.

2.3 Leadership qualities (LQ)

Leadership qualities represent an essential organizational capability that influences strategic decision-making, employee motivation, and overall organizational effectiveness. Leadership plays a critical role in shaping organizational culture, guiding strategic direction, and facilitating the successful implementation of entrepreneurial and market-oriented strategies (Yukl, 2012).

Recent leadership research emphasizes a multidimensional perspective in which effective leaders demonstrate qualities such as integrity, communication competence, strategic vision, and emotional intelligence (Bajrami et al., 2024). These attributes enable leaders to inspire employees, foster trust within the organization, and align individual efforts with organizational goals.

Strategic leadership has received significant attention in contemporary organizational research. Strategic leaders possess the ability to anticipate environmental changes, formulate long-term strategies, and mobilize organizational resources to achieve competitive advantage. In SMEs, strategic leadership is particularly important because owners or top managers often play a direct role in shaping the firm’s strategic orientation and innovation activities (AlSafadi & Aljubran, 2026).

Another influential leadership approach is transformational leadership, which emphasizes the ability of leaders to inspire and motivate followers through vision, intellectual stimulation, and individualized support. Transformational leaders create a positive organizational culture that encourages creativity, learning, and collaboration (Jayasooriya et al., 2025). This leadership style has been shown to strengthen the relationship between entrepreneurial orientation and organizational performance by enhancing employees’ commitment to innovation and strategic change.

The role of leadership has also evolved in response to digital transformation and global business dynamics. Modern leaders are increasingly required to demonstrate digital literacy, adaptability, and inclusive communication skills to manage diverse and geographically dispersed teams (Dulloo & Mudaliar, 2025). These competencies enable organizations to remain competitive in technology-driven environments.

Overall, leadership qualities serve as a critical mechanism that influences how effectively strategic orientations such as EO and MO are implemented within organizations. Effective leadership enhances innovation capability, strengthens strategic alignment, and ultimately contributes to improved organizational performance.

2.4 Organizational performance (OP)

Organizational Performance (OP) refers to the ability of an organization to achieve its strategic objectives through effective utilization of resources, operational efficiency, and competitive positioning. In the context of SMEs, organizational performance is commonly measured through both financial and non-financial indicators, including sales growth, profitability, innovation capability, and market share.

Recent studies highlight the increasing importance of organizational capabilities in determining performance outcomes. Firms that successfully align internal competencies with strategic objectives are more likely to achieve superior performance. Human resource development, knowledge management, and innovation capability have been identified as key drivers of organizational performance in Malaysian organizations (Salleh & Sulaiman, 2016; Loke et al., 2020).

Innovation has also emerged as a significant determinant of performance, particularly among SMEs. Organizations that invest in innovation activities are better able to develop new products, improve operational processes, and respond to changing market conditions (Zakaria et al., 2016). In Malaysia, innovation-driven SMEs have demonstrated stronger resilience and competitiveness in both domestic and international markets.

Another important factor influencing organizational performance is organizational capacity, which includes structural resources, managerial capabilities, and operational efficiency. Firms that effectively leverage their organizational capacity are better positioned to achieve sustainable performance and maintain competitive advantage (Mustapa & Malak, 2019).

In addition, the Malaysian government has introduced several policy initiatives aimed at improving organizational performance across both public and private sectors. Programs such as the Government Transformation Programme (GTP) and SME development initiatives have emphasized performance management, innovation, and strategic capability development (Xavier, 2014). These initiatives reflect the increasing importance of organizational performance as a key indicator of economic competitiveness and national development.

Within the SME sector, the integration of strategic orientations and leadership capabilities plays a crucial role in enhancing organizational performance. Firms that combine entrepreneurial orientation, market orientation, and effective leadership are more likely to achieve sustainable growth, improved innovation outcomes, and stronger market competitiveness.

3. METHODOLOGY

3.1 Research design

This study adopts a quantitative research design to examine the relationships between Entrepreneurial Orientation (EO), Market Orientation (MO), Leadership Qualities (LQ), and Organizational Performance (OP) among Bumiputera Small and Medium Enterprises (SMEs) in Sabah, Malaysia. A quantitative approach is appropriate because it enables the testing of hypothesized relationships between constructs using statistical analysis and allows for generalization of findings across a larger population.

The study employs a cross-sectional survey method, where data were collected at a single point in time from SME owners and managers. Survey-based research is widely used in entrepreneurship and management studies to capture perceptions, strategic orientations, and performance indicators within organizations (Hair et al., 2017). The use of structured questionnaires allows for standardized data collection and facilitates the application of multivariate statistical techniques.

To analyze the relationships between variables, the study utilizes Partial Least Squares Structural Equation Modeling (PLS-SEM). PLS-SEM is particularly suitable for exploratory and predictive research involving complex models with multiple constructs and relationships. It is also appropriate for studies with relatively small samples and non-normal data distributions, which are common characteristics in SME research (Hair et al., 2017).

3.2 Population and sampling

The target population for this study consists of Bumiputera SME owners and entrepreneurs operating in Sabah, Malaysia. SMEs were selected as the focus of the study because they play a significant role in economic development, employment generation, and regional growth in Malaysia.

The sampling frame includes SMEs operating in various sectors such as:

- General services
- Food production and food stalls
- Retail and grocery businesses
- Handicraft and artisan enterprises
- Beauty and personal care services
- Tailoring and repair workshops

A purposive sampling technique was employed to select respondents who met the following criteria:

a. The business must be registered as an SME.
b. The business owner must be a Bumiputera entrepreneur.
c. The respondent must be directly involved in managing the business.

Data were collected from 513 SME respondents, which exceeds the minimum sample size requirement recommended for PLS-SEM analysis. According to Hair et al. (2017), the minimum sample size should be ten times the maximum number of structural paths directed at any construct in the model. Therefore, the sample size used in this study is sufficient to ensure statistical reliability and robustness of the analysis.

3.3 Data collection procedure

Data were collected using a structured questionnaire survey distributed to SME owners and entrepreneurs across Sabah. The questionnaires were administered through a combination of:

- Physical distribution during SME programs and training sessions
- Online survey platforms
- Direct engagement with SME networks and business associations

Respondents were informed of the purpose of the study and assured that their responses would remain confidential and be used solely for academic research.

The questionnaire consisted of two main sections:

a. Demographic information
b. Measurement items for the study constructs

The demographic section collected information regarding gender, education level, business category, years of operation, and annual sales turnover. These variables provide contextual information about the characteristics of the SMEs included in the study.

3.4 Measurement of variables

The constructs used in this study were measured using established scales adapted from previous studies to ensure reliability and validity.

3.4.1 Entrepreneurial orientation (EO)

Entrepreneurial orientation was measured using items adapted from Covin and Slevin (1989) and Lumpkin and Dess (1996). The scale captures three core dimensions:

- Innovativeness
- Proactiveness
- Risk-taking

Respondents were asked to indicate the extent to which their businesses adopt innovative practices, take calculated risks, and proactively pursue new market opportunities.

3.4.2 Market orientation (MO)

Market orientation was measured using the scale developed by Narver and Slater (1990). The construct includes three components:

- Customer orientation
- Competitor orientation
- Inter-functional coordination

These items assess the extent to which firms collect and respond to market intelligence related to customers and competitors.

3.4.3 Leadership qualities (LQ)

Leadership qualities were measured using items adapted from Yukl's (2012) leadership research and related leadership studies. The scale captures leadership attributes such as:

- Strategic vision
- Communication effectiveness
- Integrity and ethical leadership
- Employee motivation and empowerment

These items assess the ability of SME leaders to guide their organizations and support strategic initiatives.

3.4.4 Organizational performance (OP)

Organizational performance was measured using subjective performance indicators commonly used in SME research. The items assess firm performance relative to competitors in terms of:

- Sales growth
- Profitability

- Market share
- Overall business performance

Subjective performance measures are widely accepted in SME research because financial data from privately owned firms are often difficult to obtain (Wales et al., 2013). All measurement items were assessed using a five-point Likert scale.

3.5 Data analysis techniques

The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The analysis was conducted using specialized SEM software to evaluate both the measurement model and the structural model.

The analysis followed the two-step approach recommended by Hair et al. (2017):

3.5.1 Measurement model assessment

The measurement model was evaluated to assess the reliability and validity of the constructs using the following criteria:

- Indicator reliability (factor loadings)
- Internal consistency reliability (Cronbach's alpha and composite reliability)
- Convergent validity (Average Variance Extracted – AVE)
- Discriminant validity (Fornell-Larcker criterion and HTMT ratio)

3.5.2 Structural model assessment

After establishing the validity of the measurement model, the structural model was assessed to examine the relationships between constructs. The following indicators were used:

- Path coefficients
- Coefficient of determination (R^2)
- Effect size (f^2)
- Predictive relevance (Q^2)

Additionally, mediation and moderation analyses were conducted to examine the indirect effects of market orientation and the moderating role of leadership qualities in the relationship between entrepreneurial orientation and organizational performance.

4. RESULTS AND ANALYSIS

4.1 Respondent demographics

A total of 513 valid responses from Bumiputera SME owners across 22 districts in Sabah were analyzed in this study. The demographic profile of respondents provides insight into the characteristics of SME entrepreneurs participating in the survey. The data indicate a diverse representation of business sectors, education levels, and operational experience.

4.1.1 Gender distribution

The gender distribution among respondents shows a relatively balanced representation. Female entrepreneurs accounted for 278 respondents (54.2%), while male entrepreneurs represented 235 respondents (45.8%). This indicates that female participation in entrepreneurial activities among Bumiputera SMEs is substantial and reflects the growing role of women in the SME sector.

Table 1: Respondent demographics summary (n = 513)

Category	Item	Frequency
Gender	Female	278
	Male	235
Business Category	General Services	328
	Food Stall / Vendor	45
	Handicraft / Artisan	26
	Grocery / Convenience Store	22
	Bakery	17
	Beauty / Personal Care	14
	Food Production	14
	Tailoring / Sewing	13
	Retail Shop	9
	Repair / Workshop	7
	Printing Services	7
	Restaurant	6
	Catering	3
	Cafe	2
Education Level	Diploma	139
	Degree	134
	SPM	83
	STPM	74
	Professional Certificate	44
	Master	29
	PhD	7
	Others	3
Years in Business	Less than 1 year	15
	1–2 years	71
	3–4 years	179
	5–6 years	104
	More than 6 years	141
Annual Sales	Less than RM100,000	213
	RM100,000 – RM199,000	98
	RM200,000 – RM299,000	52
	RM300,000 – RM399,000	52
	RM400,000 – RM499,000	40
	RM500,000 – RM599,000	27
	Above RM600,000	30

4.1.2 Business categories
The analysis of business categories reveals that general services dominate the SME sector, accounting for 328 respondents (63.9%). Other business types include food vendors, handicraft businesses, grocery stores, bakeries, and retail outlets. These results highlight the service-oriented nature of SMEs in Sabah.

4.1.3 Education level
The educational background of respondents indicates that most SME owners possess tertiary education qualifications, particularly diplomas and bachelor's degrees. This suggests that a significant proportion of SME entrepreneurs possess formal

educational training that may support business management and strategic decision-making.

4.1.4 Years of business operation

Most businesses have been operating for 3-4 years (179 respondents) and more than 6 years (141 respondents), indicating a relatively mature SME ecosystem. Only a small number of businesses have operated for less than one year.

4.1.5 Estimated annual sales

The majority of SMEs reported annual sales below RM100,000, indicating that most businesses fall under the microenterprise category according to Malaysian SME classification standards.

4.2 Measurement model assessment

The measurement model assessment evaluates the reliability and validity of the constructs used in this study. Following the guidelines of Hair et al. (2017), the assessment involves examining:

- Internal consistency reliability
- Convergent validity
- Discriminant validity

Table 2: Reflective measurement model assessment

Construct	Items	Factor Loadings	CR	AVE
EO – Innovativeness	INV1 – INV3	0.817 – 0.882	0.818	0.730
EO – Risk-taking	RT1 – RT3	0.596 – 0.862	0.807	0.590
EO – Autonomy	AUT1 – AUT5	0.761 – 0.797	0.857	0.618
EO – Proactiveness	PRO1 – PRO3	0.733 – 0.863	0.812	0.670
EO – Aggressiveness	AG1 – AG3	0.672 – 0.880	0.729	0.639
MO – Customer Orientation	CO1 – CO6	0.776 – 0.861	0.897	0.657
MO – Competitor Orientation	COMP1 – COMP5	0.763 – 0.879	0.901	0.717
MO – Inter-functional Coordination	IF1 – IF6	0.629 – 0.848	0.881	0.611
MO – Profit Orientation	PO1 – PO4	0.743 – 0.875	0.852	0.692
Leadership Qualities	SA, MP, RT_A, BP	0.718 – 0.882	>0.75	>0.66
Organizational Performance	OP1 – OP5	0.742 – 0.877	0.893	0.696

All Composite Reliability values exceed 0.70 and AVE values exceed 0.50, confirming internal consistency and convergent validity (Table 2).

Table 3: Heterotrait-Monotrait (HTMT) criterion

Constructs	1	2	3	4	5
Competitor Orientation	—				
Customer Orientation	0.505	—			
Inter-functional Coordination	0.676	0.663	—		
Organizational Performance	0.628	0.619	0.606	—	
Profit Orientation	0.686	0.604	0.724	0.603	—

All HTMT values are below the recommended threshold of 0.85, confirming adequate discriminant validity among the constructs (Table 3).

4.3 Structural model and hypothesis testing

Structural Equation Modeling using PLS-SEM was conducted to test the hypothesized relationships among EO, MO, LQ, and OP. The results demonstrate strong relationships between entrepreneurial orientation and the various dimensions of market orientation.

Table 4: Hypothesis testing results

Hypothesis	Relationship	β	t-value	p-value	Decision
H1	EO → Competitor Orientation	0.645	13.411	<0.001	Supported
H2	EO → Customer Orientation	0.603	10.410	<0.001	Supported
H3	EO → Inter-functional Coordination	0.653	12.028	<0.001	Supported
H4	EO → Profit Orientation	0.608	12.410	<0.001	Supported
H5	Competitor Orientation → OP	0.282	4.434	<0.001	Supported
H6	Customer Orientation → OP	0.289	4.570	<0.001	Supported
H7	Inter-functional Coordination → OP	0.120	1.704	0.044	Supported
H8	Profit Orientation → OP	0.130	2.071	0.019	Supported

The results (Table 4) indicate that entrepreneurial orientation strongly predicts all market orientation dimensions, with the strongest influence observed on inter-functional coordination ($\beta = 0.653$).

4.4 Mediation analysis

The mediation analysis examined whether market orientation mediates the relationship between entrepreneurial orientation and organizational performance.

Table 5: Mediation model analysis

Hypothesis	Relationship	Indirect Effect	t-value	p-value	Result
H9	EO → Profit Orientation → OP	0.079	1.960	0.025	Supported
H10	EO → Inter-functional → OP	0.078	1.625	0.052	Not Supported
H11	EO → Customer Orientation → OP	0.174	3.803	<0.001	Supported
H12	EO → Competitor Orientation → OP	0.182	4.023	<0.001	Supported

Customer orientation and competitor orientation provide the strongest mediation pathways linking EO to organizational performance (Table 5).

4.5 Moderation analysis

The moderating role of leadership qualities was tested to determine whether leadership influences the relationship between market orientation and organizational performance.

Table 6: Moderation model analysis

Hypothesis	Relationship	β	t-value	p-value	Result
H13	LQ × Competitor Orientation → OP	-0.003	0.062	0.475	Not Supported
H14	LQ × Customer Orientation → OP	0.221	3.385	<0.001	Supported
H15	LQ × Inter-functional → OP	-0.126	2.121	0.017	Supported
H16	LQ × Profit Orientation → OP	-0.082	1.124	0.131	Not Supported

Leadership qualities significantly strengthen the effect of customer orientation on organizational performance, but unexpectedly weaken the relationship between inter-functional coordination and performance (Table 6).

5. DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

This study examined the relationships between Entrepreneurial Orientation (EO), Market Orientation (MO), Leadership Qualities (LQ), and Organizational Performance (OP) among Bumiputera small and medium enterprises (SMEs) in Sabah, Malaysia. Anchored in the Resource-Based View (RBV), the study aimed to understand how strategic capabilities influence SME performance through both mediating and moderating mechanisms. The empirical findings provide important insights into how internal strategic orientations and leadership capabilities contribute to organizational success.

The results indicate that entrepreneurial orientation significantly influences all dimensions of market orientation, including competitor orientation, customer orientation, inter-functional coordination, and profit orientation. Among these relationships, EO demonstrated the strongest influence on inter-functional coordination, followed by competitor orientation and profit orientation. These findings confirm that entrepreneurial firms tend to be more proactive in gathering market intelligence and coordinating internal activities to respond effectively to market opportunities. In line with previous studies, the results suggest that firms with higher levels of entrepreneurial orientation are more capable of identifying market opportunities, experimenting with innovative solutions, and developing proactive market strategies.

The study also confirms that market orientation has a significant positive effect on organizational performance. specifically, customer orientation and competitor orientation emerged as the strongest predictors of performance. SMEs that focus on understanding customer needs and monitoring competitors are better able to develop competitive strategies that enhance business outcomes. This finding supports the argument that market intelligence and customer responsiveness are essential capabilities for SMEs operating in competitive environments. The results also demonstrate that profit orientation and inter-functional coordination contribute to performance, although their effects are relatively weaker than those of customer and competitor orientation.

One of the key contributions of this study is the confirmation of the mediating role of market orientation in the relationship between entrepreneurial orientation and organizational performance. The mediation analysis revealed that EO indirectly influences performance through several MO dimensions, particularly customer orientation and competitor orientation. This finding suggests that entrepreneurial behavior alone is insufficient to improve performance unless it is translated into effective market-oriented strategies. In other words, firms must not only be innovative and proactive but also align their entrepreneurial initiatives with market demands and customer expectations.

The moderation analysis provides further insights into the role of leadership qualities in shaping organizational outcomes. the results indicate that leadership qualities significantly strengthen the relationship between customer orientation and organizational performance. Leaders who demonstrate strong ethical values, transparency, and self-awareness are more capable of guiding their organizations in implementing customer-focused strategies that improve business performance. Effective leadership enables SMEs to translate market insights into actionable strategies and coordinate organizational resources effectively.

Interestingly, the analysis revealed a negative moderating effect of leadership qualities on the relationship between inter-functional coordination and performance. This unexpected finding suggests that in some SMEs, strong leadership may inadvertently limit the benefits of cross-functional collaboration. One possible explanation is that highly centralized leadership structures may reduce autonomy among employees or departments, thereby limiting the effectiveness of collaborative decision-making processes. This finding highlights the complexity of leadership dynamics in SMEs and suggests that leadership effectiveness depends not only on the presence of strong leadership qualities but also on how leadership authority is exercised within the organization.

Overall, the findings reinforce the notion that entrepreneurial orientation, market orientation, and leadership qualities function as complementary strategic capabilities that collectively enhance organizational performance. SMEs that effectively integrate these capabilities are better positioned to innovate, respond to market changes, and achieve sustainable competitive advantage.

5.2 Theoretical contributions

This study contributes to the existing body of knowledge in several ways. First, it integrates entrepreneurial orientation, market orientation, and leadership qualities into a unified conceptual framework to examine their combined influence on SME performance. While previous studies have examined these constructs independently, relatively few studies have explored their interactive effects within a single model, particularly in the context of Bumiputera SMEs.

Second, the study extends the Resource-Based View (RBV) by demonstrating that strategic orientations and leadership qualities represent important intangible resources that contribute to competitive advantage. According to RBV theory, organizations achieve superior performance when they possess valuable, rare, inimitable, and non-substitutable resources. The findings of this study suggest that EO, MO, and LQ function as strategic capabilities that enable SMEs to leverage internal knowledge, market intelligence, and leadership expertise to improve organizational performance.

Third, the study provides empirical evidence from the Sabah SME context, which remains relatively underexplored in entrepreneurship and management research. By focusing on Bumiputera SMEs operating in an emerging economic environment, the study contributes to a better understanding of the unique challenges and strategic capabilities that influence SME performance in developing regions.

5.3 Practical implications

The findings of this study provide several practical implications for SME entrepreneurs, policymakers, and business development agencies.

First, SME support programs should prioritize the development of entrepreneurial competencies among business owners. Training initiatives should emphasize innovation, opportunity recognition, and strategic risk-taking to encourage entrepreneurial behavior among SMEs. Government agencies such as SME Corp Malaysia, MARA, and regional development agencies could incorporate the development of entrepreneurial orientation into their entrepreneurship training programs.

Second, the strong mediating role of market orientation suggests that SMEs must strengthen their capabilities in market intelligence gathering, customer engagement, and competitor analysis. SME development programs should therefore include modules on market research, customer relationship management, and competitive strategy development to help entrepreneurs better understand and respond to market dynamics.

Third, the study highlights the importance of leadership development in SME performance. Leadership training programs should focus on developing strategic thinking, communication skills, ethical leadership, and emotional intelligence among SME owners and managers. Leaders who demonstrate these qualities are better able to motivate employees, coordinate organizational activities, and implement effective business strategies.

Fourth, policymakers should consider implementing integrated SME capability development frameworks that combine entrepreneurship training, market intelligence development, and leadership coaching. Such integrated programs can help SMEs develop the strategic capabilities necessary to compete in increasingly complex and competitive markets.

5.4 Policy implications

From a policy perspective, the findings highlight the need for targeted interventions to strengthen the strategic capabilities of Bumiputera SMEs in Sabah. Despite substantial government support programs, many SMEs continue to face challenges related to limited managerial expertise, insufficient market knowledge, and weak organizational capabilities. Policy initiatives should therefore focus on:

- Strengthening entrepreneurial ecosystems in Sabah
- Improving access to market intelligence and business advisory services
- Providing leadership development programs for SME owners
- Encouraging collaboration between universities, government agencies, and SME associations

Institutions such as Universiti Malaysia Sabah (UMS) can play a critical role in supporting SME development by providing entrepreneurship training, business incubation programs, and research-based policy recommendations.

5.5 Limitations and future research

Although this study provides valuable insights into SME performance, several limitations should be acknowledged. First, the study uses a cross-sectional research design, which limits the ability to examine causal relationships over time. Future research could employ longitudinal designs to examine how entrepreneurial orientation, market orientation, and leadership qualities evolve as firms grow and adapt to changing market conditions.

Second, the study focuses exclusively on Bumiputera SMEs in Sabah, which may limit the generalizability of the findings to other regions or demographic groups. Future studies could conduct comparative research between different regions in

Malaysia or between Bumiputera and non-Bumiputera SMEs to explore potential differences in strategic capabilities and performance outcomes.

Third, the unexpected negative moderating effect of leadership qualities on inter-functional coordination suggests the need for qualitative research to better understand leadership dynamics within SMEs. Case studies and in-depth interviews could provide deeper insights into how leadership behaviors influence organizational collaboration and decision-making processes.

Future research could also explore the role of digital transformation, technological capabilities, and innovation ecosystems in enhancing SME performance, particularly in emerging economies.

5.6 Conclusion

This study investigated the relationships between entrepreneurial orientation, market orientation, leadership qualities, and organizational performance among Bumiputera SMEs in Sabah. The findings demonstrate that entrepreneurial orientation significantly enhances market orientation capabilities, which in turn contribute to improved organizational performance. Market orientation was found to mediate the relationship between entrepreneurial orientation and performance, highlighting the importance of translating entrepreneurial behavior into market-responsive strategies.

Leadership qualities also play a critical role in shaping organizational outcomes. Effective leadership strengthens the positive effects of customer orientation on performance, although the results indicate that leadership may also influence internal coordination dynamics in complex ways.

Overall, the study confirms that entrepreneurial orientation, market orientation, and leadership qualities represent critical strategic capabilities that enhance SME competitiveness and performance. SMEs that successfully integrate these capabilities are better equipped to innovate, respond to market changes, and achieve sustainable growth. For Bumiputera SMEs in Sabah, developing these strategic capabilities is essential for improving competitiveness, expanding market opportunities, and contributing to regional economic development.

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