



The influence of entrepreneurial capability and innovation capability on sustainable organization performance: Evidence of community enterprise in Thailand



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ABSTRACT

The purpose of this study is to examine the influence of entrepreneurial capability and innovation capability on sustainable organization performance, as well as to explore the role of innovation capability as a mediator in the relationship between entrepreneurial capability and sustainable organization performance. Using questionnaires to collect data from community enterprises in Phuket, Thailand. The respondents were presidents and vice-presidents of their respective community enterprises. The analysis was conducted using (AMOS-SEM) approach. The results reveal that entrepreneurial capability plays a robust role in promoting innovation capability and sustainable organization performance. Furthermore, innovation capability has a positive influence on sustainable organization performance. Additionally, innovation partially mediates the relationship between entrepreneurial capability and sustainable organization performance. Entrepreneurial capability (EC) is influenced by several key factors, including Leadership and Management, Active Learning and Analysis, and Passion and Self-Achievement. These elements contribute to an individual's ability to identify and capitalize on opportunities, drive innovation, and create value in their ventures. While Innovation capability (IC) is determined by Management Potential, Process Potential, and Technology Potential. Sustainable Organization Performance (SOP) is measured by Economic Performance, Social Performance, and Environmental Performance. Consequently, the results of this research provide guidelines for policymakers to create an enabling environment for community enterprises to thrive, promote entrepreneurship and innovation, and contribute to sustainable organization performance.

Introduction

The present era of rapid change necessitates organizations to swiftly adapt in order to not only survive but also attain long-term sustainability. Entrepreneurial capability theory provides some directions for entrepreneurial practice in the face of volatility, uncertainty, complexity, and ambiguity (VUCA) (Murugan et al., 2020). The impact of entrepreneurship on organizational management and performance enhances competitiveness. The organization shall ensure that resources are used appropriately and integrated in response to the changing environment (Yi et al., 2018). The Resource-Based View (RBV) is an approach to achieving sustained competitive advantage (Barney, 1991; Prahalad and Hamel, 1990; Wernerfelt, 1984). The conceptual development of this approach took place during the 1980s and 1990s,

following the influential publications by Birger Wernerfelt, Prahalad and Hamel, and Barney, J, among other contributors. Including studies on dynamic capacity directly affect resource-based perspective (RBV) performance and can mediate valuable, scarce, inimitable resources, and non-replaceable (VRIN) of the company to improve efficiency (Lin and Wu, 2014; Lei et al., 2017).

Numerous studies have explored competitive advantage strategies within the context of sustainable competition, with a focus on enhancing work performance amid dynamic and unpredictable business environments (Subramanian et al., 2016; Bayraktar et al., 2017; Teece, 2009). The issue of enterprise capability in the field of entrepreneurship. The capability theory relatively lacks guidance for enterprise practices; enterprises lack effective response strategies in a changing environment, resulting in a high failure rate for startups (Hongjia et al.,

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2022). Entrepreneurial capabilities broadly define the startup, survival, and success of firms, which is much more important than entrepreneurial strategic orientations such as learning orientation, innovation orientation, technology orientation, etc. (Faroque et al., 2021).

After the economic crisis in 1997, the Thai government and organizations viewed community enterprises (CE) as a means of alleviating poverty caused by economic crises in both urban and rural areas. The government has implemented several policies and measures aimed at revitalizing the economy through the promotion of grassroots economy. This approach involves integrating local wisdom with the abundant natural resources present in the community. By leveraging these resources, the government aims to develop new products and services that build upon existing innovations. Additionally, these initiatives foster an advantage by encouraging various activities conducted with honesty, integrity, and a strong commitment to business ethics. Community enterprise is a way of developing and sustaining local culture, making workers proud and successful in their business. The local development approach consists of promoting and producing through market-based activities such as marketing, production, implementing activities, and using technology in production, which will lead to local development (Promsen, 2020). However, community enterprises continue to encounter challenges, including a lack of thorough analysis of organizational readiness. They often overlook internal factors such as identifying strengths and weaknesses, as well as external factors like recognizing opportunities and threats. Additionally, they may struggle with conducting potential analysis, managing skills, prioritizing business planning, and performing market analysis during the establishment of community enterprises. Furthermore, there is often a scarcity of specialized knowledge in areas such as accounting, marketing, product development, marketing analysis, and managing working capital. As a result, community enterprises often find themselves reliant on external suppliers and face difficulties in these areas.

In the current operations of community enterprises, it is evident that many of them lack operational skills that emphasize professional entrepreneurship and the utilization of innovation to effectively develop organizations and gain a competitive advantage. Therefore, there is a lack of good knowledge management to further develop a flexible organizational structure and a lack of developing relationships between customers and stakeholders, including using technology and innovation to develop products. Personnel frequently lack expertise, leading to the production of non-standard products and an inability to enhance competitiveness in the market. This poses a great challenge for community enterprise operators and highlights the need for sustainable organization development and the ability to be entrepreneurial and innovative. This plays a crucial role in empowering community enterprise entrepreneurs to effectively lead the organization towards achieving its goals. The study applies the resource-based view (RBV) theory, which is suitable for considering the capability of entrepreneurship to predict community enterprises' innovation and sustainable organization performance, with innovation capability acting as a mediator in this relationship. Entrepreneurial capability plays a robust and noteworthy role in promoting innovation and the sustainable performance of manufacturing SMEs. Furthermore, innovation partially mediates the relationship between entrepreneurial capability and manufacturing SMEs' sustainable performance (Al Koliiby, Abdullah, 2021). Building on previous research findings, this study addresses the following research questions:

RQ1. What is the influence of Entrepreneurial Capability on Innovation Capability and Sustainable Organization Performance?

RQ2. What is the influence of Innovation Capability on Sustainable Organization Performance?

RQ3. Does innovation capability mediate the relationship between Entrepreneurial Capability and sustainable Organization performance?

Theoretical review and hypothesis development

Sustainable organization performance (SOP)

An organization's performance refers to measuring its efforts to operate operations and adjust strategies for organizational success (David, 2011). A successful organization should have good organizational performance, which is measured by key performance indicators derived from the organization's strategic objectives. In some cases, the organization's performance needs to be benchmarked against similar organizations to assess its position relative to competitors (Al Hammadi, Hussain, 2018). According to stakeholder theory (Freeman, 1984), the concept of performance operates based on measures that can be compared with other companies' performance. Companies' operations differ based on organizational structure and organizational effectiveness (Venkatraman and Ramanujam, 1986). The broader and more comprehensive the structure, the more it represents organizational effectiveness and the efficiency of the organization in all aspects related to organizational performance, business performance, or company performance (Cameron, 1986). Sustainability emphasizes key indicators that enable the measurement of sustained organizational performance (Tang et al., 2015). The theory of sustainable performance states that sustainability describes an enduring form of economy and society that can be sustained on a global scale (Garske and Ekaradt, 2020). This theory calls for benchmarking competitors and rivalry strategies and performance and taking proactive actions to gain a higher market share. Many organizations have realized that sustainability can support the achievement of competitive advantage and innovation in services, products, and processes (Frempong et al., 2021). The organizational capability is a crucial factor for an organization's strategy in achieving its goals, as it contributes to competitive advantage and enhances operational performance (HassabElnaby et al., 2012; Salman et al., 2016).

When organizations remain true to their ethical and environmental values, the goal of protecting the environment can be achieved (Kamble et al., 2020). Sustainability is defined as meeting present needs without compromising the needs of future generations to meet their own needs (Brundtland, 1987). Organizational operations often focus on financial aspects such as return on investment and earnings per share (Morin, 1995). It encompasses both the operational and financial performance results and is best viewed as a performance-based outcome that serves as a means to address the impact of resource utilization. Customer satisfaction may precede business outcomes and financial operations. Additionally, sustainable business operations may be considered as an outcome in the financial and sustainable performance of the company based on economic, environmental, and social performance (Lee and Saen, 2012; Xu and Wu, 2018).

Another aspect of the study focuses on the Balanced Scorecard (BSC) as a valuable management tool for evaluating and implementing organizational strategies. It begins with defining the organization's vision, mission, and strategy, which includes identifying key success factors. The BSC provides a framework to assess various aspects of the organization's performance and supports effective strategic implementation. These key factors are used to create Key Performance Indicators (KPIs) for measuring performance in order to operate efficiently, covering financial results, customer relationships, internal business processes, and organizational learning and growth (Kaplan and Norton, 1992) in determining company performance (Combs et al., 2005). It is important to measure performance based on stakeholder satisfaction (Connolly et al., 1980; Hitt, 1988; Zammuto, 1984) to differentiate between past practices and performance. In this case, customer satisfaction is an evident outcome that incorporates the perspective of customers and stakeholders as part of the stable performance operation in today's highly competitive environment. Organizations need to safeguard the long-term interests of their customers (Lombardo and D'Orio, 2012). Numerous studies have linked the supply chain with sustainable

organizational performance or innovation with sustainable organizational performance (Kleindorfer et al., 2005; Linton et al., 2007). Sustainability plays a significant role in supply chain management and management contexts, and it is associated with corporate social responsibility by considering multiple dimensions such as political, social, cultural, economic, and the natural environment (Wood, 2010; Rahim and Zainuddin, 2016).

In this study, the researcher defines sustainable organizational performance as the outcome of organizational operations utilizing resources to achieve results in terms of economic performance (e.g., higher profit, increased sales, cost management, and investments), social performance (e.g., quality of work life, corporate social responsibility, and business networks), and environmental performance (e.g., environmental friendliness, value delivery, and customer satisfaction).

Entrepreneurial capability (EC)

The concept of entrepreneurial capability (EC) is intricately connected to innovation (Garud et al., 2014) and is associated with the expansion of thinking from a holistic standpoint (Schumpeter, 1943). Entrepreneurs serve as the driving force or impulse in the process. Entrepreneurship is the embodiment of innovation and plays a key role in economic development by facilitating change and transformation in a discreet manner (Metcalfe, 2006). In an economic context, entrepreneurs with creative ideas innovate the methods of resource allocation and the approach to organizational competence (Penrose, 1959; Garnsey, 1998; Oliver and Garnsey, 2002; Teece et al., 1994; Carlsson and Eliasson, 1994; Ahuja and Lampert, 2001; Cantwell, 2001). In a dynamic competitive organization Entrepreneurs have been found to be able to transform their organization and build ecosystems through strategic actions that are not out of routine or the need to create new routines (Teece, 2012).

Entrepreneurial capability (EC) refers to the skills, experience, and knowledge required to identify and capitalize on business opportunities (Baumol, 1993; Chen et al., 2002), including technological aspects, techniques and strategies, and the ability to integrate and coordinate within organizations. In Schumpeter's original theory of innovation (Schumpeter, 1943), entrepreneurs were regarded as physical individuals, and the concept of entrepreneurship and EC were seen as a set of individual entrepreneurial attributes. However, as innovation is seen as a more regular process, it is now understood that entrepreneurs are the ones who establish and operate businesses. Entrepreneurs face various risks and challenges as either trailblazers (Pickle and Abrahamson, 1989) or visionaries who identify opportunities and create organizations or companies to successfully implement those opportunities. Successful entrepreneurs possess five qualities: (1) a drive or motivation to work, including responsibility, enthusiasm, initiative, perseverance, endurance, and ambition; (2) intellectual abilities, including intelligence, creative thinking, and critical thinking skills; (3) interpersonal abilities, including emotional stability, personal relationship skills, sociability, wit, and empathy for others; (4) communication abilities, including written and verbal communication skills; and (5) technical abilities, including the knowledge and experience necessary for business operations, such as fundamental knowledge, specialized knowledge, and practical experience (Bygrave, 1994). Additionally, entrepreneurial abilities are characterized by different motivations, such as pursuing high achievement, willingness to take risks, self-confidence, and adaptability (Longenecker and Moore, 1987). Entrepreneurs seeking success must possess management skills, a good personality, technical knowledge, decision-making abilities, leadership and communication skills, patience, and experience in their respective businesses (Szonyi and Steinhoff, 1979). Recognized entrepreneurs have the ability to motivate and direct followers towards achieving organizational goals, embracing entrepreneurial opportunities, and leveraging them (Wiley et al., 2015). Entrepreneurial capability can be studied spatially to compare operators in different geographical

contexts (Wright and Bonnet, 2007) or in terms of the impact of factors affecting entrepreneurial styles (Clarysse et al., 2011). The nature of entrepreneurship is a significant factor in business growth (Ferreira and Azevedo, 2007), and entrepreneurs should adapt their business strategies based on the industry type and situation. Competition, as emphasized by (Hashim et al., 2001; Todd, 2006; Lim, 2009) is crucial for business success and depends on the capabilities of entrepreneurs. Therefore, entrepreneurs must fulfill their managerial roles and act as social creators (Longenecker et al., 1994).

In this study, the researcher defines entrepreneurial capability (EC) as the ability to drive the organization towards its goals by possessing internal drive, creativity, problem-solving abilities, and communication skills, as well as management expertise that influences the sustainable operation of the business. The ability to be an entrepreneur encompasses the following components: passion and self-achievement, which help entrepreneurs have a passion for their business and adopt a successful approach with high self-sufficiency, forming the foundation for contributing to new ventures (Cardon, 2009) integrity and commitment, which involve caring for others, exhibiting high social responsibility, and having a spirit of dedication and hard work; leadership and management, which empower entrepreneurs to not only lead employees towards goals but also be aware and seize business opportunities (Tang, 2012) and active learning and analysis, which involves proactive learning, analytical analysis, and logical thinking that enables entrepreneurs to have an open mind, actively explore and seek new information, and discover innovations (March, 1991). Previous studies have indicated that entrepreneurship with traditional knowledge management processes directly affects the dynamic capability and sustained organization performance if the organization has a high traditional knowledge base. the higher the sustained performance.

(Permatasari et al., 2023). These various entrepreneurial competencies and attributes are critical in stimulating innovation (Mohsin et al., 2017; Umar et al., 2018). Including entrepreneurial capability are viewed as the most important predictor of sustainable performance and growth of SMEs (Al Mamun and Fazal, 2018; Mitchelmore and Rowley, 2013). The entrepreneurial leadership impacted innovation performance directly and indirectly through the mediating role of innovation capability. (Al-Sharif, 2023). Based on the above, the following hypotheses are proposed.

H1. Entrepreneurial capability has a positive influence on innovation capability.

H2. Entrepreneurial capability has a positive influence on sustainable Organization performance.

Innovation capability (IC)

Organizational innovation capabilities refer to the abilities that organizations need to gain a competitive advantage in the market. They serve as tools that entrepreneurs can utilize to lead their organizations to success. The development of new products and services through innovation acts as a growth engine, leading to increased sales, profits, and power. Innovation capability is considered an optimal strategy for firms to achieve competitive advantages and overcome key rivals. It enables firms to better meet consumer needs, stay ahead of the competition, and align their strengths with market opportunities (Le et al., 2019). The competitive nature of the corporate landscape (Battor and Battor, 2010; Sivasdas and Dwyer, 2000) is directly linked to organizational enhancement (Calantone et al., 2002; Hult et al., 2004; Keskin, 2006; Panayides, 2006; Thornhill, 2006). Therefore, innovation capability involves the processes and organization of new ideas for products and services, leading to unprecedented growth dynamics in the national economy, increased employment, and generating profits for innovative businesses (Urabe et al., 1988; Taleb et al., 2023). Previous studies have found that organizations with dynamic management capabilities have a

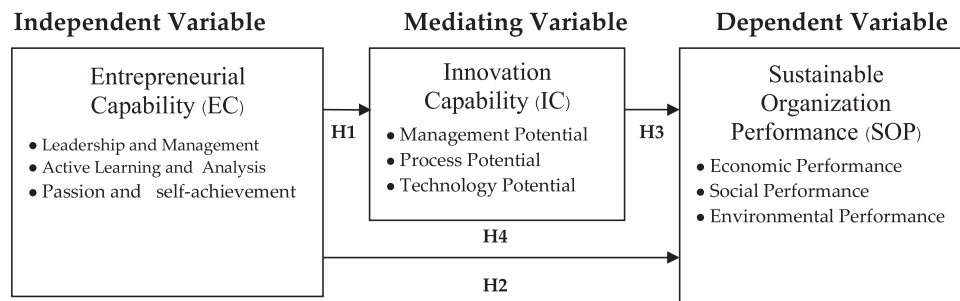


Fig. 1. Conceptual framework.

positive impact on organizational performance. And help improve the efficiency of the organization in terms of competition, finance, marketing and innovation to meet the needs of employees, customers and investors (Kongrode et al., 2023).

Innovation is a continuous decision-making process for many enterprises, starting from the stage of creating a new idea to the stage of implementation (Afuah, 1998). Innovations can be classified based on market and technology characteristics, as well as management, organizational structure, communication, and resource flow requirements for innovation to occur (Eisenhardt and Martin, 2000). It is crucial for organizations to provide the necessary inputs for innovation, which in turn leads to superior performance (Wang and Ahmed, 2004). Product and process innovation competencies are considered prerequisites for the survival and success of organizations. Innovation capability allows SMEs to develop new ideas and make changes to products, processes, and management systems, increasing their chances of survival in the market environment (Serna et al., 2016). In the context of the innovation ecosystem, technological innovation capability depends not only on the innovative elements that SMEs possess but also on value co-creation with the industrial chain and ecosystem (Yue, 2023).

In this study, the term innovation capability (IC) is defined as a process involving the creation of new ideas and management potentials to create a competitive advantage for the organization. It encompasses decision-making processes aimed at achieving the goals of innovation in process potentials and technology potentials for sustainable organizational performance. Previous studies have found that innovation influences corporate sustainable performance and its all constructs (environment, economic and social) and innovation partially mediates the association between the knowledge management process and corporate sustainable performance. (Shahzad et al., 2020). Based on the above, the following hypotheses are proposed.

H3. Innovation capability has a positive influence on sustainable organization performance.

H4. Innovation capability mediates the relationship between entrepreneurial capability and sustainable organization performance.

Based on the discussion above, a conceptual framework is developed for this study, as illustrated in Fig. 1. The framework includes entrepreneurial capability, innovation capability, and sustainable organization performance. Entrepreneurial capability is treated as the independent variable, while sustainable organization performance is treated as the dependent variable. The framework considers the mediating role of innovation capability in the relationship between entrepreneurial capability and sustainable organization performance.

Research methodology

Sample and data collection

In this study, a simple random selection method was employed, assuming that every member of the population had an equal chance of

being selected. The data for this sampling method was obtained from a survey conducted among 329 community enterprises registered with the Phuket Provincial Agriculture Office Department of Agricultural Extension (2021), which is representative of the study population. Corporate executives acted as representatives and cooperated in answering the survey, resulting in a total of 265 completed questionnaires, corresponding to a valid response rate of 80.54 %. This sample size is considered appropriate, as community enterprises typically have a response rate of around 10%. It falls within the expected range of 5–35 % for social science research, as recommended by Sekaran and Bougie (2016).

Survey instrument

The study utilized a questionnaire as the survey instrument, which was developed based on a literature review and underwent examination by experts. The questionnaire's consistency index was determined using the IOC (Index of Item Objective Congruence), yielding a value of 0.95. The questionnaire consisted of four parts:

Part 1: Profile of respondents and characteristics of community enterprises, including firm year, firm size, type of community enterprise, characteristics, and starting capital (Table 1).

Part 2: Entrepreneurial capabilities, encompassing leadership and management, active learning and analysis, passion, and self-achievement. These aspects were adapted from the works of (March, 1991; Cardon, 2009; Tang, 2012).

Part 3: Innovative capabilities, covering management potentials, process potentials, and technology potentials. These dimensions were adapted from the works of Yue (2023), Wang and Ahmed (2004).

Part 4: Sustainable organizational performance, consisting of economic performance (adapted from Lee and Saen, 2012; Eltayeb et al., 2011; Smith, 2015), social performance (adapted from Wood, 2010), and environmental performance (adapted from Kamble et al., 2020; Laosirihongthong et al., 2013).

The questionnaire in parts 2–4 implemented a 5-level Rating Scale Method of Likert, and its reliability was assessed using the Internal Consistency Method, specifically the Cronbach's Alpha Coefficient, which was found to be 0.827 (Table 2).

Data analysis

The questionnaire in part 1 uses descriptive statistics, including frequency and percentage, to analyze the profile of respondents and characteristics of community enterprises. Questionnaires in Part 2–4 use a Rating Scale. Descriptive statistics used are Mean and Standard Deviation. Exploratory factor analysis (EFA) was used for the extraction method with Principal Component Analysis and the rotation method with Varimax in Tables 3–5. The discriminant validity and correlations between EC, IC, and SOP are presented in Tables 6 and 7. Inferential statistics are used to study the equation model. To analyze the linear structure of variables, the AMOS program was utilized to construct a covariance-based structural equation model (CB-SEM). This model was

Table 1
Profile of respondents and characteristics of community enterprise.

Measure	Value	Frequency	Percentage
Respondents	President	124	76.20 %
	Vice President	34	21.50 %
	Director	6	2.30 %
Firm Year	Below 5 years	78	29.40 %
	6 to below 10 years	108	40.80 %
	11 to below 15 years	61	23.00 %
	16 years and above	18	6.80 %
Firm Size	Below 15 people	92	34.70 %
	16–30 people	137	51.70 %
	31–50 people	20	7.50 %
	51–75 people	12	4.50 %
	76–100 people	4	1.50 %
Type of community	crop production	20	7.50 %
	Livestock production	8	3.00 %
	Fishery production	10	3.80 %
	Food processing	78	29.40 %
	Textile or clothing	22	8.30 %
	Wickerwork	5	1.90 %
	Artificial flowers	11	4.20 %
	Machine tools	3	1.10 %
	souvenirs	20	7.50 %
	Herbal Products	18	6.80 %
	Beverage	32	12.10 %
	Pottery	2	0.80 %
	Metal fabrication	3	1.10 %
	Production of other	3	1.10 %
	Community Shop	9	3.40 %
Characteristic of community	Tourism	12	4.50 %
	Health	6	2.30 %
	Machinery repair	3	1.10 %
	Basic Community Enterprise	237	89.40 %
	Progressive Community Enterprise	28	10.60 %
Starting Capital of Community enterprise	Below 100,000 Bath	116	43.80 %
	100,001 to below 250,000	59	22.30 %
	250,001 to below 500,000	53	20.00 %
	500,001 to below 750,000	24	9.10 %
	750,001 to below 1000,000	13	4.90 %

Table 2
Mean and standard deviation.

Constructs	Mean	SD
Entrepreneurial Capability (EC)	(4.22)	(.396)
Leadership and management (LM)	4.18	.670
Active Learning and analysis (AL)	4.51	.522
Passion and Self-achievement (PS)	3.96	.670
Innovation Capability (IC)	(4.23)	(.377)
Management Potential (MP)	4.43	.518
Process Potential (PP)	4.31	.639
Technology Potential (TP)	3.94	.623
Sustainable Organization Performance (SOP)	(4.40)	(.492)
Economic Performance (EP)	4.19	.659
Social Performance (SP)	4.56	.504
Environmental Performance (EVP)	4.45	.579

*Conbrach’s Alpha 0.827

employed to investigate and examine the hypotheses pertaining to the relationships among the variables. The mediating effect in this research refers to the role of a mediator variable in explaining the relationship between an independent variable and a dependent variable. A mediator variable helps to clarify the underlying mechanism or process through which the independent variable influences the dependent variable. It mediates or transmits the effect of the independent variable to the dependent variable (de Gruyter et al., 1985; Sudhahar et al., 2006; Hayes, 2013).

Table 3
Exploratory factor analysis. Entrepreneurial capabilities.

Variables	Component			Communality
	(1)	(2)	(3)	
Communicating	.966			.982
Problem-solving	.935			.912
Decision-making	.966			.982
Explain vision	.892			.898
Accomplish a goal		.929		.935
Creating		.895		.858
Applying		.873		.791
Understanding		.839		.745
Emotional energy			.968	.945
Drive and spirit			.971	.944
Conbrach’s Alpha	.979	.931	.939	
Sum of Squares	3.738	3.362	1.891	8.991
Percentage of Trace	37.376	33.622	18.907	89.906

*Extraction Method: Principal component Analysis.

*Rotation Method: Varimax

Research result

Demographic and descriptive statistics

The study population included 265 community enterprises (CE) located in Phuket, Thailand, as indicated in Table 1. Of all the

Table 4
Exploratory factor analysis: innovation capabilities.

Variables	Component			Communality
	(1)	(2)	(3)	
Distinctiveness of landscapes	.854			.774
Integration with other recreational areas	.907			.920
Investing activities	.875			.769
Achieve flexibility	.850			.808
Resources management	.833			.805
Competence		.891		.912
Set a clear action plan		.936		.925
Reducing wait times			.800	.646
Connection density			.751	.579
Accessibility			.843	.711
Conbrach's Alpha	.936	.913	.718	
Sum of Squares	3.920	1.983	1.948	7.851
Percentage of Trace	39.199	19.831	19.481	78.511

*Extraction Method: Principal component Analysis.

*Rotation Method: Varimax

Table 5
Exploratory factor analysis: sustainable organization performance.

Variables	Component			Communality
	(1)	(2)	(3)	
Higher profit	.910			.906
Sales increase	.924			.968
Cost	.869			.831
Investment	.924			.968
Quality of work life		.849		.919
Corporate social responsibility		.850		.778
Business network		.850		.801
Environment friendly			.818	.917
Resource worth			.715	.892
Conbrach's Alpha	.962	.894	.907	
Sum of Squares	3.579	2.748	1.647	7.974
Percentage of Trace	39.764	30.529	18.297	88.590

*Extraction Method: Principal component Analysis.

*Rotation Method: Varimax

respondents, 76.20 % were presidents, and 21.50 % were vice-presidents. The firm age ranged from 6 to 10 years, accounting for 40.80 % of the sample. The firm size ranged from 16 to 30 people, representing 51.70 % of the sample. The most common type of community enterprise was food processing (29.40 %), followed by beverages (12.10 %). Regarding characteristics, 89.40 % were classified as basic community enterprises, while 10.60 % were progressive community enterprises. The majority (43.80 %) had a starting capital of less than 100,000 baht.

Table 6
Discriminant validity and correlations.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Leadership and management (LM)	1	.							
(2) Active Learning and analysis (AL)	.470 **	1							
(3) Passion and Self-achievement (PS)	-.093	-.003	1						
(4) Management Potential (MP)	.465 **	.902 **	.012	1					
(5) Process Potential (PP)	.351 **	.647 **	.016	.509 **	1				
(6) Technology Potential (TP)	-.117	-.125 *	.172 **	-.151 *	-.033	1			
(7) Economic Performance (EP)	.984 **	.449 **	-.106	.443 **	.343 **	-.119	1		
(8) Social Performance (SP)	.450 **	.967 **	.006	.914 **	.616 **	-.093	.432 **	1	
(9) Environmental Performance (EVP)	.590 **	.760 **	-.038	.729 **	.536 **	-.161 **	.575 **	.737 **	1

Note: **p < 0.01

*p < 0.05

Measurement model

In the present study, exploratory factor analysis (EFA) was used to evaluate the tools and reduce measurement error. There are three key factors: Entrepreneurial Capability (EC), Innovation Capability (IC), and Sustainable Organization Performance (SOP). The results of orthogonal axis rotation by the Varimax method are presented in Tables 3–5. For Entrepreneurial Capability (EC), all 10 variables used in the analysis could be grouped into three components, each of which could explain 89.906 % of the variance. The communality weights ranged from 0.745 to 0.982, and Cronbach's Alpha coefficients ranged from 0.931 to 0.979, indicating good precision. The same approach was applied to Innovation Capability (IC) and Sustainable Organization Performance (SOP), with similar results.

Leadership and management (LM) explained by four variables with component weights ranging from 0.892 to 0.966, had a Cronbach's Alpha of 0.979, and accounted for 37.376 % of the variance. The variables related to this sub-component were Communicating, Problem-solving, Decision-making, and Explain vision.

Active Learning and analysis (AL) explained by four variables with component weights ranging from 0.873 to 0.929, had a Cronbach's Alpha of 0.931, and accounted for 33.622 % of the variance. The variables related to this sub-component were Accomplish a goal, Creating, Applying, and Understanding.

Passion and Self-achievement (PS) explained by two variables with component weights ranging from 0.968 to 0.971, had a Cronbach's Alpha of 0.939, and accounted for 18.907 % of the variance. The variables related to this sub-component were Emotional energy and Drive and spirit.

Table 7
Summary discriminant validity and correlations.

Construct	(1)	(2)	(3)
(1) Entrepreneurial Capability (EC)	1		
(2) Innovation Capability (IC)	0.569 **	1	
(3) Sustainable Organization Performance (SOP)	0.795 **	0.607 **	1

Note: * *p < 0.01 p < 0.05

Regarding Innovation Capability (IC), all 10 variables used in the analysis could be grouped into three components, explaining 78.511 % of the variance. The component weights communality ranged from 0.579 to 0.925, and Cronbach's Alpha coefficients ranged from 0.718 to 0.936, indicating good precision. The same analysis was performed for Sustainable Organization Performance (SOP), with similar results in Table 4.

Management Potential (MP) Explained by 5 variables with component weights ranging from 0.833 to 0.907. The Cronbach's Alpha was 0.936, sum of squares was 3.920, and the percentage of trace was 39.199 %. All variables are related to the first sub-component, namely Distinctiveness of landscapes, Integration with other recreational areas, Investing in activities, Achieve flexibility, and Resources management.

Process Potential (PP) Explained by 2 variables with component weights ranging from 0.891 to 0.936. The Cronbach's Alpha was 0.913, sum of squares was 1.983, and the percentage of trace was 19.831 %. All variables are related to sub-components, namely Competence and Set a clear action plan.

Technology Potential (TP) Explained by 3 variables with component weights ranging from 0.751 to 0.843. The Cronbach's Alpha was 0.718, sum of squares was 1.948, and the percentage of trace was 19.481 %. All variables were related to the third sub-component, namely Reducing wait times, Connection density, and Accessibility.

For Sustainable Organization Performance (SOP), it was found that all 10 variables used in the analysis could be grouped into 3 components, each of which could explain 78.511 % of the trace of all variables. There were between 2 and 5 variables with component weights communality ranging from 0.579 to 0.925. As for Cronbach's Alpha, it ranged between 0.894 and 0.962, which is not less than 0.700, indicating good precision (Cronbach, 1970) as shown in Table 5.

Economic Performance explained by four variables with component weights ranging from 0.869 to 0.924, had a Cronbach's Alpha of 0.962, and accounted for 39.764 % of the variance. The variables related to this sub-component were Higher profit, Sales increase, Cost, and Investment.

Social Performance explained by two variables with component weights ranging from 0.849 to 0.850, had a Cronbach's Alpha of 0.894, and accounted for 30.529% of the variance. The variables related to this sub-component were Quality of work life, Corporate social responsibility, and Business network.

Environmental Performance explained by two variables with component weights ranging from 0.715 to 0.818, had a Cronbach's Alpha of 0.907, and accounted for 18.297 % of the variance. The variables related to this sub-component were Environment friendly and Resource worth.

The discriminant validity and correlations between variables were tested and shown in Table 6. The results indicated statistically significant relationships in the same direction, and the Pearson correlation coefficients ranged from -0.161-0.967. These findings suggest that the indicator questions are discriminant valid and suitable for testing the hypotheses, as they are reliable and valid based on the empirical data.

Structural model assessment

The AMOS-SEM approach was used to predict the relationships among variables. After validating the psychometric properties of the

measurement model, the structural model was assessed to examine the relationship between the constructs (Fig. 2). The effects of entrepreneurial capability and innovation capability on sustainable organization performance were analyzed, and the standardized effects are shown in Table 8. The hypotheses testing results revealed that entrepreneurial capability had a positive effect on innovation capability ($\beta_2 = 0.541$, p-value < 0.001) and sustainable organization performance ($\beta_2 = 0.824$, p-value < 0.001), confirming hypotheses H1 and H2. For H3, the result ($\beta_3 = 0.300$, p-value < 0.001) indicated a positive and significant relationship. (Table 9).

Mediating effect of innovation capability

The study also examined the indirect effect of innovation capability on the relationship between entrepreneurial capability and sustainable organization performance (H4). The results in Table 10 indicated that the mediating effect ($\beta_3 = 0.131$, p-value < 0.001) was positive and significant. (Table 11).

Discussion

The findings of this study provide evidence that entrepreneurial capability has a positive and significant influence on both innovation capability and sustainable organization performance. These results support the findings of Sun et al. (2022), who also found a positive impact of entrepreneurship on the sustainable innovation capabilities of platform organizations. Furthermore, the study highlights the mediating role of knowledge integration between operators and the sustainable innovation capacities of these organizations. Likewise, innovation capability had a positive and significant impact on sustainable organization performance and the Innovation capability mediates the relationship between entrepreneurial capability and sustainable Organization performance. The results of this study are also similar with those of other studies in the SME sectors (Al Koliby and Abdullah, 2021; Chabbouh and Boujelbene, 2022).

The entrepreneurial capability mentioned leadership and management is ability to be a community enterprise entrepreneur need to be able to communicate information that is useful to people in the organization and effective communication can solving the problems that arise or face different situations can work manually and make decisions by themselves under pressure and including ability to clear explain vision. The findings of this study align with previous research that suggests entrepreneurial initiative is driven by operational routines and capacities associated with environmental dynamics (Mahring and Renzl, 2018). For active learning and analysis, the community enterprise can be creating new product or services and set accomplish a goals to reduce the risks that will occur to the organization in the future, able to analyze things that happen in order to develop or extend the work of the organization, learn new things and apply them to benefit the organization and seeking knowledge to gain a deeper understanding all the time. Understanding and memorizing skills is something that CE should practice and use all the time. For Passion and self-achievement was found that the key components are must enjoy the challenging work, full of emotional energy, believe that job success is due to the ability to drive the spirit of entrepreneur. This study is consistent with research indicating that dynamic knowledge

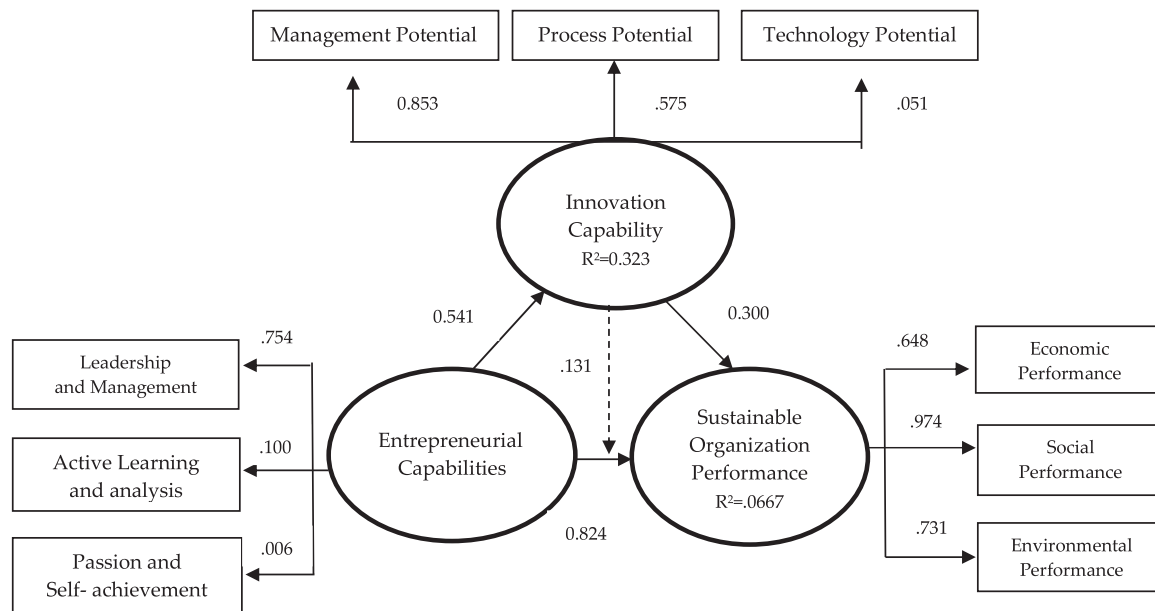


Fig. 2. Result of the structural model.

management abilities have a state of active mental concentration and lead to strategic intuition (Jutidharabongse et al., 2020). In addition, organization members must have entrepreneurial traits or habits making the organization successful and they have distinguished attachment and identification. There is a belief that an entrepreneurial attitude determines the success of a job and perceive that belief is what determines the successful of work.

The Innovative capabilities of community enterprises that contribute by management to sustainable organization performance caused by create outstanding innovation for the organization, integrated with

various parties and the ability to compete and more activities due to use of innovative investing activities. Previous studies have indicated that key factors contributing to successful management within the context of business network engagement positively impact network interactive performance and entrepreneurial innovation capacity (Zardini et al., 2023). The Community enterprises can develop cooperation by relying on business partners sharing resources to be worth while can reduce production costs. This enables the organization to achieve flexibility, Implementing management innovations cause fewer mistakes the organization has been developed can create value for the organization

Table 8 Standardized effects.

Construct	Total effect		Direct effect		Indirect effect	
	EC	IC	EC	IC	EC	IC
IC	0.569	0.000	0.569	0.000	0.000	0.000
SOP	0.795	0.230	0.664	0.230	0.131	0.000

Table 9 Hypotheses testing results.

Hypotheses	Path Coefficients	Estimate (β)	S.E.	C.R.	p values	Decision
Direct effect						
H1	EC→ IC	0.541 ***	0.048	11.234	0.000	Accepted
H2	EC→SOP	0.824 ***	0.054	15.382	0.000	Accepted
H3	IC→ SOP	0.300 ***	0.056	5.320	0.000	Accepted

Note: ***p < 0.001, ** p < 0.01, *p < 0.05

Table 10 Mediating effect of innovation capability.

Hypotheses	Path coefficients	Estimate (β)	S.E.	C.R.	p values	Decision
Indirect effect						
H4	EC→IC→SOP	0.131 **	0.024	11.489	0.000	Accepted

Note: ***p < 0.001, ** p < 0.01, *p < 0.05,

Table 11
Dimension of Entrepreneurial capability, Innovation capability, Sustainable Organization Performance.

	Description (indicators)	Reference
Entrepreneurial Capability	<i>Leadership and Management</i> Focus on Communicating, Problem-solving, Decision-making, Explain vision <i>Active Learning and analysis</i> Focus on Accomplish a goal, Creating, Applying, Understanding <i>Passion and Self-achievement</i> Focus on Emotional energy, Drive and spirit	Garud et al. (2014), Schumpeter (1943), Metcalfe (2006), Penrose (1959), Garnsey (1998), Oliver and Garnsey (2002), Teece et al. (1994), Carlsson and Eliasson (1994), Ahuja and Lampert (2001), Cantwell (2001), Baumol (1993), Chen et al., (2002), Longenecker and Moore (1987), Szonyi and Steinhoff (1979), Clarysse, Tartari and Salter (2011), Ferreira and Azevedo (2007), Hashim, Wafa and Sulaiman (2001), Todd (2006), Lim (2009), Longenecker, Moore and Petty (1994), Cardon (2009), Tang (2012), March (1991), Wright, Bonnet (2007), Teece (2012).
Innovation Capability	<i>Management Potential</i> Focus on Distinctiveness of landscapes, Integration with other recreational areas, Investing activities, Achieve flexibility, Resources management <i>Process Potential</i> Focus on Competence, Set a clear action plan <i>Technology Potential</i> Focus on Reducing wait times, Connection density, Accessibility	Battor and Battor (2010), Sivasdas and Dwyer (2000), Calantone, Cavusgil, and Zhao (2002), Hult, Hurley, and Knight (2004), Keskin (2006), Panayides (2006), Thornhill (2006), Urabe et al. (1988), Afuah (1998), Eisenhardt and Martin (2000), Serna et al. (2016), Yue (2023). Shahzad et al., (2020), Mohsin et al. (2017), Umar et al. (2018)
Sustainable Organization Performance	<i>Economic Performance</i> focus on Higher profit, Sales increase, Cost, Investment, <i>Social Performance</i> Focus on Quality of work life, Corporate social responsibility, Business network <i>Environmental Performance</i> Focus on Environmentally friendly, Resource worth	David (2011), Venkatraman, & Ramanujam (1986), Brundtland (1987), Morin (1995), Lee and Saen (2012), Kaplan and Norton (1992), Combs et al. (2005), Connolly et al. (1980), Hitt (1988), Zammuto (1984), Sudhahar et al. (2006), Kleindorfer et al. (2005), Linton et al. (2007), Wood (2010), Tang et al. (2015), Garske and Ekardt (2020), Kamble et al. (2020), Salman et al. (2016), Mitchelmore and Rowley (2013), Permatasari et al. (2023)

enabling customers to be able to perceive and feel gain confidence, if the organization is properly managed can reduce the risk. This finding corresponds with that of previous studies (Amini Sedeh et al., 2022; Chabbouh and Boujelbene, 2022; Mohsin et al., 2017; Umar et al., 2018). In the process management of IC can create an effective dependency on innovation in the organization including the cooperation of personnel in the organization to be able to bring out their own potential and competence to set a clear action plan. For the technology potential in IC cause by the speed of work from the use of innovation can manage time and reducing wait times through innovation. Confirming previous studies showing that IT competence has a positive effect on dynamic capabilities and to increase organizational innovation efficiency and support survival in a rapidly changing and competitive environment (Chinnapong et al., 2021). The communicate greatly to make work more efficient, organization can work with high efficiency as a result of using innovation and investment activities in innovation. In addition Community enterprises should have developed new products or services to always be different from the original continuous investment in research and product development all the time. The product is designed to be convenient and easy to use to meet the needs of customers. There is always an incentive to innovate and develop new products and services. Platforms are used to help the development of organizations to quickly launch new products or services. Bringing new innovations to help develop modern production processes and able to maintain quality in delivering products or services quickly. Consistent with previous studies, innovation and open platforms have created many opportunities for entrepreneurs and start-ups. from acting as inputs for innovation to acting as a complement to existing platforms (Nambisan et al., 2018).

The sustainable organization performance results in economic sustainability, allowing organizations to reduce production costs. It also leads to a continuous increase in sales and higher profits from operations. The results of the study are consistent with studies indicating that organizational dynamic competence includes cost leadership. And both competitive advantages will lead to the performance of the organization. (Correia et al., 2022) Additionally, organizations can make new investments, which is consistent with the findings of Salman et al. (2016), Soto-Acosta et al. (2016), and Yustian et al. (2021). These findings also support social sustainability by creating awareness among community enterprises and promoting social responsibility. They contribute to the formation of business networking between internal and external organizations and improve the quality of life for members of the organization. Consistent with previous studies, it was found that organizational enrichment and skill development to ensure successful

adaptation to change and support sustainable organizational growth (Zahra et al., 2006). Furthermore, environmental sustainability is achieved by adopting environmentally friendly production processes that do not harm the environment. Additionally, there is an emphasis on efficient resource utilization and reducing losses caused by the production process.

Conclusions

Implications of study

The findings of this study have important policy implications for various stakeholders, including community enterprises, policymakers, and organizations involved in promoting entrepreneurship and innovation. The following policy recommendations can be derived from the results:

1. Foster leadership and management skills: Policies should emphasize the development of leadership and management abilities among community enterprise entrepreneurs. This includes effective communication, problem-solving, decision-making under pressure, and the ability to articulate a clear vision. Training programs and mentoring initiatives can be implemented to enhance these skills.
2. Promote active learning and knowledge acquisition: Policymakers should encourage community enterprises to engage in active learning and analysis to foster innovation. This can involve creating goals to reduce future risks, analyzing and extending organizational work, continuously seeking knowledge, and promoting a culture of understanding and memorizing skills.
3. Cultivate passion and self-achievement: Policies should focus on creating an environment that fosters passion and self-achievement within community enterprises. This can be achieved by promoting challenging work, emotional energy, and a belief in the ability to drive entrepreneurial success. Supportive measures, such as recognition programs and motivational workshops, can be implemented to enhance these factors.
4. Encourage collaboration and resource sharing: Policymakers should facilitate cooperation between community enterprises and their business partners to enable resource sharing and reduce production costs. This can be done by creating platforms or networks that facilitate collaboration and knowledge exchange. Financial incentives and support mechanisms can be provided to encourage such collaborations.
5. Support management innovations: Policymakers should promote the implementation of management innovations within community enterprises. This can involve providing guidance and support on

implementing new practices that reduce mistakes, create value, and increase customer confidence. Training programs on innovative management techniques can be offered to community enterprise managers.

6. Promote technology adoption: Policymakers should emphasize the importance of technology adoption and IT competence within community enterprises. This can involve providing access to resources and training programs that enhance technological capabilities. Support should be provided to community enterprises in leveraging technology to improve efficiency, manage time effectively, and reduce wait times.

7. Facilitate open platforms and innovation ecosystems: Policymakers should create an enabling environment for community enterprises to access open platforms and innovation ecosystems. This can involve providing funding support, incubation programs, and networking opportunities that connect community enterprises with entrepreneurs, start-ups, and other relevant stakeholders. Policies should promote the development of new products and services, incentivize innovation, and facilitate the rapid launch of innovative solutions.

8. Support economic, social, and environmental sustainability: Policymakers should prioritize policies that support sustainable organization performance. This includes initiatives that promote economic sustainability by reducing production costs, increasing sales, and improving profitability. Social sustainability can be addressed by creating awareness, fostering social responsibility, and facilitating business networking between organizations. Environmental sustainability should be promoted through the adoption of environmentally friendly production processes, efficient resource utilization, and waste reduction.

9. Foster skill development and organizational enrichment: Policymakers should support initiatives that enhance skill development and organizational enrichment within community enterprises. This can involve providing training programs, mentorship opportunities, and funding support for capacity building. Policies should promote adaptability to change and facilitate sustainable organizational growth.

10. Provide financial support for investments: Policymakers should create mechanisms to provide financial support for community enterprises to make new investments. This can involve grants, loans, or tax incentives that encourage organizations to invest in innovation, research, and development. Financial support should be provided to foster a culture of continuous improvement and the development of new products and services.

By implementing these policy recommendations, policymakers can create an enabling environment for community enterprises to thrive, promote entrepreneurship and innovation, and contribute to sustainable organization performance.

Limitations and future

This study solely focuses on two topics, namely Entrepreneurial Competence and Innovation Competency, and does not cover other factors that may influence organizational sustainability. In future studies, factors related to internal organizational management agility, intellectual capital, absorption capacity, and value co-creation should be explored to increase awareness of the factors that influence sustainable organizational operations and enable organizations to plan for the future.

Additionally, this study specifically examines community enterprise groups. Future research should target specific groups such as tourism community enterprises, food and beverages, clothing, or agricultural souvenirs to provide a clearer and more specific scope of research.

Author Contributions

Conceptualization, S.A. and P.S.; methodology, S.A., P.S. and J.R.; software, P.S.; data curation, P.S.; writing—original draft preparation, S.A. and P.S.; writing-review and editing, S.A. and J.R.; project

administration, S.A.; funding acquisition, S.A.; All authors have read and agreed to the published version of the manuscript.

Conflict of interests

The authors declare that there is no conflict of interests regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

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