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ENTREPRENEURIAL CHARACTERISTICS AND BUSINESS INNOVATIVE CREATIVITY AFFECT THE BUSINESS PERFORMANCE OF SMES IN UBON RATCHATHANI PROVINCE, THAILAND

Abstract:

SMEs are widely acknowledged as essential economic growth, employment, and innovation drivers in both developed and developing economies. However, to survive and remain competitive, strong business performance is crucial for their success. The research aimed to examine the influence of entrepreneurial characteristics and innovative business creativity on the performance of SMEs in Ubon Ratchathani Province, Thailand. A questionnaire with a reliability coefficient (0.97) at a very high level was used in this study. Area sampling collected 271 small and medium enterprises in Ubon Ratchathani province, Thailand. The statistics used were descriptive statistics and multiple linear regression analysis. The results showed that eight sub-independent variables correlated with the business performance at a very high level ($r = 0.87$) and can explain or predict the variance of business performance at a high level with 74% (Adjusted R-Square). Seven variables affected the business performance of SMEs with statistical significance at 0.01** and 0.05*, which were entrepreneurial characteristics of management ($\beta = 0.183^{**}$), taking risks ($\beta = 0.181^{**}$), learning of business innovative creativity ($\beta = 0.17^{**}$), creativity ($\beta = 0.16^{**}$), innovation ($\beta = 0.159^{*}$), operational ($\beta = 0.15^{*}$), and autonomy ($\beta = 0.12^{**}$), respectively. To enhance the performance of SMEs in Ubon Ratchathani Province, entrepreneurs should focus on improving their business management skills through workshops and tailored training, fostering a culture of calculated risk-taking by creating safe environments for experimentation, such as pilot projects, and investing in continuous learning and development to bolster innovative thinking, including seminars and mentorship programs. Additionally, organizing brainstorming sessions can promote creativity and lead to actionable outcomes from innovative ideas, and supporting employee autonomy will further enhance motivation and innovation. On the government side, creating support programs and facilitating networking opportunities will allow entrepreneurs to share best practices and challenges. Collaboration with research institutions can also drive innovation, while regular assessments of SME needs will ensure relevant and effective policy adjustments. Implementing these strategies will cultivate a more innovative and resilient business environment.

Keywords:

Entrepreneurial Characteristics, Business Innovative, Creativity, Business Performance, SMEs

JEL Classification: F14

1. INTRODUCTION

The global economic situation in 2024 was expanded by 2.6 percent and is estimated to expand by 3.2 percent in 2025 from the Advanced Economies group that continues to grow. However, important issues that need to be closely monitored that will affect the global economy in 2025 include the policy direction of President Donald Trump, which has clear trade barriers, the slowdown of the Chinese economy, and geopolitical conflicts that continue to drag on. As for the 2025 estimate, the Thai economy is expected to continue to expand within the range of 2.3-3.3 percent from positive factors in tourism, which is expected to meet the target. The worrying factor remains the household debt problem, which is relatively high and has no clear solution. Small and medium-sized enterprises (SMEs) are essential organizations in Thailand's economic system, accounting for approximately 99.0 percent of all businesses (Office of Small and Medium Enterprises Promotion, 2024). The number of SMEs in Thailand is 3,225,743, most of which are in the business trade, service, and manufacturing sectors, as shown in Table 1.

Table 1: the business types of SMEs in Thailand

Business Sector of SMEs	Number	Percent
Business Trade	1,346,641	41.75
Hospitality	1,304,004	40.42
Manufacturing sector	515,759	15.99
Agricultural business	59,339	1.84
Total	3,225,743	100.00

The overall economy of Thailand in 2024 is still considered good. The GDP growth rate has expanded by 2.6 percent compared to the previous year, with the GDP value of SMEs reaching 3,746,967 million baht. In the third quarter of the year, SME GDP expanded by 3.0%. This year's (2025) overall growth is expected to grow by 2.3%, which is a slowdown due to people's cautious spending. Employment expanded slightly at 1.8% as inflation began to ease after being very high in 2024, driven by higher raw material and fuel prices and the impact of interest rate hikes from both the United States and Thailand. SMEs are widely recognized as critical drivers of economic growth, employment, and innovation across both developed and developing economies. However, the survival of SMEs, competitiveness, and business performance are key to making the business successful or failing. The performance must be reasonable and profitable for business survival. Kraus et al. (2022) mentioned the survival and growth of SMEs are heavily influenced by the entrepreneurial characteristics of their leaders and the level of innovative creativity embedded in their business strategies. Entrepreneurial traits such as risk-taking, proactiveness, resilience, and opportunity recognition have been widely recognized as key factors influencing business success, particularly in the context of SMEs, these traits enable entrepreneurs to navigate uncertainty, identify and seize emerging market opportunities, and sustain long-term competitive advantage (Rauch & Frese, 2021; Wales, Gupta, & Mousa, 2020).

Entrepreneurial characteristics are the personal traits, behaviors, and competencies that define how entrepreneurs identify opportunities, manage resources, take risks, and drive innovation. In the context of SMEs, these characteristics are critical due to the limited resources, intense competition, and need for adaptability that SMEs typically face. The success and sustainability of SMEs often hinge on the entrepreneurial capabilities of their founders or managers. Entrepreneurs with a strong innovative capacity can introduce new products, services, or processes that meet evolving customer demands (Smith & Lee, 2023; Johnson et al., 2022; Kumar, 2024). SMEs that are led by risk-tolerant and opportunity-oriented entrepreneurs are more likely to pursue new markets or invest in growth strategies,

which can yield high returns despite uncertainties (Obaji & Onuorah, 2023). Leadership and motivation as strong leadership, often rooted in entrepreneurial characteristics, is essential for inspiring employees, fostering a positive organizational culture, and driving performance through clear vision and motivation (Ahmad & Seet, 2021). In volatile and competitive markets, entrepreneurial traits empower SMEs to be agile, forward-thinking, and resilient, directly enhancing their business performance. When these traits are aligned with innovative creativity—manifested through new product development, process improvements, and novel business models, they can significantly enhance the performance and competitiveness of SMEs (Kraus et al., 2022; Musa & Sulaiman, 2021). In today's dynamic and uncertain market environment, the ability of SME entrepreneurs to leverage innovation is not merely a strategic advantage but a necessity for sustainable performance. Fusing entrepreneurial traits and creative capacities enhances adaptability, customer satisfaction, and long-term profitability (Ngugi et al., 2020). Despite growing academic interest in this field, there remains a gap in understanding how these factors influence SME performance, particularly in diverse socio-economic contexts. Despite growing academic interest in this field, there remains a gap in understanding how entrepreneurial characteristics influence SME performance, particularly in diverse socio-economic contexts. For example, in sub-Saharan Africa, limited access to finance and weak institutional frameworks often constrain the translation of entrepreneurial traits into business performance (George et al., 2022). In Southeast Asia, cultural norms and informal business practices significantly shape entrepreneurial behavior, yet their direct effect on SME outcomes remains under-researched (Nguyen & Pham, 2023). Meanwhile, in high-income countries, while innovation-driven entrepreneurship is more common, studies have shown inconsistent links between personal entrepreneurial orientation and long-term firm growth (Taylor & Jack, 2024). These findings underscore the need for more nuanced, context-specific analyses to understand how such factors interact with local environments to shape SME outcomes.

In Thailand, especially Ubon Ratchathani of Northeastern, Small and Medium-sized Enterprises (SMEs) are pivotal to the economic development. These enterprises form the foundation of the local economy by generating employment, driving regional commerce, and supporting the preservation of cultural industries. Leveraging the province's strategic location adjacent to Laos and Cambodia, many SMEs engage in cross-border trade, facilitating regional economic integration and expanding export markets for rice, textiles, and skincare items (Bangkok Post, 2023). In addition to their trade-related contributions, SMEs are instrumental in providing jobs in labor-intensive sectors like agriculture and food processing, thereby supporting rural livelihoods and reducing poverty. Moreover, they play a key role in promoting the cultural and creative economy by producing traditional handicrafts and local textiles, which serve as both economic outputs and expressions of cultural identity (Pongstaporn, 2018).

Despite facing persistent challenges—such as limited access to capital, technological constraints, and logistical inefficiencies, SMEs remain central to the province's sustainable development. Supportive policies focusing on improving infrastructure, facilitating trade, and fostering innovation are crucial for enhancing competitiveness (Thongyen, 2023). Significantly, the performance of SMEs in Ubon Ratchathani is increasingly influenced by both internal and external factors, including entrepreneurial leadership, financial accessibility, innovation capabilities, and market responsiveness. In recent years, entrepreneurial traits such as resilience, proactivity, and risk tolerance have become essential for navigating economic uncertainty and technological disruption. Business success in this context often hinges on the entrepreneur's ability to integrate innovation into product development, marketing strategies, and operational practices. Emerging research shows that aligning entrepreneurial characteristics with innovative creativity significantly boosts firm performance, particularly in local and regional markets where competition intensifies, and consumer demands evolve (Kraus et al., 2022; Obaji & Onuorah, 2023). Enhancing the entrepreneurial mindset and creative capacities of SME owners in Ubon Ratchathani is vital for individual business growth and the region's long-term economic vitality. These research results will

provide actionable insights for policymakers, educators, and development practitioners seeking to strengthen Thailand's entrepreneurial ecosystem.

RESEARCH OBJECTIVES

The research aimed

1) to study the opinion level of entrepreneurs of SMEs to entrepreneurial characteristics and business innovative creativity on the business performance in Ubon Ratchathani province, Thailand.

2) to examine the influence of entrepreneurial characteristics and business innovative creativity on the business performance of SMEs in Ubon Ratchathani Province, Thailand.

2. LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

2.1 The Concept of Business Performance in SMEs

Business performance in Small and Medium-sized Enterprises (SMEs) refers to evaluating how effectively and efficiently an SME achieves its goals and objectives. This performance can be assessed through various metrics and frameworks that capture the business's financial, operational, customer, and internal growth. Performance measurement is crucial for SMEs because these organizations face resource constraints, intense competition, and market uncertainties. Evaluating performance allows SMEs to adjust strategies, improve operations, and make informed decisions for sustainable growth. The Balanced Scorecard (BSC) framework provides a comprehensive way of measuring business performance by balancing financial and non-financial indicators. It helps SMEs track performance across four perspectives (financial, customer, internal processes, and learning and growth). This holistic approach ensures that SMEs do not only focus on immediate financial results but also on long-term strategic objectives. The BSC was initially developed by Kaplan and Norton (1992) as a performance management framework designed to help organizations measure and manage their strategy. The Balanced Scorecard (BSC) is a widely utilized strategic management tool that assesses business performance from four perspectives: financial, customer, internal processes, and learning and growth. It helps organizations translate their strategy into tangible objectives and measures, driving improvements across these dimensions. The application of BSC in small and medium-sized enterprises (SMEs) is increasingly gaining attention due to its potential to enhance business performance. Research from 2022 to 2024 demonstrates that SMEs' adoption of BSC can provide crucial insights into management competence, innovation, operational efficiency, and strategic alignment.

Financial Perspective: This perspective focuses on traditional performance metrics like profitability, revenue growth, and cost management. SMEs tend to emphasize financial sustainability, especially in markets with limited capital.

Customer Perspective: Measures of customer satisfaction, loyalty, and retention. Ensuring a strong customer base is often key to long-term growth for SMEs.

Internal Processes: Evaluate the efficiency of internal processes and operations. Optimizing internal workflows and supply chain management is crucial for SMEs to reduce costs and improve service delivery.

Learning and Growth: This perspective focuses on employee training, organizational culture, and innovation. SMEs can use this perspective to build internal capabilities and encourage workforce development.

Many research studies business performance with the concept of a balanced scorecard. For example, a study by Fernandes (2024) to explore 414 Portuguese SMEs found that while

SMEs do not universally adopt BSC, its use fosters formal strategy development and improves strategic alignment. This research underlined that BSC adoption is influenced by managerial perceptions of its relevance and benefits. Nguyen and Le (2023) studied management competence and SME performance in Vietnam (2023). A study examining 419 Vietnamese SME directors revealed a significant positive relationship between management competence and performance, with BSC adoption contributing to improved performance in financial, customer, and internal process perspectives. BSC and Operational Efficiency in Thai SMEs (2023): A study conducted in Thailand indicated that SMEs using BSC significantly improved operational efficiency, particularly in supply chain management and employee satisfaction (Suwan, 2023). BSC and Performance in Indonesian MSMEs (2022), A case study in Central Java, Indonesia, examined the influence of BSC on MSME performance. The study concluded that a well-implemented BSC improved the SMEs' overall performance, clearly focusing on aligning business strategies with measurable outcomes (Setiawan & Indrawati, 2022). Business performance in SMEs is a multifaceted concept beyond simple financial results. It encompasses managing internal operations effectively, satisfying customers, innovating, and developing employees. Frameworks such as the Balanced Scorecard allow SMEs to track performance in a structured way, helping them stay competitive and sustainable in an ever-changing market environment. This study uses the concept of a balanced scorecard to measure the business performance of SMEs.

2.2 Entrepreneurial characteristics

Individual Entrepreneurial characteristics refer to the personal traits, behaviors, and attributes that influence an individual's ability to identify opportunities, innovate, take risks, and effectively manage business ventures. These characteristics often include proactiveness, risk-taking, resilience, creativity, and opportunity recognition, all of which are critical for entrepreneurial success and business growth (Rauch & Frese, 2021). The details of each aspect are as follows:

1) Autonomy

Autonomy is defined as the freedom and independence entrepreneurs possess in making strategic decisions, setting goals, and steering the direction of their business. It is widely regarded as a fundamental psychological and motivational factor that significantly contributes to entrepreneurial success and overall business performance (Lumpkin, Cogliser, & Schneider, 2021). One of the key advantages of autonomy is that it enhances innovation and creativity by allowing entrepreneurs to explore novel ideas, test new solutions, and pivot their strategies without being hindered by rigid bureaucratic structures. This freedom fosters a culture of adaptability, which is critical for the survival and growth of SMEs. Furthermore, autonomy improves the speed and agility of decision-making, enabling entrepreneurs to respond rapidly to market fluctuations and gain a competitive advantage in dynamic business environments. Autonomy is also closely linked to higher levels of intrinsic motivation; entrepreneurs who feel in control of their work tend to experience greater job satisfaction, commitment, and resilience when facing challenges. Lastly, autonomy supports strategic flexibility by allowing entrepreneurs to customize their approaches based on their vision, objectives, and market realities, which enhances the likelihood of achieving long-term success.

2) Innovation

Innovation is a cornerstone for SME survival and growth. Innovative entrepreneurs drive product development, improve operational efficiency, and create competitive advantages. Without innovation, SMEs risk stagnation and market irrelevance (Kraus, 2022).

3) Risk Courage (Risk-Taking)

Risk courage enables entrepreneurs to make bold decisions in uncertain environments. Calculated risk-taking allows SMEs to seize emerging opportunities, enter new markets, and invest in novel ideas. While risk implies uncertainty, it is often necessary for growth and competitive positioning (Wales et al, 2020)

4) Management

Strong management skills of entrepreneurs such as planning, organizing, leadership, and decision-making—are essential for translating entrepreneurial vision into action. Effective management improves resource utilization, team performance, and business scalability, all of which directly influence SME performance (Ahmad & Seet, 2021).

These four entrepreneurial characteristics form the foundation of successful SME performance. Individually, they each support different strategic dimensions of a business, but when combined, they create a powerful synergy that drives innovation, resilience, and long-term growth in competitive environments

2.3 Creativity and Business Innovation

Creativity and business innovation are indispensable to the sustained success and competitiveness of small and medium-sized enterprises (SMEs). Operating within resource-constrained environments, SMEs rely heavily on innovation as a strategic tool for differentiation, adaptability, and growth. Creativity serves as the foundation for generating novel and valuable ideas, while innovation enables the transformation of these ideas into impactful products, services, and processes. The reviewed literature reinforces the critical importance of fostering creativity and innovation across four key dimensions—creativity, development, operational, and learning.

Studies consistently highlight that organizational creativity, digital innovation strategies, innovation leadership, and employee engagement significantly contribute to SME performance (Wijayanto, 2023; Pakdeeteva & Kopraser, 2023; Kusumawati & Gunawan, 2024; Teerapornlertratt, 2022). These findings affirm that SMEs which embed creative thinking and innovation into their core operations are more likely to respond effectively to market changes, enhance customer satisfaction, and achieve long-term success. Consequently, developing internal capacities for creativity and innovation should be a strategic priority for SME owners, policymakers, and support institutions aiming to build resilient and competitive enterprises.

1) Creativity

Creativity refers to the generation of novel and useful ideas that can be transformed into tangible innovations. In the SME context, creativity is especially valuable due to the inherent resource constraints that limit large-scale innovation projects. Kusumawati and Gunawan (2024) highlighted the dual importance of novelty and usefulness in creative output, noting that these two elements significantly influence product innovation performance. Their study underscores the importance of fostering creative thinking at both individual and organizational levels to improve market responsiveness and customer satisfaction.

2) Development

The development dimension encompasses the translation of creative ideas into viable products, services, or business models. Wijayanto (2023) emphasized the role of organizational creativity, where individual and group creativity, along with knowledge sharing and a supportive internal culture, contribute to sustained innovation. The research concluded that when development is grounded in continuous idea generation and effective communication, SMEs are better equipped to pursue product and service improvements that align with market needs.

3) Operational

Innovation at the operational level refers to how creativity is embedded within day-to-day business functions and strategic execution. This includes integrating digital tools, improving internal processes, and adapting to customer feedback. Pakdeeteva and Kopraser (2023) found that digital transformation and innovation management are vital for SME competitiveness in an increasingly digital economy. Their findings suggest that process

innovation, when strategically managed, not only enhances productivity but also builds resilience against external market pressures.

4) Learning

Organizational learning involves building and reinforcing an enterprise's capacity for continuous innovation through leadership, engagement, and adaptability. Teerapornlertratt (2022) revealed that innovative leadership, structured planning, and active personnel engagement are critical for fostering a learning culture within SMEs. These elements ensure that innovation is not a one-time event but a sustainable, evolving process embedded in the organization's identity. Learning-oriented SMEs are more likely to harness employee creativity and respond effectively to changing environments.

2.4 Hypotheses:

For many of the studies above about entrepreneurial characteristics, Creativity and business innovation, and business performance in many contexts, the authors can propose the hypotheses and research framework via literature review, as below.

H₁: There is a significant influence entrepreneurial characteristics on business performance of SMEs in Ubon Ratchathani Province, Thailand.

H₂: There is a significant influence creativity and business innovation on business performance of SMEs in Ubon Ratchathani Province, Thailand.

2.5 Conceptual Framework:

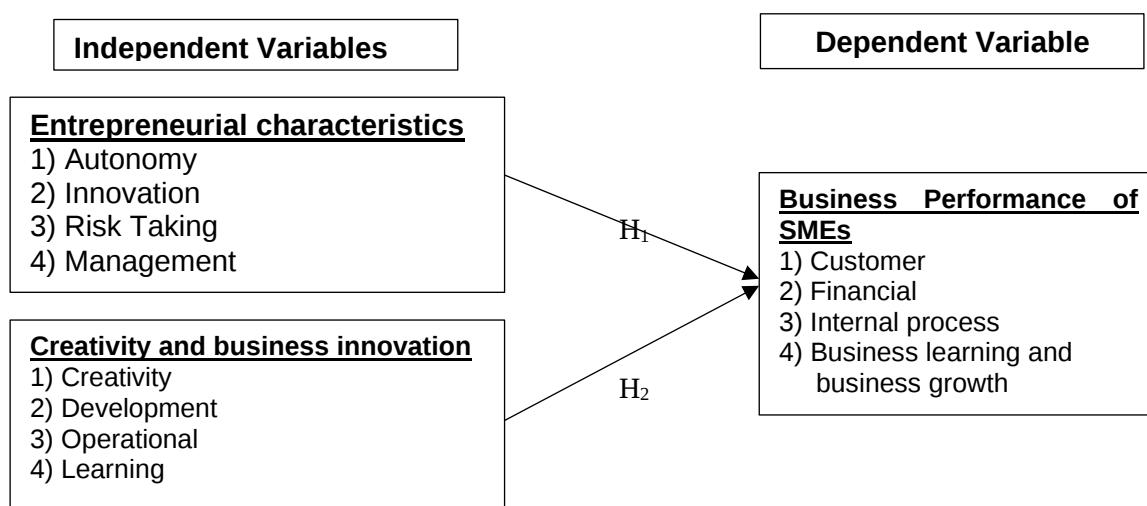


Figure 1: A Conceptual Research Framework

3. RESEARCH METHODOLOGY

This research utilized a quantitative methodology, focusing on entrepreneurs and senior managers over the age of 20 who own businesses in Ubon Ratchathani and Warin Chamrap, the two most prominent cities in Ubon Ratchathani province. An area sampling technique was employed to select these two districts, and data were collected from the sample group between July and August 2024. The total population of entrepreneurs in the region was 65,211, and a sample size of 271 was determined using the formula from Kanchanawasee et al. (2008), which was based on a 95% confidence level and a 10% tolerance level of standard deviation. Cluster sampling was then applied to include businesses across trade, hospitality, and manufacturing sectors, as detailed in Table 2.

Table 2: Sample sizes of Entrepreneurs of SMEs

Entrepreneurs of SMEs in Ubon Ratchathani Province, Thailand	
Business Type	Sample Sizes
1. Business Trade	99
2. Hospitality Business	126
3. Manufacturing Business	46
Total	271

4. VALIDITY AND RELIABILITY TESTS

To ensure the validity of the questionnaire, three experts in business administration, research methods, and statistics evaluated the structural content of each variable. The index of item-objective congruence (IOC) for every item was established to range between 0.67 and 1.00, surpassing the criterion of 0.50 set by Rovinelli and Hambleton (1977). The results from a pilot study involving 30 entrepreneurs in the Warinchamrap District, near Ubon Ratchathani city, are presented in Table 3. The overall Cronbach's alpha value obtained was 0.971, which is significantly higher than the threshold of 0.70, indicating a very high internal consistency within the questionnaire data. According to Gliem and Gliem (2003), Cronbach's alpha value exceeding 0.90 demonstrates excellent reliability. Thus, the data from the pilot study confirms that the questionnaire is reliable for further testing. The questions regarding entrepreneurial characteristics, creativity and business innovation, and business performance are therefore deemed appropriate to retain for the continuation of this study.

Table 3: Cronbach's Alpha Coefficient Results

Variables	Cronbach's Alpha	Interpretation
Entrepreneurial traits (12 items)	0.926	Very good
Creativity and business innovation (12 items)	0.910	Very good
Business Performance (13 items)	0.942	Very good
Total (37 items)	0.971	Very good

The statistics used in the data analysis were descriptive, percentage, frequency, mean, and multiple regression analysis. Dummy variables are provided for group variables. The research used an enter approach to selecting all independent variables to predict business performance of SMEs to get the best model. For interpretation of the mean, the writer set the criteria for interpreting the mean results at huge samples according to Ingard et al. (2020, p. 101) as follows: Mean 4.21 – 5.00 is the most important. Mean 3.41 – 4.20 high priority. Mean 2.61 – 3.40 medium importance. Mean 1.81 – 2.60 low importance. And mean 1.00 – 1.80 least importance. Data Collection: Collect information in July – August 2024 for two months. Data collected by the senior students who studied business research and studied in the faculty of Management Science of Ubon Ratchathani University.

5. RESEARCH RESULTS

Objective 1: To study the opinion level of entrepreneurs of SMEs to entrepreneurial characteristics and business innovative creativity on the business performance in Ubon Ratchathani province, Thailand

Table 4: The results of entrepreneurs of SMEs to entrepreneurial characteristics

Entrepreneurial Characteristics	n	Mean	S.D.	The Opinion Level
1) Autonomy	271	4.40	0.47	high
2) Innovation	271	4.36	0.59	high
3) Risk-taking	271	4.38	0.54	high
4) Management	271	4.35	0.54	high
Total	271	4.37	0.54	high

The analysis of SME entrepreneurs' opinions regarding entrepreneurial characteristics revealed a generally high level of agreement, with an overall mean score of 4.37 out of 5 and a standard deviation of 0.54, indicating a strong positive perception. All dimensions of entrepreneurial characteristics were rated at a high level, emphasizing their collective importance in business success. Among the traits, autonomy was rated the highest ($M = 4.40$, $SD = 0.47$), reflecting the entrepreneurs' appreciation for independence and decision-making freedom. This was followed by risk-taking ($M = 4.38$, $SD = 0.54$), highlighting a willingness to embrace uncertainty about business growth. Innovation also scored highly ($M = 4.36$, $SD = 0.59$), suggesting a strong orientation toward creative problem-solving and adaptability. Finally, management skills, while slightly lower, remained critical with a mean of 4.35 and a standard deviation of 0.54. These findings demonstrate that SME entrepreneurs in Ubon Ratchathani Province value all core entrepreneurial traits, with autonomy and risk-taking being slightly more prominent, underscoring their role in driving SME performance (see Table 4).

Table 5: The results of creativity and business innovation opinion level of entrepreneurs

Creativity and business innovation	n	Mean	S.D.	The Opinion Level
1) Creativity	271	4.32	0.54	high
2) Development	271	4.29	0.54	high
3) Operational	271	4.38	0.56	high
4) Learning	271	4.37	0.54	high
Total	271	4.34	0.47	high

The results of the entrepreneurs of SMEs to creativity and business innovation opinion level revealed a high level, with an overall averaging of 4.34 out of 5 and an SD of 0.47. This number indicates a strong positive sentiment toward business creativity innovation. The analysis found that every aspect is also essential at a high level of entrepreneurs' opinion. The descending order was as follows: operational average was 4.38, and the SD was 0.56. Learning average of 4.37; the SD was 0.54. Creativity average of 4.32; the SD was 0.54. Finally, development had an average of 4.29 and a SD of 0.54 (see Table 5).

Table 6: The results of the Business Performance of SMEs opinion level of customers

Business Performance of SMEs	n	Mean	S.D.	The Opinion Level
1) Customer	271	4.48	0.48	high
2) Financial	271	4.30	0.54	high
3) Internal process	271	4.32	0.55	high
4) Learning and business growth	271	4.43	0.50	high
Total	271	4.38	0.52	high

The results of the entrepreneurs of SMEs to Business Performance opinion level revealed a high level, with an overall averaging of 4.38 out of 5 and an SD of 0.52. This number indicates a strong positive sentiment toward business performance. The analysis found that every aspect is also essential at a high level of entrepreneurs' opinion. The descending order was as follows: the customer average was 4.48, and the SD was 0.48. Learning and business growth average of 4.43; the SD was 0.50. Internal processes average of 4.32; the SD was 0.55. Finally, financials had an average of 4.30 and a SD of 0.54 (see Table 6).

Objective 2: To examines the influence of entrepreneurial characteristics and business innovative creativity on the business performance of SMEs in Ubon Ratchathani Province, Thailand.

Table 7: Results of the multiple correlation analysis of the predictor variables and the business performance of SMEs

Model	R	R ²	Adjusted R ²
1	.862a	0.744	0.742

From table 7, the multiple correlation analysis results revealed that the multiple $R = 0.862$; the independent variables were related to the at a very high level. (Salkind, 2013) An R^2 (Adjusted) = 0.742 found that the independent variables could account for 74.2 percent of the variance of change in business performance of SMEs. In contrast, the other 25.8 percent were influenced by the different variables not included in the model.

Table 8: Results of analysis of variances, the predictor variables and the business performance of SMEs

Source of Variances	Sum of Squares	d.f.	Mean Square	F	Sig.
Regression	35.206	2	17.603	387.230	.000 ^b
Residual	12.137	267	0.045		
Total	47.343	269			

From table 8, Results of analysis of variances show that $F = 387.23$, $\text{sig} = 0.00 < 0.01$ means independent variable at least one effect the business performance of SMEs statistically significant at 0.01 level.

Table 9: Results of the multiple linear regression analysis of the business performance of SMEs

Model	Unstandardized Coefficients		Standard Coef.	t	p-value	Collinearity Statistics	
	B	S.E.	Beta			Toler.	VIF
Constant	0.56	0.15		3.83	0.00**		
Autonomy	0.11	0.04	0.12	2.88	0.00**	0.57	1.76
Innovation	0.11	0.03	0.15	3.27	0.00**	0.46	2.18

Risk taking	0.14	0.03	0.18	4.13	0.00**	0.50	2.00
Management	0.14	0.03	0.18	4.30	0.00**	0.53	1.90
Creativity	0.12	0.03	0.16	3.62	0.00**	0.49	2.05
Development	0.01	0.04	0.02	0.28	0.78	0.34	2.97
Operational	0.11	0.04	0.15	2.77	0.01*	0.33	3.04
Learning	0.13	0.04	0.17	3.39	0.00**	0.39	2.60

(Note * $p < 0.05$, ** $p < 0.01$)

From Table 9, the results found that seven independent variables (out of 8) had a statistically significant effect on the business performance of SMEs. All variables had the tolerance and the VIF values were pass the criteria, i.e., Tolerance > 0 and VIF < 5.53 (Pheunpha, 2023), so there was no problem with a very high level of correlation between independent variables. All predictors were suitable for analysis in the multiple regression model in descending order of influence size as follows:

- **Management** of entrepreneurial characteristics influences the entrepreneurs of business performance of SMEs statistically significant at 0.01 level. Beta regression coefficient = 0.18; that is, if SMEs were an increase in **management** by 1 unit, it resulted in the business performance of SMEs increasing by 0.18 standard units, with the other independent variables being constant.

- **Risk** taking of entrepreneurial characteristics influences the entrepreneurs of business performance of SMEs statistically significant at 0.01 level. Beta regression coefficient = 0.18; that is, if SMEs were an increase in **risk** taking by 1 unit, it resulted in the business performance of SMEs increasing by 0.18 standard units, with the other independent variables being constant.

- **Learning** of business innovative creativity influences the entrepreneurs of business performance of SMEs statistically significant at 0.01 level. Beta regression coefficient = 0.17; that is, if SMEs were an increase in **learning** by 1 unit, it resulted in the business performance of SMEs increasing by 0.17 standard units, with the other independent variables being constant.

- **Creativity** of business innovative creativity influences the entrepreneurs of business performance of SMEs statistically significant at 0.01 level. Beta regression coefficient = 0.16; that is, if SMEs were an increase in **creativity** by 1 unit, it resulted in the business performance of SMEs increasing by 0.16 standard units, with the other independent variables being constant.

- **Innovation** of entrepreneurial characteristics influences the entrepreneurs of business performance of SMEs statistically significant at 0.01 level. Beta regression coefficient = 0.15; that is, if SMEs were an increase in **innovation** by 1 unit, it resulted in the business performance of SMEs increasing by 0.15 standard units, with the other independent variables being constant.

- **Operational** of business innovative creativity influences the entrepreneurs of business performance of SMEs statistically significant at 0.01 level. Beta regression coefficient = 0.15; that is, if SMEs were an increase in **operational** by 1 unit, it resulted in the

business performance of SMEs increasing by 0.15 standard units, with the other independent variables being constant.

- **Autonomy** of entrepreneurial characteristics influences the entrepreneurs of business performance of SMEs statistically significant at 0.01 level. Beta regression coefficient = 0.12; that is, if SMEs were an increase in **autonomy** by 1 unit, it resulted in the business performance of SMEs increasing by 0.12 standard units, with the other independent variables being constant.

Meanwhile, development of business innovative creativity did not influence the entrepreneurs of business performance of SMEs.

The equation to predict the business performance of SMEs in the standard score terms.

The business performance of SMEs = $0.18^{**}(\text{Management}) + 0.18^{**}(\text{Risk taking}) + 0.17^{**}(\text{Learning}) + 0.16^{**}(\text{Creativity}) + 0.15^{**}(\text{Innovation}) + 0.15^{*}(\text{Operational}) + 0.12^{**}(\text{Autonomy})$

6. CONCLUSIONS AND DISCUSSION

SME entrepreneurs in Ubon Ratchathani Province highly emphasize key entrepreneurial characteristics with an overall high average score of 4.37, autonomy and risk-taking emerging as the most valued traits. The high mean score reflects a strong positive perception of these qualities contributing to business success. Innovation and management skills also play vital roles, indicating a balanced entrepreneurial mindset. These findings highlight the critical influence of personal traits on SME performance. Fostering these characteristics can further strengthen entrepreneurial outcomes in the region. SME entrepreneurs expressed a strong positive outlook toward creativity and business innovation, with an overall high average score of 4.34. All operations, learning, creativity, and development aspects were rated highly, reflecting their perceived importance in driving business success. SMEs should emphasize Operational and learning. These findings highlight that fostering innovation and creativity across all business areas is essential for SME growth and competitiveness. The results show that SME entrepreneurs have a strong positive perception of their business performance, with an overall high average score of 4.38. All key aspects were rated highly, indicating their importance in driving success. The highest-rated areas were customer focus ($M = 4.48$), learning and business growth, internal processes, and financials. These findings highlight the entrepreneurs' emphasis on customer satisfaction and continuous improvement as key performance drivers.

The multiple regression analysis revealed that entrepreneurial characteristics and business innovation collectively have a strong and significant impact on SME business performance, with an adjusted R^2 of 0.742. This indicates that 74.2% of the variance in performance can be explained by the selected variables. Management and risk-taking had the highest influence, followed closely by learning, creativity, innovation, operations, and autonomy. All variables were statistically significant at the 0.01 level, highlighting their essential roles in enhancing SME performance. These findings underscore the importance of developing both entrepreneurial traits and innovative practices to drive sustainable business success. The conclusion of hypothesis results is shown in table 10.

Table 10: Conclusion of hypothesis testing results

Hypothesis	Decision
H1: There is a significant influence entrepreneurial characteristics on business performance of SMEs in Ubon Ratchathani Province, Thailand.	Accepted
H2: There is a significant influence creativity and business innovation on business performance of SMEs in Ubon Ratchathani Province, Thailand.	Accepted

The multiple regression analysis highlights that various entrepreneurial characteristics and business innovation factors significantly contribute to the performance of SMEs in Ubon Ratchathani Province, Thailand.

Among these, the management factor exhibits a standardized beta coefficient of $\beta = 0.18$, indicating a moderate yet meaningful impact on business performance. This suggests that effective management plays a vital role in steering SME success, particularly in dynamic and resource-constrained regional contexts. Management effectiveness influences strategic decision-making, operational efficiency, and the ability to respond to market changes—key components of sustained competitive advantage. According to Ahmad and Seet (2021), managerial competency is closely linked to business growth, particularly for SMEs navigating uncertain environments. Their study emphasized that SMEs led by proactive and skilled managers are more likely to adopt innovative practices and maintain long-term viability. Recent Thai-based studies further support this finding. For example, Pholphirul (2022) found that managerial quality directly impacts SMEs' ability to integrate innovation into their business models, which in turn enhances performance outcomes. Similarly, Sirisomboonsuk et al. (2023) reported that SME managers who embrace innovation and technology achieve better financial performance and organizational adaptability. These findings align with the positive influence of the management variable observed in the regression analysis. Furthermore, Tantiseneepong and Charoenrat (2024) highlight that in provincial economies such as Ubon Ratchathani, where external consultancy and high-level business services may be limited, internal management capacity becomes even more crucial. This reinforces the idea that even a moderate beta coefficient like 0.18 represents a substantial level for performance improvement within local SMEs.

Risk-taking ($\beta = 0.18$) has a significant and meaningful impact on the business performance of SMEs in Ubon Ratchathani Province, Thailand. As an essential component of entrepreneurial orientation, risk-taking empowers entrepreneurs to navigate uncertainty, pursue innovation, and explore untested markets. The ability to take calculated risks enables SMEs to adapt to volatile conditions, gain competitive advantage, and achieve sustainable growth. This is particularly important in regional and resource-constrained settings, where bold decision-making can compensate for limited external support. Supported by both regional and international studies (Wales et al., 2020; Nguyen & Duong, 2022; Rungsisawat & Jermsittiparsert, 2023; Teece, 2022), the findings affirm that fostering a risk-tolerant entrepreneurial mindset is vital for SME resilience and long-term success.

Learning ($\beta = 0.17$) plays a meaningful role in enhancing the performance of SMEs in Ubon Ratchathani Province, Thailand. A strong commitment to continuous learning enables entrepreneurs to remain adaptable, innovative, and responsive to shifts in market conditions. This characteristic empowers SME leaders to acquire new knowledge, upgrade skills, and integrate best practices, factors that contribute significantly to improved strategic decision-making and overall business success. Saad Zighan et al. (2022) emphasize that learning-oriented entrepreneurs are more capable of identifying growth opportunities and managing organizational change. Their study found that firms that institutionalize learning practices—such as knowledge sharing, reflective thinking, and market research—are more likely to enhance innovation and sustain performance in the long term. In regional economies like Ubon Ratchathani, where external knowledge infrastructure may be limited, the ability to learn

internally becomes even more critical. Additionally, Wang and Chugh (2022) argue that entrepreneurial learning fosters dynamic capabilities, allowing SMEs to develop routines for experimentation, feedback, and continuous improvement. This learning orientation leads to more agile responses to competition and customer needs. Likewise, Al-Hakim and Hassan (2023) highlight that learning is closely linked to innovation performance among SMEs in developing countries, as it enables owners to transform information into actionable strategies. In the Thai context, Chotipanich and Pichaichannarong (2023) found that SMEs that emphasize learning and knowledge acquisition report better outcomes in terms of process efficiency and customer satisfaction. Their findings support the regression result ($\beta = 0.17$), underscoring that learning while slightly lower in impact compared to other variables—remains a vital enabler of growth and competitiveness. Overall, fostering a culture of continuous learning equips SMEs to respond effectively to evolving market demands, technological change, and operational challenges. It nurtures a mindset of adaptability, which is indispensable for thriving in uncertain and resource-constrained environments.

Creativity ($\beta = 0.16$) plays a vital role in driving the performance of SMEs in Ubon Ratchathani Province, Thailand. While its regression coefficient is moderate, the influence of creativity extends beyond numerical significance—it serves as a critical enabler of innovation, adaptability, and long-term competitiveness. Creative entrepreneurs are more likely to develop unique products, enhance operational processes, and implement novel strategies to meet evolving market demands. Literature reinforces this perspective. Kraus (2022) underscores creativity as a cornerstone of entrepreneurial success, especially in dynamic environments. Empirical studies by Neneh (2023), Runyan et al. (2022), and Ratten and Ferreira (2022) further highlight the impact of creativity on opportunity recognition, customer engagement, and innovative problem-solving. These findings suggest that fostering creativity helps SMEs overcome limitations typical of rural regions, such as resource scarcity and limited market access. In summary, nurturing a creative mindset among entrepreneurs not only fuels business growth but also protects against stagnation and enhances resilience making creativity a strategic asset for SMEs seeking sustained success in emerging and regional economies.

Innovation ($\beta = 0.15$) is a critical, albeit moderately weighted, factor influencing the business performance of SMEs in Ubon Ratchathani Province, Thailand. It involves the creation, adaptation, or application of new ideas to develop products, services, or processes that enhance customer satisfaction and improve operational efficiency. Although the regression coefficient is slightly lower compared to other entrepreneurial traits, innovation remains a cornerstone for maintaining competitiveness in dynamic markets. According to Liang et al. (2021), innovation enables SMEs to respond effectively to evolving customer demands, technological advancements, and shifting competitive landscapes. Their study highlighted that SMEs with stronger innovation capabilities were more resilient and more likely to achieve long-term success in rapidly changing environments. Additionally, Kraus et al. (2022) emphasize that innovation in SMEs is not limited to product development but includes process innovations that improve resource efficiency and customer service. These types of innovations are especially vital in regional or rural contexts like Ubon Ratchathani, where firms often face infrastructure limitations and need to create value with constrained resources. Na-Nan et al. (2022) also found that innovation significantly contributes to the agility and adaptability of Thai SMEs. Their research revealed that firms investing in continuous innovation were better able to reposition themselves during periods of economic disruption, such as the COVID-19 pandemic. This underscores innovation's strategic role in ensuring organizational survival and growth, even when its short-term measurable impact appears modest. Furthermore, Oura et al. (2023) argue that innovation acts as a mediator between entrepreneurial competencies and firm performance. Their findings suggest that without a culture of innovation, other entrepreneurial traits—such as risk-taking and creativity—may not fully translate into competitive advantage or profitability. Summary, while innovation holds a slightly lower standardized regression coefficient ($\beta = 0.15$), its qualitative importance remains high. For SMEs in developing or rural areas, innovation ensures relevance, responsiveness, and resilience—key elements in achieving and sustaining market success.

Operational efficiency ($\beta = 0.15$) is a significant driver of SME performance in Ubon Ratchathani Province, Thailand. Despite its moderate standardized regression coefficient, operational efficiency plays a crucial role in enhancing productivity, profitability, and customer satisfaction by streamlining processes, reducing costs, and improving service delivery. In environments with limited resources, where SMEs must maximize output while minimizing inputs, operational efficiency is particularly important. As noted by Ismail et al. (2022), optimizing operational practices enables SMEs to improve response times, enhance inventory management, and smooth workflows, offering a competitive advantage. Further emphasizing its importance, Mohammad and Habib (2023) argue that operational efficiency increases SME resilience and scalability, enabling firms to adapt and maintain stable output, particularly during crises. This perspective aligns with the findings in Ubon Ratchathani, where SMEs have demonstrated enhanced adaptability under economic uncertainties. In the Thai context, Khamparia et al. (2022) observed that SMEs adopting digital tools to automate processes experienced substantial performance improvements, both financially and operationally, supporting the notion that efficient operations are a crucial determinant of business success. In conclusion, operational efficiency, though often overlooked in favor of more visible traits like innovation, is fundamental to the sustainability and competitiveness of SMEs, particularly in rural or developing regions. Its influence on performance—both financially and strategically—highlights its importance in driving long-term business success.

Autonomy ($\beta = 0.12$) plays an influential, though relatively modest, role in enhancing the business performance of SMEs in Ubon Ratchathani Province, Thailand. Despite its lower regression coefficient compared to other entrepreneurial traits, autonomy remains a critical driver of entrepreneurial success. It reflects the entrepreneur's freedom to make independent decisions, set strategic direction, and take timely actions without relying on external approval or rigid organizational structures. As emphasized by Lumpkin, Cogliser, and Schneider (2021), autonomy is a core dimension of entrepreneurial orientation that empowers business owners to pursue innovative ideas, respond swiftly to market changes, and remain strategically agile. This flexibility is especially vital for SMEs operating in dynamic or uncertain environments, where rapid decision-making can create competitive advantages. Moreover, Nguyen et al. (2022) found that autonomy significantly influences the innovative behavior of small business owners, particularly in developing countries where formal support mechanisms are often lacking. Entrepreneurs with a high degree of autonomy are more likely to experiment with new approaches, customize offerings for niche markets, and rapidly shift business models in response to customer feedback. In the Thai SME context, Thamkhantho et al. (2023) reported that autonomy contributes to increased employee empowerment and faster internal communication, both of which enhance operational responsiveness and customer service. Their findings also suggest that autonomous decision-making is linked to higher levels of intrinsic motivation among entrepreneurs, which fuels persistence and long-term strategic thinking. Additionally, Rauch et al. (2022) argue that autonomy enhances strategic flexibility—the ability to pivot when external conditions change. This is particularly relevant in rural or semi-urban areas like Ubon Ratchathani, where local entrepreneurs often must navigate infrastructural limitations, shifting consumer preferences, and economic volatility. Autonomy allows SMEs to move faster than larger firms in seizing new opportunities or addressing risks. In sum, while autonomy's statistical impact ($\beta = 0.12$) is modest, its strategic value is substantial. It enables innovation, enhances responsiveness, and builds resilience making it a key factor in the sustained performance and adaptability of SMEs in emerging markets. These findings align with existing literature, emphasizing that a combination of strategic management, risk-taking, continuous learning, creativity, innovation, operational efficiency, and autonomy are pivotal in enhancing SME business performance. Entrepreneurs who cultivate these characteristics are better equipped to navigate challenges and capitalize on opportunities, driving sustainable growth and success.

7. Recommendations

Based on the findings of the multiple regression analysis, the following recommendations are proposed to enhance the performance of SMEs in Ubon Ratchathani, Thailand and similar regional contexts:

1) **Strengthening Entrepreneurial Training Programs**, Government agencies, academic institutions, and SME support organizations should design and implement targeted training programs to develop critical entrepreneurial characteristics, such as strategic management, risk assessment, creativity, and autonomy. These programs should be practical, regionally contextualized, and focused on real-world application.

2) **Encourage Risk-Taking through Policy and Financial Support**, Policymakers should create supportive financial mechanisms, such as low-interest loans, innovation grants, and risk-sharing instruments, to reduce the perceived cost of failure and encourage entrepreneurial risk-taking. Incubators and mentorship programs can also help guide entrepreneurs in taking calculated risks.

3) **Foster a Culture of Continuous Learning**, SMEs should be encouraged to institutionalize learning through knowledge-sharing platforms, peer networks, and access to digital learning tools. Establishing partnerships with universities and research institutions can further enhance their capabilities to acquire, process, and apply new knowledge effectively.

4) **Promoting Innovation and Digital Transformation**, Support for technology adoption, including subsidies for digital tools and automation systems, can significantly improve operational efficiency and innovation capacity. Workshops and consultancy services should also be made available to guide SMEs in integrating innovation into both products and processes.

5) **Support Creative Thinking and Problem Solving**, Creativity should be cultivated at both individual and organizational levels. This can be achieved by incorporating design thinking and innovation labs into SME development strategies. Local innovation hubs or collaborative spaces can serve as platforms for experimentation and cross-sector collaboration.

6) **Enhance Internal Management Capabilities**, SMEs should be encouraged to adopt professional management practices through leadership development programs, succession planning, and the use of performance management tools. Investment in middle management and staff upskills will also ensure long-term scalability.

7) **Leverage Autonomy for Strategic Agility**, Entrepreneurs should be empowered to make independent, informed decisions through decentralized management structures. Providing tools for market analysis, scenario planning, and customer engagement will support timely and strategic responses to changes in the business environment.

8. Future Research Directions

1) **Longitudinal Studies on Entrepreneurial Traits and SME Performance**, future research should explore how entrepreneurial characteristics evolve over time and their long-term effects on business performance. Longitudinal data could uncover trends and causal relationships more robustly than cross-sectional studies.

2) **Sector-Specific Analysis**, while this study considers SMEs in general, different sectors (e.g., manufacturing, services, agriculture) may exhibit varying degrees of dependency on traits like creativity, innovation, or risk-taking. Sectoral studies would provide more granular and actionable insights.

3) **Comparative Regional Studies**, extending the research to other provinces in Thailand or neighboring ASEAN countries would offer comparative perspectives and help identify universal versus context-specific entrepreneurial success factors.

4) Role of Digital Transformation in Moderating Entrepreneurial Traits, as digitalization becomes increasingly vital, future studies could investigate how digital tools and platforms interact with traits like innovation, autonomy, and learning orientation to influence performance outcomes.

5) Quantitative and Qualitative Mixed-Methods Approaches, combining statistical analysis with in-depth interviews or case studies can provide a richer understanding of how and why certain entrepreneurial traits influence performance, especially in rural or developing regions.

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