

Navigating Innovation: Understanding the Forces Behind Entrepreneurial Success in Small and Medium-sized Enterprises for Sustainable Business Ventures

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ABSTRACT

This study was designed to investigate factors influencing entrepreneurial success and innovation adoption within SMEs in Mamburao. It aims to explore how leadership vision, resource availability, and market understanding contribute to innovation adoption. This approach provides comprehensive insights into entrepreneurial dynamics, innovation practices, and sustainability initiatives within the SME sector. Moreover, SMEs in Mamburao employ diverse innovation strategies including product/service innovation, process optimization, market expansion through digital platforms, collaborative partnerships, and sustainability initiatives. Based on these findings, practical recommendations are provided to enhance innovation adoption and sustainability practices within SMEs. These include strengthening leadership capabilities, optimizing resource allocation, fostering an entrepreneurial culture, and leveraging strategic partnerships. The study also proposes a strategic model for cultivating sustainable business ventures tailored to the context of SMEs in Mamburao.

INTRODUCTION

The Perceived Gap. Small and medium-sized enterprises (SMEs) are indispensable drivers of economic vitality worldwide, playing a pivotal role in job creation, fostering economic growth, and catalyzing innovation (Oduro, 2020). Their significance transcends national borders, profoundly impacting global economic development. In the context of the Philippines, SMEs represent a cornerstone of the economy, embodying multifaceted contributions as economic engines, employment generators, industry innovators, and catalysts for regional development. The latest Philippine MSME Statistics report underscores the substantial footprint of micro, small, and medium-sized enterprises (MSMEs) in the country's economic landscape. According to the report, MSMEs constitute an overwhelming majority of business establishments, comprising 99.59% of total enterprises. Notably, micro enterprises dominate the landscape, accounting for 90.49% of establishments, followed by small enterprises at 8.69%, and medium enterprises at 0.40% (DTI, 2022).

The primary aim of this study is to uncover the intricate dynamics of entrepreneurial success within SMEs, specifically focusing on sustainable business ventures. By examining the unique context of SMEs in Mamburao, Occidental Mindoro, this research sought to shed light on the factors driving innovation, fostering entrepreneurship, and promoting sustainable development in this area. Incorporating recent research findings and empirical evidence, this study endeavors to contribute to the discourse on entrepreneurship, innovation, and sustainable development, providing valuable insights for stakeholders across sectors.

In summary, this study represents a concerted effort to advance understanding of entrepreneurial success within SMEs for sustainable business ventures. By focusing on the unique context of Mamburao, Occidental Mindoro, and leveraging recent research findings, this research aims to inform policies, strategies, and practices aimed at fostering entrepreneurship, innovation, and sustainable development in SMEs, ultimately contributing to economic growth and societal well-being.

THEORETICAL REVIEW

Entrepreneurial Innovations

Entrepreneurial innovation within small and medium-sized enterprises (SMEs) has been widely recognized as a critical driver of economic growth, competitiveness, and job creation. Scholars argue that SMEs, due to their inherent characteristics such as flexibility, agility, and close proximity to markets, are well-positioned to innovate and introduce novel products, services, and processes (Thrassou, Uzunboylu, Vrontis, & Christofi, 2020). According to Asemokha, Musona, Torkkeli and Saarenketo (2019), entrepreneurial innovation in SMEs encompasses the identification and exploitation of new opportunities, the development of innovative solutions to market needs, and the implementation of creative strategies to gain a competitive advantage.

Key Factors Influencing the Adoption of Innovation in Small and Medium-Sized Enterprises (SMEs)

This following literature underscores the multidimensional nature of innovation adoption in SMEs, highlighting the interconnected roles of leadership, resource management, and market understanding. Effective leadership fosters a supportive environment for innovation, strategic resource allocation optimizes investment in innovation initiatives, and market insights ensure that innovations meet customer expectations and market demands. By integrating these factors into their innovation strategies, SMEs can enhance their capacity to innovate and maintain competitive advantage in dynamic business environments.

Leadership and Vision

Leadership and vision are foundational elements influencing innovation adoption in SMEs. Transformational leadership, characterized by inspirational guidance and empowerment, has been identified as particularly effective in cultivating an innovative culture (Cortes & Herrmann, 2020). This leadership style not only motivates employees but also aligns their efforts with organizational goals, fostering a proactive approach to innovation. Hoang et al. (2021) emphasize that visionary leaders articulate clear goals and a compelling vision that inspires teams to embrace new ideas and technologies. Such leaders are pivotal in steering SMEs towards adopting innovative practices that resonate with market demands, ensuring sustainable growth and competitive advantage (Leek-

Resource Availability

Resource constraints, particularly financial limitations, present significant challenges for SMEs aiming to innovate. Gherghina et al. (2020) underscore the critical role of strategic resource management in overcoming these challenges. SMEs often face pressures to allocate limited funds to immediate operational needs, which can impede investments in innovation initiatives (Kamalrulzaman et al., 2021). However, strategic alliances and partnerships have emerged as viable strategies for SMEs to pool resources and expertise, facilitating innovation despite financial constraints (Zahoor & Al-Tabbaa, 2020). This collaborative approach not only mitigates risks but also enhances innovation capabilities by leveraging external networks and knowledge. By prioritizing resource allocation based on strategic goals and market opportunities, SMEs can optimize their limited resources and make informed decisions that support long-term innovation and growth. The challenge lies in balancing short-term financial pressures with long-term innovation goals, requiring SMEs to adopt agile and adaptive strategies to sustain competitiveness.

Market Understanding

Understanding market demand and customer feedback is crucial for SMEs seeking to innovate effectively. Matriano and Khan (2019) highlight the importance of customer-centric approaches in tailoring products and services to

meet evolving market needs. By actively gathering and analyzing customer insights, SMEs can identify emerging trends and preferences, informing strategic decisions related to product development and marketing strategies (Horváth et al., 2024). This proactive approach not only enhances customer satisfaction but also strengthens competitive positioning by aligning offerings with market expectations.

Innovation Strategies employed by SMEs to stay competitive and ensure sustainable business ventures

Innovation can be classified into various forms which are also part of the definition. There are different types of innovation from literature and these differ from one author to another. Hussain, Shahzad and Hassan (2020) elaborate that innovation can be categorized into 4 types namely product innovation, process innovation, marketing innovation and organizational innovation.

Product/service innovation

Product and service innovation is crucial for SMEs aiming to stay competitive in dynamic markets. According to recent studies, SMEs frequently introduce new products and services as a proactive strategy to enhance competitiveness and meet evolving market demands (Kamalrulzaman et al., 2021; Falahat et al., 2018). This proactive stance underscores the importance these SMEs place on continuous improvement and innovation to maintain market relevance. Factors influencing the decision to innovate products/services include market demand, competitor offerings, technological advancements, and customer feedback (Gherghina et al., 2020; Ceptureanu et al., 2020). Research highlights that aligning innovation strategies with market conditions and customer preferences enhances the likelihood of successful outcomes and sustainable growth (Falahat et al., 2020). SMEs that adopt a comprehensive approach to product/service innovation are better positioned to capitalize on emerging opportunities and navigate competitive pressures effectively.

Process innovation

Process innovation involves optimizing internal operations to improve efficiency, reduce costs, and enhance agility. Automation and digitalization are prominent strategies among SMEs to streamline operations and gain competitive advantages (Ramdani et al., 2021). By adopting technologies like ERP systems, CRM software, and automated manufacturing processes, SMEs can achieve operational efficiencies and better respond to market demands (Ramdani et al., 2021).

Marketing innovation

Market innovation strategies enable SMEs to adapt to changing market dynamics and customer preferences. Digital transformation and e-commerce adoption are prevalent among SMEs seeking to enhance customer engagement, expand market reach, and optimize sales channels (Costa & Castro, 2021; Hussain et al., 2020). By leveraging digital technologies, SMEs can personalize customer experiences, target specific market segments effectively, and optimize marketing

strategies (Thaichon et al., 2022; Wibowo et al., 2021). Market segmentation and niche targeting strategies help SMEs identify and cater to unique customer needs, enhancing customer satisfaction and loyalty (Jamaludin et al., 2022). Localized marketing and community engagement also play significant roles in building strong customer relationships and enhancing brand presence within specific geographic markets (Jamaludin et al., 2022; Kumar, 2024). By adopting innovative approaches to market engagement, SMEs can differentiate themselves, foster customer loyalty, and sustain growth amidst competitive pressures.

Collaborative innovation

Collaborative innovation is characterized by partnerships and alliances between firms, has emerged as a prominent strategy for enhancing innovation capabilities and competitiveness (Wang & Hu, 2020). It involves SMEs forming strategic partnerships and alliances with external stakeholders to co-create value, access new resources, and leverage complementary strengths. Collaborative innovation enables firms to leverage external knowledge and resources, leading to the development of novel products, services, and processes (Benhayoun, Le Dain, Dominguez-Péry & Lyons, 2020).

Sustainability Innovation

Sustainability innovation focuses on developing products, processes, or business models that promote environmental sustainability and social responsibility. SMEs are increasingly integrating sustainability into their innovation strategies to meet regulatory requirements, mitigate environmental impacts, and enhance brand reputation (Hilmersson & Hilmersson, 2021; Horváth et al., 2024). Sustainable product design and eco-friendly manufacturing practices are key areas of focus, enabling SMEs to reduce carbon footprints, minimize waste, and optimize resource use (Hilmersson & Hilmersson, 2021).

Entrepreneurial Innovations and SME Performance and Success

Numerous studies have highlighted the positive relationship between entrepreneurial innovation and SME performance (Asemokha et al., 2019; Falahat et al., 2020; O'Dwyer & Gilmore, 2019; Udriyah et al., 2019). The literature extensively emphasizes the crucial link between innovation and firm success, underscoring the pivotal role of innovation strategies in enhancing competitiveness (Naranjo-Valencia et al., 2016, cited in Falahat, Tehseen, & Van Horne, 2018). Studies emphasize that firms with a higher level of innovativeness tend to outperform their counterparts, particularly in turbulent business environments (Zawawi et al., cited in Falahat et al., 2018). This positive association between innovation and firm performance has been consistently supported by empirical evidence across various industries (Bartoloni & Baussola, 2018).

Theoretical Framework

This study draws upon several prominent theories to provide a comprehensive understanding of entrepreneurial success within SMEs for sustainable business ventures in Mamburao, Occidental Mindoro. The theories include the Innovation Diffusion Theory, the Resource-Based View (RBV) Theory, the Entrepreneurial Orientation (EO) Theory, and the Triple Bottom Line (TBL) Theory.

Innovation Diffusion Theory

The Innovation Diffusion Theory, proposed by Rogers in 1962 (cited in Ramírez-Solis, & Rodriguez-Marin, 2022). and expanded upon in subsequent editions, provides a framework for understanding how new ideas, products, or practices spread within a social system over time. This theory is particularly relevant to the study of innovation adoption within small and medium-sized enterprises (SMEs), as it offers insights into the factors that influence the adoption and diffusion of innovations.

Resource-Based View (RBV) Theory

The Resource-Based View (RBV) theory, introduced by Jay Barney in 1991 (cited in El Namar et al., 2022)., is a strategic management framework that emphasizes the role of firm-specific resources and capabilities in achieving sustainable competitive advantage. According to RBV, a firm's competitive advantage stems from its ability to acquire, develop, and deploy valuable, rare, and difficult-to-imitate resources and capabilities.

Entrepreneurial Orientation (EO) theory

The Entrepreneurial Orientation (EO) theory, developed by Lumpkin and Dess in 1996 (mentioned in Perera & Samarakoon, 2021), is a framework that explores the entrepreneurial behaviors and strategic orientations of firms. It identifies five dimensions of entrepreneurial orientation that characterize firms with an entrepreneurial mindset:

- 1) Innovativeness: The propensity to engage in new product development, experimentation, and creativity to stay ahead of the competition and meet customer needs in novel ways.
- 2) Proactiveness: The willingness to seize opportunities and take proactive actions to anticipate and shape the future market environment rather than simply reacting to it.
- 3) Risk-taking: The willingness to take calculated risks and tolerate uncertainty in pursuit of entrepreneurial opportunities, including investing resources in potentially high-risk ventures.
- 4) Competitive Aggressiveness: The inclination to fiercely compete in the marketplace by challenging competitors, aggressively pursuing market share, and seeking to outperform rivals.
- 5) Autonomy: The degree of independence and freedom given to employees to act entrepreneurially within the organization, empowering them to make decisions and take initiative.

Triple Bottom Line (TBL) Theory

The Triple Bottom Line (TBL) theory, introduced by Elkington (1997) in Edeigba & Arasanmi (2022), emphasizes three performance dimensions: social, environmental, and economic. It encourages organizations to pursue not only financial profit but also to consider their impact on people and the environment. In the study of SME entrepreneurial success in Mamburao, Western Mindoro, TBL serves as a relevant framework for assessing sustainability by integrating social responsibility, environmental management, and profitability.

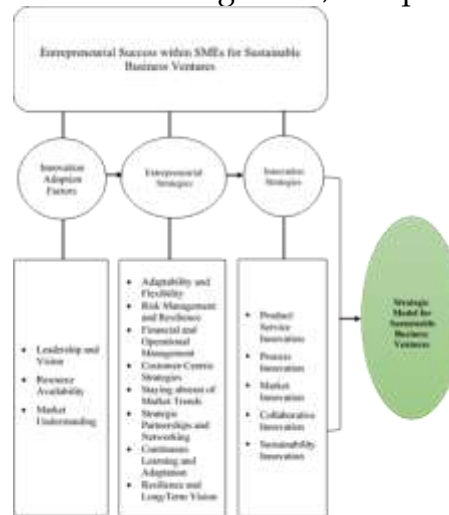


Figure 1. Conceptual Framework

METHODOLOGY

Research Design

This study uses a mixed methods design, combining surveys and interviews to examine entrepreneurial success and sustainability among SMEs in Mamburao. Surveys provide quantitative measures, while interviews offer qualitative insights, enabling triangulation to strengthen validity and reliability. Data are analyzed using both quantitative and qualitative techniques, allowing a holistic understanding of entrepreneurial dynamics. The mixed methods approach is chosen due to the complexity of the research, which requires capturing both measurable indicators (e.g., innovation, income growth) and experiential insights (e.g., strategic thinking, sustainability decisions).

Population, Samples and Sampling Technique

The study population consists of SME owners and/or managers in Mamburao, Occidental Mindoro, registered with the Department of Trade and Industry (DTI). According to the Municipal Licensing Office, there were 798 DTI-registered SMEs in 2023. From this population, a purposive sample of the top 20 SMEs was selected based on income growth from 2021 to 2023, which serves as the indicator of entrepreneurial success. This approach ensures that insights are drawn from entrepreneurs who have achieved notable growth. Table 1 presents the top performing SMEs in Mamburao.

Table 1. Top performing SMEs in Mamburao, Occidental Mindoro based on income growth rate (2021-2023)

SME	Average Growth Rate (%) in Income / Sales (2021-2023)
Kadyo Meat Stall	119.958
Abistado Catering and Party Needs	108.974
Sunlight Solar Power Production and Electrical Supply	70.864
Deejay Store	66.349
Myla's Mamburao Pizza	59.029
Eugenio's General Merchandise	56.369
Leone's Kitchen and Bar	55.714
Tita Lilia's Flower Shop and Gen. Merchandise	45.841
M.R. Babao Dry Goods Store	45.762
K-Alwinz General Merchandise Corporation	44.833
My Sugar Shack Cakes	42.691
Farm and Fable Marketing	37.535
New Silangan Hardware and Fishing Supply	35.529
Ailyn Gen Merchandise	34.084
A.D Jimenez Computer Supplies and Services	32.526
Gielyn Marine Agri	30.409
E.T Aquino Travellers and Restaurant	29.286
RV Fish Buying Station	25.640
B. Andaya Fish Buying Station	23.810
UHAWS Hime of Pantawid Uhaw	19.295

Overall, the population for this study comprises all DTI-registered SMEs in Mamburao, with the sample consisting of the top 20 performing SMEs based on income growth. The purposive sampling technique allows the study to focus on participants who exemplify entrepreneurial success, thereby providing valuable insights into factors contributing to success in SMEs within the area.

Data Analysis

The analysis of data in this study employed a mixed-methods approach, integrating both quantitative and qualitative methods to comprehensively explore the research questions and objectives. This combination allows for a deeper understanding of the factors influencing entrepreneurial success in SMEs for sustainable business ventures in Mamburao.

RESULTS AND DISCUSSION

Key Factors Influencing the Adoption of Innovation in Small and Medium-Sized Enterprises (SMEs)

Based on the interviews conducted with 20 owners and managers of top-performing SMEs in Mamburao, leadership and vision, along with resource availability, emerged as key factors influencing the adoption of innovation.

Leadership and Vision. Sixteen of 20 SME leaders emphasized that effective leadership fosters a culture of innovation by setting clear goals, encouraging adaptability, and promoting experimentation.

Resource Availability. Fourteen participants highlighted financial constraints as a major barrier to innovation. Limited capital often forced SMEs to prioritize essential, high-demand products over riskier innovation, reflecting pragmatic resource management.

Market Understanding. Eighteen participants stressed that customer preferences strongly shape innovation. SMEs actively use feedback to improve products, anticipate market shifts, and maintain competitiveness through customer-centric strategies.

Entrepreneurial Strategies for Navigating Challenges and Capitalizing on Innovation Opportunities in SMEs

Interviews revealed several core strategies enabling SMEs to navigate challenges and harness innovation. **Adaptability and flexibility** were emphasized as crucial for responding to market volatility and sustaining competitiveness. **Risk management and resilience** also stood out, with entrepreneurs embracing risk-taking while maintaining perseverance amid crises.

Financial and operational discipline provided stability, ensuring daily operations while supporting long-term growth and innovation. Many SMEs also prioritized **customer-centric strategies**, actively using feedback to refine products, services, and marketing, thereby strengthening loyalty and market relevance.

Staying informed of **market trends and technological shifts** was another recurring theme, as entrepreneurs adopted proactive approaches to remain competitive. Likewise, **continuous learning and adaptation** were seen as vital for upgrading skills and knowledge in a changing environment.

Finally, **resilience and long-term vision** emerged as defining attributes, enabling SMEs to remain focused during setbacks and to turn challenges into growth opportunities. Together, these strategies highlight that success in Mamburao's SMEs stems from agility, customer orientation, operational discipline, and a forward-looking mindset.

Innovation Strategies SMEs Employ to Stay Competitive and Ensure Sustainable Business Ventures

SMEs in Mamburao employ a range of innovation strategies to sustain competitiveness and growth, including **Product/Service Innovation, Process Innovation, Market Innovation, Collaborative Innovation, and Sustainability**

Innovation. These categories reflect the diverse ways SMEs enhance operations, strengthen market positioning, and pursue long-term business sustainability. **Product/Service Innovation** emerged as particularly significant. As shown in Table 2, SMEs demonstrated a generally high entrepreneurial orientation with an average weighted mean of 3.50, indicating competitiveness, employee empowerment, and moderate risk-taking. These traits are critical for small, resource-constrained enterprises seeking to innovate effectively. This aligns with Kamalrulzaman et al. (2021), who found that innovation capabilities in Malaysian agricultural SMEs were strongly linked to proactive strategic orientation and employee involvement. In Mamburao, the relatively high scores for competitiveness (3.70) and employee empowerment (3.80) reflect similar dynamics—firms that foster agility and delegate decision-making are able to accelerate innovation cycles and respond more effectively to market changes.

Table 2. Entrepreneurial Orientation of SMEs in Relation to Product and Service Innovation

S2	Entrepreneurial Orientation	WM	SD	Verbal Description
1	Extent of SME prioritization on innovation in its operations	3.20	1.056	Moderate Extent
2	How proactive is your SME in identifying and seizing new business opportunities?	3.40	0.940	Moderately Proactive
3	How willing is your SME to take risks in pursuit of entrepreneurial opportunities?	3.40	0.754	Moderately Proactive
4	How competitive is your SME in the marketplace compared to other businesses in your industry?	3.70	0.801	Highly Competitive
5	To what extent does your SME empower employees to take initiative and make decisions?	3.80	0.696	High Extent
Average Weighted Mean and Standard Deviation		3.50	0.894	High Level

Note. WM = Weighted Mean; SD = Standard Deviation

In summary, the entrepreneurial orientation displayed by these SMEs reflects a promising, though cautious, approach to innovation. This is consistent with contemporary SME innovation behavior as documented in regional and international literature. Aligning internal capabilities such as proactiveness and empowerment with external market intelligence could enable SMEs to transition from operational survival to sustainable innovation leadership.

Table 3 illustrates that all 20 SME participants introduced new products or services within the past three years, demonstrating a collective commitment to innovation as a key business strategy. This widespread adoption of innovation practices reflects the growing necessity for small businesses to continuously evolve in response to market pressures and shifting consumer preferences. The

complete participation of respondents in innovation activities underscores that even resource-constrained enterprises recognize product and service innovation as vital for survival and growth. According to Kamalrulzaman et al. (2021), SMEs that actively pursue innovation are more likely to experience sustained competitive advantage, particularly in rapidly changing business environments.

Table 3. Product and Service Innovation Practices Among SME Participants

Product/ Service Innovation Practices	Frequency (n=20)	Percentage (%)
Introduced of new products / services in the past 3 years		
Yes	20	100
Factors influencing SME decision to introduce new products and services		
Market demand	4	20
Market demand & competitor offerings	1	5
Market demand & customer feedback	3	15
Market demand, competitor offerings & customer feedback	3	15
Market demand, technological advancements & customer feedback	1	5
Market demand, competitor offerings, technological advancements & customer feedback	8	40

The results also reveal that multiple external factors influence innovation decisions among SMEs. Specifically, 40 percent of respondents indicated that their strategies were shaped by a combination of market demand, competitor offerings, technological advancements, and customer feedback. This underscores the idea that SMEs do not innovate in isolation but respond to a complex interplay of market forces.

Table 4 presents the self-assessed level of market understanding among SME owners and managers in Mamburao. The findings show a weighted mean of 4.00 and a standard deviation of 0.562, indicating that the majority perceive their market knowledge as "very good." Specifically, 70% rated their understanding as very good, 15% as excellent, and 15% as good. No participants rated their market understanding as fair or poor, demonstrating a consistent perception of strong market awareness among the respondents.

Table 4. Level of Market Understanding Among SME Owners/Managers

Rating	Description	Frequency (n = 20)	Percentage (%)
5	Excellent	3	15
4	Very Good	14	70
3	Good	3	15
2	Fair	0	0
1	Poor	0	0
	WM / SD / Description	4.00	0.562 (Very Good)

Note. WM = Weighted Mean; SD = Standard Deviation

This high level of perceived market understanding is a critical asset for innovation-driven SMEs. As emphasized by Riswanto et al. (2020), market-oriented SMEs that actively gather, analyze, and respond to market information are more likely to innovate successfully.

Table 5 presents the sustainability innovation practices among SMEs in Mamburao, focusing on their integration of social responsibility, environmental consciousness, economic sustainability, and collaboration with stakeholders. The findings reveal that SMEs demonstrate a high level of internal commitment to sustainability. Similarly, the prioritization of economic sustainability in business practices received a high mean of 3.90, suggesting that most SMEs also maintain a strong focus on long-term financial viability as part of their sustainability agenda.

Table 5. Sustainability Innovation Practices of SMEs

S4	Sustainability Innovation Items	WM	SD	Verbal Description
1	To what extent does your SME incorporate social responsibility practices into its operations?	3.95	0.686	High Extent
2	How environmentally conscious is your SME in its business practices?	3.95	0.686	High Extent
3	Extent of SME's prioritization of Economic sustainability in business practices	3.90	0.852	High Extent
4	Extent of SME's collaboration with other organizations or stakeholders to promote sustainability initiatives	2.40	0.883	Moderate collaboration

These findings align with Hermundsdottir and Aspelund (2021), who highlight that SMEs with high sustainability orientation tend to develop stronger competitiveness and stakeholder trust. Moreover, Burlea-Schiopoiu and Mihai (2019) assert that sustainability in SMEs contributes to organizational resilience, particularly in volatile market environments. The high scores in these three areas underscore that SMEs are actively pursuing responsible innovation internally, positioning themselves as agents of sustainable value creation.

Table 6 illustrates the overall perception of business success among SME participants, specifically their self-assessed achievement in meeting business objectives. The weighted mean of 3.90 and a standard deviation of 0.788 indicate that the majority of SME owners or managers perceive themselves as successful in achieving their enterprise goals. The corresponding verbal description, "Successful," reflects a generally positive outlook on business performance across the sample.

Table 6. Overall Perception of Business Success by SME Participants

S5	Overall Perception	WM	SD	Verbal Description
1	SMS's ratings on the overall success in achieving their business objectives	3.90	0.788	Successful

This result aligns with previous findings in the study, particularly in areas where SMEs demonstrated strong entrepreneurial orientation, innovation practices, and sustainability efforts. The high perception of success may be attributed to their proactive stance in adapting to market changes, customer-focused strategies, and prudent financial and operational management. According to Ceptureanu et al. (2020), SMEs that embrace innovation and sustainability not only improve their operational effectiveness but also gain a competitive advantage, which enhances their chances of long-term success.

Process Innovation

Interviews with SMEs revealed five key process innovation strategies. **Automation and digitalization** were most common, adopted by 18 of 20 SMEs through ERP, CRM, and digital payment tools. **Lean manufacturing and continuous improvement** followed, cited by 14 SMEs focusing on waste reduction and standardized operations. **Supply chain optimization** was practiced by 10 SMEs, improving coordination, logistics, and inventory management. **Quality Management Systems (QMS)** were noted by 8 SMEs, with ISO and TQM adoption enhancing consistency and customer trust (Ali et al., 2020). Finally, **employee empowerment and training**, mentioned by 3 SMEs, supported cross-functional collaboration and organizational resilience.

Market Innovation

Interviews with SME owners and managers in Mamburao highlight market innovation as vital for competitiveness and sustainability. **Digital transformation and e-commerce** were the most common strategies, adopted by 15 SMEs to streamline operations, engage customers, and expand market reach, consistent with studies showing that digital platforms enhance efficiency, reduce costs, and boost customer loyalty (Costa & Castro, 2021; Hussain et al., 2020). **Personalized customer experiences**, also cited by 15 SMEs, involved tailoring products, services, and loyalty programs based on customer feedback, supporting findings that personalization strengthens satisfaction and brand loyalty (Thaichon et al., 2022). **Market segmentation and niche targeting** were

practiced by 8 SMEs, enabling them to serve underserved segments and compete effectively in less saturated markets (Deepak & Jeyakumar, 2019). A smaller group (3 SMEs) pursued **localized marketing and community engagement**, fostering trust and goodwill within the local economy (Jamaludin et al., 2022).

Overall, these strategies show that SMEs in Mamburao combine digital tools, customer feedback, niche focus, and community ties to enhance flexibility, differentiate themselves, and remain resilient in a competitive, evolving marketplace.

Collaborative Innovation

Interview findings show that only 4 of 20 SMEs in Mamburao practice **collaborative innovation**, mainly with suppliers, distributors, or complementary businesses to improve products, distribution, and capacity. Although limited, collaboration provides access to external resources, reduces risks, and enhances resilience (Radziwon & Bogers, 2019; Zahoor & Al-Tabbaa, 2020). The concept of **open innovation** further underscores the importance of cross-industry partnerships in building sustainable business models (Carrasco-Carvajal et al., 2023).

The implication is that SMEs should be encouraged to collaborate more through policy support, partnership platforms, and incentives to strengthen the innovation ecosystem.

Sustainability Innovation

Table 7 presents the findings on sustainability innovation practices among successful SMEs in Mamburao, focusing on their engagement in social responsibility, environmental consciousness, the implementation and types of sustainability initiatives, encountered challenges, and levels of collaboration. The results underscore the growing recognition among SMEs of sustainability as a strategic imperative rather than a peripheral concern.

Table 7. Sustainability Innovation Practices Among Successful SMEs in Mamburao

Response Category	Frequency (n=20)	Percentage (%)
Extent of social responsibility practices		
5 – To a very great extent	4	20
4 – To a great extent	11	55
3 – To a moderate extent	5	25
2 – To a small extent	0	0
1 – Not at all	0	0
Mean = 3.97	To a great extent	
Degree to which participants is environmentally conscious in business practices		
5 – Extremely environmentally conscious	4	20

4 - Highly environmentally conscious	11	55
3 - Moderately environmentally conscious	5	25
2 - Slightly environmentally conscious	0	0
1 - Not environmentally conscious	0	0
Mean = 3.97	To a great extent	

Table 7. (continued). Sustainability Innovation Practices Among Successful SMEs in Mamburao

Response Category	Frequency (n=20)	Percentage (%)
Implemented sustainability initiatives in the past 3 years		
Yes	15	75
No	5	25
Types of Sustainability Initiatives Implemented		Rank
Renewable Energy: Our solar PV power generation system produces electricity solely from solar energy, emitting zero CO2 and generating no additional waste.	1	13.5
Sustainable Marketing: We conduct our business in an environmentally and socially responsible manner.	1	13.5
Online Marketing and Local Sourcing: We use online platforms for marketing and delivery, offering quality products and services at affordable prices, sourced locally, including flowers.	11	1
Employee Relations and Solar Panel Installation: We maintain good employee relationships and support sustainable practices like installing solar panels.	2	9.25
Local Materials for High-Quality Products: We ensure our products maintain high quality by utilizing local materials.	2	9.25
Affordable Quality Services: We offer affordable yet high-quality services.	5	5.5

Table 7 (continued) Sustainability Innovation Practices Among Successful SMEs in Mamburao

Response Category	Frequency (n=20)	Rank
Customer and Employee Relationship Focus: We prioritize building strong relationships with both customers and employees.	2	9.25
Employee Development and Management: We invest in our employees' skills and maintain good management practices.	2	9.25
Focus on Product Quality: We ensure our products are of high quality and taste.	6	4
Reduced Electricity and Plastic Use: We actively reduce electricity consumption and minimize plastic usage.	8	3
Modernized Equipment and Utensils: We invest in modern equipment and utensils to enhance our catering business.	3	7.5
Facility and Material Upgrades: We continuously upgrade our facilities and raw materials, utilizing social media for product promotion.	3	7.5
Customer Loyalty Promotions: We regularly offer discounts and promotions, especially to loyal customers, particularly during December.	5	5.5
Low Environmental Impact Practices: Implementing waste recycling and segregation to minimize environmental footprint.	9	2

Table 7. (continued) Sustainability Innovation Practices Among Successful SMEs in Mamburao

Response Category	Frequency (n=20)	Percentage (%)
Challenges encountered in the implementation of sustainability initiatives		
Lack of financial resources	4	20
Limited awareness or understanding of sustainability issues	4	20
Resistance from stakeholders	2	10
Regulatory or compliance issues	2	10
Technological constraints	1	5

Lack of financial resources and limited awareness or understanding of sustainability issues	1	5
Lack of financial resources and regulatory or compliance issues	2	10
Lack of financial resources and technological constraints	1	5
Regulatory or compliance issues and technological constraints	1	5
Lack of financial resources, regulatory or compliance issues, and technological constraints	2	10
Extent of SME's collaboration with other organizations or stakeholders to promote sustainability initiatives		
4 - Extensive collaboration	1	20

Table 7. (continued) Sustainability Innovation Practices Among Successful SMEs in Mamburao

Response Category	Frequency (n=20)	Percentage (%)
3 - Moderate collaboration	10	25
2 - Limited collaboration	5	50
1 - No collaboration	4	5
Mean =2.40	Moderate Collaboration	

SMEs in Mamburao show strong commitment to sustainability. Social responsibility scored high (mean = 3.97), with most SMEs practicing fair labor, local employment, and community support, aligning with the TBL framework (Burlea-Schiopoiu & Mihai, 2019). Environmental consciousness was also strong (mean = 3.97), guiding resource efficiency and eco-friendly practices (Hermundsdottir & Aspelund, 2021). About 75% implemented sustainability initiatives in the past three years, including online marketing, local sourcing, waste reduction, renewable energy, and employee development, reflecting proactive strategies for resilience (Ceptureanu et al., 2020).

Key challenges include financial constraints, low awareness, regulatory issues, and limited technology access (Álvarez et al., 2019). Collaboration with stakeholders remains weak (mean = 2.40), with few SMEs engaging in partnerships, limiting knowledge sharing and resource mobilization (Radziwon & Bogers, 2019). Overall, SMEs are embedding sustainability as a strategic

advantage, but stronger support and collaboration are needed to maximize impact.

Proposed Strategic Model for Cultivating Sustainable Business Ventures in Small and Medium-Sized Enterprises (SMEs)

Innovation Adoption Factors form the foundation, including leadership and vision, resource availability, and market understanding, which enable SMEs to pursue innovation effectively. From these, **Entrepreneurial Strategies** emerge, such as adaptability, risk management, financial and operational efficiency, customer focus, market awareness, partnerships, continuous learning, and long-term vision. These strategies then shape **Innovation Strategies**, which include product/service innovation (e.g., sustainability practices, technological upgrades), process innovation (automation, lean practices, supply chain optimization), market innovation (digitalization, e-commerce, personalized services), collaborative innovation (alliances with stakeholders), and sustainability innovation (renewable energy, eco-friendly practices).

The model illustrates a dynamic flow: adoption factors shape entrepreneurial strategies, which drive innovation strategies. Properly aligned, this framework enables SMEs not only to achieve business success but also to contribute to sustainable development and local economic growth.

CONCLUSIONS AND RECOMMENDATIONS

The study finds that **leadership and vision, resource availability, and market understanding** are key enablers of innovation adoption among SMEs in Mamburao. Successful SMEs employed **entrepreneurial strategies** such as adaptability, resilience, customer focus, and strategic partnerships, which enhanced flexibility and long-term sustainability. SMEs also implemented diverse **innovation strategies**—including product/service, process, market, collaborative, and sustainability innovations—highlighting the role of digitalization, eco-friendly practices, and customer-driven approaches. A **strategic model** was developed, integrating these enablers, strategies, and practices, emphasizing alignment, resource optimization, and continuous innovation as pathways to sustainable business ventures.

FURTHER STUDY

This study is limited to SMEs in Mamburao with a qualitative approach; therefore, future research is recommended to expand the research location, integrate quantitative methods to test relationships between variables, and explore the role of digitalization, policy, and the entrepreneurial ecosystem. In addition, longitudinal studies could assess the long-term impact of innovation strategies, including contributions to social and environmental sustainability.

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