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Innovation capabilities among young entrepreneurs in Sabu Raijua: The roles of strategic intuition capability, managerial cognitive capability, and absorptive capacity

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Abstract

Sabu Island, a tiny and remote island in East Nusa Tenggara, is a home to young entrepreneurs facing unique challenges to sustain their small businesses in the middle of unfavorable geographic conditions. As small and medium enterprises (SMEs) actors, these young entrepreneurs need to elevate their innovation capability to navigate uncertain and complex environments. This study is aimed to identify the factors influencing innovation capability, focusing on absorptive capacity, managerial cognitive capability, and strategic intuition capability among young entrepreneurs in Sabu Raijua. Using a sample of 244 young SMEs actors and employing Partial Least Squares (PLS) to test the hypotheses, the findings reveal that absorptive capacity and managerial cognitive capability are the strongest predictors promoting innovation capability. In addition, the study highlights that while strategic intuition capability significantly contributes to innovation capability, its effect is relatively less pronounced compared to the other factors. These insights underscore the importance of enhancing cognitive and knowledge absorption mechanisms to elevate the innovative potential of young entrepreneurs in remote regions like Sabu Raijua.

Keywords: innovation capability, absorptive capacity, managerial cognitive capability, strategic intuition, Sabu Raijua

Introduction

As an emerging country, Indonesia relies on the job creations by small and medium enterprises (SMEs) to provide massive employment opportunities. At the moment, SMEs contribute to over 70% of GDP and generate 80% of jobs in emerging countries (Qalati et al., 2021), yet they are struggling from a lack of resources and facing several challenges in technology adoption (Fang et al., 2021). Besides, SMES are also in constant move to search their market niche amidst massive expansions of larger corporations. To boost the growth of SMEs, the government of Indonesia has given plenty of

incentives and assistance for business owners to upscale their enterprises, however, many fail to grasp the opportunity due to their inability to innovate and compete in a wider market.

Innovation is the backbone of SMEs in these uncertain and complex environments. For SMEs, innovation happens due to the ability of the business owners to satisfy the needs of the customers through creating new values on products or processes. The ability to innovate or innovation capability is linked to the ability of a business to differentiate itself from other competitors by utilizing and applying its knowledge of products, processes, and management practices in its business operations (Liao et al., 2007). In smaller enterprises, the innovation capability is shown by the ability of their owners to navigate around the knowledge landscape effectively (Zou et al., 2018), so that they can harvest abundantly with their limited resources. However, the biggest issue of small business owners is the lack of experiences and capacities to absorb fast changing demands in the uncertain and complex environments.

The aim of this study is to investigate how innovation capability among young entrepreneurs is influenced by their intuition and cognition. Since innovation capability is related to the ability to repeatedly transform knowledge and ideas into new products, processes, or systems (Lawson & Samson, 2001), young entrepreneurs are prone to make mistakes because of the lack of experience and knowledge. However they are more agile, resilient, and persistent in navigating their mind to seek business opportunities. A study by Hincapié (2020) suggests that young entrepreneurs are facing high entry costs and have no information about their entrepreneurial ability. So, most young entrepreneurs dive into business world with learning-by-doing (Lafontaine & Shaw, 2016) and learning about entrepreneurial ability (Antonovics & Golan, 2012),

Due to their lack of experience and knowledge, young entrepreneurs rely heavily on their ordinary intuition in making business decisions (Suprpto et al., 2024a), which often does not yield the best results. In most SMEs, managerial decisions, including what and how to innovate, are largely made by the owners with the help of their strategic intuition, as they believe it can surrender the best decisions with the least costs (Nuthall, 2022). Strategic intuition is often referred to the way of the owners' mind in perceiving and making decisions in a timely manner based on their knowledge gained from experience (Aujirapongpan & Hareebin, 2020). For young entrepreneurs, their capability in incorporating strategic intuition to make timely decisions is based on the personal or talent ability in "employing their thought processes, engaging through concentration and an alert state of mind, and possessing the proper foundation of job expertise and analytical competency" (Aujirapongpan, Ru-Zhe, & Jutidharabongse, 2020).

Studies on intuition capability for business decision making have acknowledged the importance of knowledge gained from experience (Liebowitz et al., 2019; Dane & Pratt, 2007; Nuthall, 2022), which lays the foundation of the managerial cognitive capability of young entrepreneurs through learning-by-doing and learning about ability. In other words, experience and knowledge are the backbones of the intuition capabilities which are absorbed to become insights and to emerge during the time

of need to make decisions. Managerial cognitive capability is often considered as a personal ability to manage information and solve problems, such a capability that is affected by the ability to analytical capability, creative thinking, and strategic thinking (Suprpto et al., 2024b).

The focus of this study is young entrepreneurs residing in Sabu Island, where they are struggling to survive for a decent life amidst harsh natural conditions. Despite all unfavorable conditions, the people of Sabu work various jobs in accordance with the seasonal changes, such as cultivating lands during wet season or catching fish during dry season. The constant changing of nature forces the local people to rely more on their intuitive judgment before they make any decisions. With limited natural resources and lack of infrastructure support, the young entrepreneurs of Sabu obtain their managerial capabilities through observing the natural changes and absorbing advice from experienced senior entrepreneurs. Formal education in business and managerial training are far from their reach, so their managerial cognitive capabilities are developed by expanding their abilities through learning-by-doing.

The main obstacle of these young entrepreneurs is to build their ability to innovate or innovation capabilities, as they are less exposed to business competition and complex market demands. Knowing the importance of innovation capability, they are relatively novice to possess such an ability to fight in the jungle of this business world. Yet, these young entrepreneurs, driven by their business intuition, can navigate their business around the fierce business realm (Suprpto et al., 2024b). Therefore, this study is measuring the innovation capabilities of young entrepreneurs of Sabu through their business intuition and managerial cognitive capabilities in order to survive in the business uncertainty.

Literature Review and Hypothesis Development

1. Innovation Capability (IC)

As the backbone of business continuity, innovation is “a process by which a domain, a product, or a service is renewed and brought up to date by applying new processes, introducing new techniques, or establishing successful ideas to create new value” (Meyer, 2014). Meanwhile, innovation capability (IC) refers to a business's or organization's capacity to stand out from competitors by effectively leveraging its knowledge of products, processes, and management (Nham et al., 2020, Lawson & Samson, 2001). Innovation capability, then, is defined as a sustainable capability in which ideas and knowledge are transformed into products, processes or systems for the benefit of the company and its stakeholders (Lawson & Samson, 2001). In the era of severe business competitions, innovation becomes the competitive advantage of business entities, regardless of the business size. In the circumstance of small business enterprises, the innovation capability of an organization is often represented by the capability of the owners to navigate around the business uncertainty and complexity.

Scholars such as Lawson and Samson (2001) and Liao et al. (2007) confirm the importance of innovation capability for small businesses as it excels the business entities through new information, problem solving, and openness to ideas and knowledge. Failing to innovate, small businesses are at risk to be eliminated from the existing market (Liao et al., 2007). Innovation capability falls into three categories, product innovation capability, process innovation capability, and market innovation capability (Songkajorn et al., 2020). Liao et al. (2007) categorized innovation capability into product innovation capability, process innovation capability, and managerial innovation capability. Earlier, Lyon et al. (2000) categorized innovation capability into two aspects, product innovation capability and process innovation capability.

Considering the size of the business entity for this study, which is small business enterprises, innovation capability is measured with product innovation capability (Liao et al., 2007), which is defined as the ability to create product differentiation by developing new products. It is also measured with process innovation capability (Liao et al., 2007), which means the ability to develop better production processes to improve business performance, such as reducing costs, increasing profitability, and improving production capacity. Finally, innovation capability is measured with managerial innovation capability (Liao et al., 2007), which refers to the ability to implement new policies, systems, and managerial methods in order to differentiate with other business entities.

2. Strategic Intuition Capability (SIC)

The concept of strategic intuition in decision making was popularized by Duggan (2007) as the opposite of ordinary intuition, which is a form of emotion: feeling, not thinking. Furthermore, strategic intuition is described as “a flash of insight cutting through the fog of your mind with a clear, shining thought”. Other scholars define strategic intuition as brain processes that operate beyond the subconscious and connect holistically to environmental cues (Dane & Pratt, 2007) or a mindset that enables timely decision-making informed by past experiences (Miller & Ireland, 2005). As small business decision making is in the hands of the business owners, the capability of the owners to utilize their strategic intuition is crucial for the continuity of their business (Aujirapongpan et al., 2020; Suprpto et al., 2024a).

Duggan (2013) defines strategic intuition capability as the ability to think creatively to address problems. The essence of strategic intuition capability involves an individual's ability to make decisions rooted in understanding, thinking, and experiences that shape their mental model. To assess strategic intuition capability, Aujirapongpan et al. (2020) identify several indicators, including recognizing capability, proactive thinking capability, and strategic decision making capability. Recognizing capability refers to the skill of identifying existing opportunities and conducting assessments to develop future plans. Proactive thinking capabilities involve actively and decisively addressing challenges while integrating past and present experiences to forecast future outcomes. Strategic decision capabilities encompass gathering, analyzing, and interpreting information to inform strategic decisions aligned with future objectives (Aujirapongpan & Hareebin, 2020).

3. Managerial Cognitive Capability (MCC)

Scholars acknowledge the importance of prior knowledge gained from past experiences to recognize business opportunities and seize the opportunities (Liebowitz et al., 2019; Dane & Pratt, 2007; Nuthall, 2022). This prior knowledge also shapes the managerial cognition, besides formal education and informal training on running a business. Managerial cognitive capability refers to managers' ability to engage in mental processes that shape cognition (Helfat & Peteraf, 2015). This capability encompasses mental activities such as perception, attention, problem-solving, reasoning, language skills, communication abilities, and social cognition. De Souza and Forte (2019) define managerial cognitive capabilities as a leader's ability to perform mental tasks that influence strategic changes in business models or performance. Implicitly, this capability involves managing complexity, integrating information, and implementing suitable policies in dynamic business settings (Teece, 2014). A study by Adna and Sukoco (2022) outlines indicators for measuring managerial cognitive capability based on Teece's (2014) dynamic capabilities framework, which includes the ability to sense the environment, seize opportunities, and reconfigure resources to address the challenges posed by a changing business environment.

The indicators to measure managerial cognitive capability are derived from a conceptual paper by Helfat and Peteraf (2015) and an empirical study by Adna and Sukoco (2022). Sensing can be defined as the process of recognizing opportunities and preventing competitive threats (Helfat & Peteraf, 2015). Seizing is defined as the use of knowledge, experience, and critical understanding to recognize opportunities or problems that require a quick response (Helfat & Peteraf, 2015). This requires managerial expertise for strategic business decision-making, considering existing risks, and implementing policies needed to achieve organizational goals. Reconfiguring can be defined as a step to adapt or optimize business or business performance in a dynamic business environment, ensuring that business or business continues to grow in the business environment (Helfat & Peteraf, 2015).

4. Absorptive Capacity (ACAP)

Studies have shown that absorptive capacity has a strong influence on capability building (Dzhengiz & Niesten, 2020; Gebauer et al., 2012; Lichtenhaller & Lichtenthaler, 2009). In business contexts, absorptive capacity refers to the ability to acquire, assimilate, and utilize new values or information to enhance competitiveness (Tho, 2017; Cohen & Levinthal, 1990). Schweisfurth and Raasch (2018) describe absorptive capacity as a system that develops and applies external knowledge within an existing group. Lane et al. (2006) outline three stages of absorptive capacity: recognizing and capturing useful external knowledge, combining this new knowledge through dynamic learning, and applying it to generate commercial value. In summary, absorptive capacity is the skill of individuals or organizations to comprehend, explore, and manage external knowledge to improve productivity and efficiency. Indicators for measuring absorptive capacity include an individual's ability to identify new issues, absorb new information, integrate new knowledge with

existing knowledge, and apply the combined knowledge effectively (Tho, 2017; Cohen & Levinthal, 1990).

Absorptive capacity (AC) is defined as the ability to gather external knowledge, which is crucial for fostering innovation (Cohen & Levinthal, 1990). Enhancing absorptive capacity describes the ability to acquire, assimilate, transform, and utilize new knowledge, serving as a foundation for innovation to align with the dynamic capabilities of an organization. Acquisition is the ability to identify and obtain useful external knowledge. Assimilation is a process or routine to analyze, process, interpret, and understand new knowledge. Transformation is the ability to develop and refine a routine to combine existing knowledge with new knowledge and assimilate knowledge. Exploitation is the application of new knowledge that produces new things such as products, systems, processes, knowledge, or organizational forms.

5. Hypotheses development

Managerial Cognitive Capability and Innovation Capability

Studies on innovation and innovation performance are abundant (Yang et al., 2019; Duan et al., 2022). Yet, studies that relate innovation capability and managerial cognitive capability on entrepreneurs are still limited (Ganguly et al., 2019; Yeşil & Doğan, 2019). Scholars have pointed out the important role of knowledge as the foundation of one's ability to innovate (Zhang et al., 2010; Leiponen, 2016), yet exploring such a relationship is still limited. Although previous studies have reckoned the impact of knowledge quality, knowledge sharing, and knowledge acquisition on innovation capability (Ganguly et al., 2019; Harjanti, 2017; Liao et al., 2010), there is still a loophole in connecting managerial cognitive capability and innovation capability. Some scholars have filled in the gap by exploring the influence of knowledge management and managerial cognitive capability (Appietu-Ankrah et al., 2024; De Souza & Forte, 2021; Adna & Sukoco, 2020; Helfat & Peteraf, 2015). Cao et al. (2020) have examined the impact of managerial cognitive capability on innovation at the level of the organization. However, the relationship between managerial cognitive capability and innovation capability needs further exploration, especially at the level of individuals. So, the first hypothesis (H1) is that managerial cognitive capability has a significant impact on innovation capability among young entrepreneurs.

Absorptive Capacity and Innovation Capability

Some studies have confirmed that absorptive capacity has a significant impact on innovation capability. Cohen and Lavinthal (1990) suggested that external knowledge can be used to determine innovation capability. Following Cohen and Levinthal, Zahra and George (2002) found a significant positive relationship between absorptive capacity and innovation, as these factors construct the organization's competitive advantage. Knudsen and Roman (2004) also support that absorptive capacity is a predictor for an organization's innovation capability. Caloghirou et al. (2004) confirmed

that both internal capabilities and openness toward knowledge sharing are important for upgrading innovative performance. Even though extensive studies have been undertaken on the relationship between absorptive capacity and innovation capability, most of them are conducted at the corporate level (Lawson, 2001, Knudsen & Roman, 2004; Liao et al, 2010). There are a few attempts to bring that down to the individual level (Fang et al., 20), so it has become the focus of this study to examine the impact of absorptive capacity on innovation capability at the individual level. As entrepreneurs, small business owners absorb external knowledge to create their competitive advantages through innovation. Therefore, the second hypothesis (H2) is that absorptive capacity has a significant impact on innovation capability among young entrepreneurs.

Strategic Intuition Capability and Innovation Capability

Some scholars probe that intuition is the foundation of creativity (Bushuyev et al., 2024), while creativity is the source of innovative minds. Through creativity, entrepreneurs can absorb new ideas and fields of knowledge that help make proper predictions. While predictions cannot be planned purely based on rationality, entrepreneurs utilize their intuitive side to open up opportunities to act beyond traditional ways of finalizing their decisions (Olaleye et al., 2020). These intuitive actions may surrender novelty in running their business, which is often related to either **product innovation**, **process innovation** or **managerial innovation** (Liao et al., 2010). Some studies have examined the relationship between strategic intuition capability and innovation capability among entrepreneurs (Somwethee et al., 2023; Aujirapongpan & Hareebin, 2020; Olaleye et al., 2020), with some mixed results of studies. Other studies suggest that strategic intuition capability has some influences on innovation capability (Bushuyev et al., 2024; Aujirapongpan et al., 2020), yet such a study is still limited. Officer (2005) questions the relation between intuition and innovation. Therefore, the third hypothesis (H3) is examining the significant impact of strategic intuition capability on innovation capability among young entrepreneurs.

Managerial Cognitive Capability and Strategic Intuition Capability

Business decisions are not solely decided by data and information, but entrepreneurs mostly use their intuition to finalize their judgment. Intuitive judgment is highly affected by prior experiences (Duggan, 2013), meanwhile experiences are one of the sources to build up knowledge which constructs entrepreneurs' managerial cognition (Cohen & Levinthal, 1990). The ability to judge final decisions using intuition, or strategic intuition capability, is essential for entrepreneurs (Karaca & Bağış, 2024; Kuo, 1998). Managerial cognition enables entrepreneurs to sense business opportunity, and managerial cognition influences strategic decision making (Adner & Helfat, 2003). Another study by Jutidharabongse et al. (2020) has shown that cognitive capability has a significant impact on strategic intuition capability. Adna and Sukoco (2020) also support the finding at the organizational level, suggesting that managerial cognitive capability has a significant influence on organizational capacity for change. At the individual level, a study on entrepreneurs shows that strategic business intuition is significantly affected by their managerial cognitive capability

(Suprpto et al., 2024a), as they use their managerial knowledge to sense market demands and their strategic intuition to capitalize the market. Therefore, the fourth hypothesis (H4) probes that managerial cognitive capability has a significant impact on strategic intuition capability among young entrepreneurs.

Managerial Cognitive Capability and Absorptive Capacity

Absorptive capacity describes the ability to gather external knowledge and use it effectively as the source of innovation. Absorptive capacity model has clearly stated that absorptive capacity depends on prior knowledge and knowledge sources (Cohen & Levinthal, 1990; Zahra & George, 2002; Todorova & Durisin, 2007). Prior knowledge gained from experiences and learning processes shape cognitive capability, that assists managers in absorbing new knowledge. Helfat and Martin (2015) reveal that managerial cognition allows managers to sense market opportunity and reconfigure resources to make decisions. Studies about absorptive capacity at the organizational level and its antecedents are abundant, although absorptive capacity has started at the level of individuals. Scholars have already pointed out the lack of studies at the individual level. For entrepreneurs, managerial cognition is an important antecedent of absorptive capacity, that allows them to identify which knowledge is important to grasp for the benefit of their businesses, yet it still remains untested. So, the fifth hypothesis (H5) probes whether managerial cognitive capability has a significant impact on absorptive capacity among young entrepreneurs.

Absorptive Capacity and Strategic Intuition Capability

Absorptive capacity is about the acquisition, assimilation, transformation, and exploitation of external knowledge for the sake of performance and innovation (Zahra & George, 2002). Absorptive capacity is the foundation of sharing knowledge, exchanging information, and using available resources among business partners to generate new business ideas. Meanwhile, strategic intuition capability is about the ability to make business decisions based on understanding, thinking, and experiences (Duggan, 2013). Studies by Songkajorn et al. (2022) and Aujirapongpan et al. (2020) suggest a significant relationship between the ability to absorb external forces and the ability to build strategic intuition among small business owners. However, there is an inconsistency in the result of this research. A study by Suprpto et al. (2024b) on entrepreneurs in rural areas yields a different result, since absorptive capacity has no significant impact on strategic intuition capability. Therefore, a deeper investigation is needed to examine the significance of absorptive capacity on strategic intuition capability, as such a study is still limited. The sixth hypothesis (H6) suggests that absorptive capacity has a significant impact on strategic intuition capability among young entrepreneurs.

Based on the hypothesis development, the research framework is constructed as depicted in Figure 1.

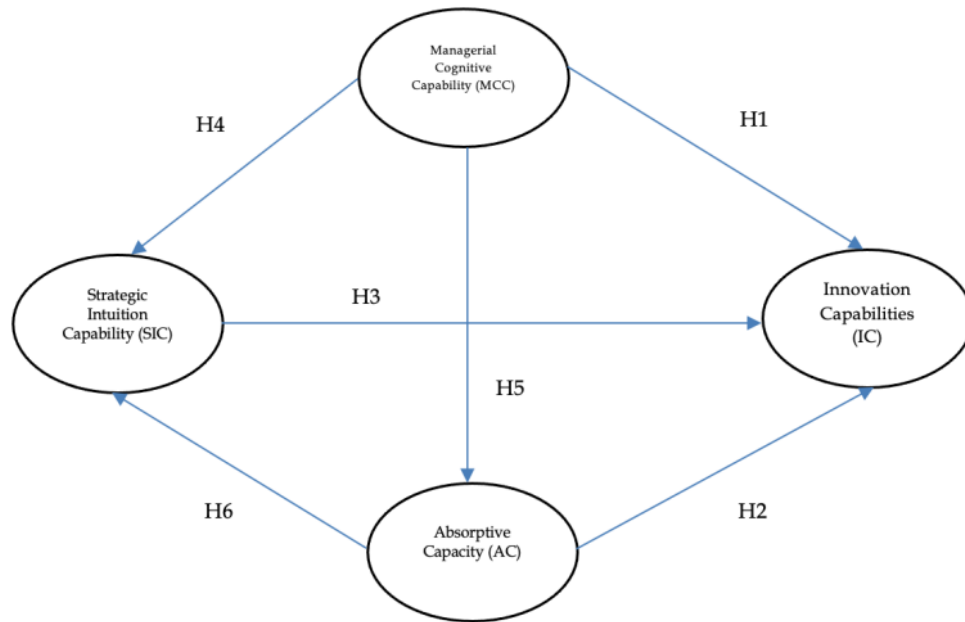


Figure 1. Research Framework

Research Method

² This study used a quantitative research approach to examine the cause-and-effect relationship between the independent and dependent variables. The target population consisted of micro and small business owners in Sabu Raijua, East Nusa Tenggara. Specifically, the focus was on entrepreneurs from Generations Y and Z who hold decision-making roles related to the growth of their businesses.

Data was collected using questionnaires, which were divided into two sections: one for gathering respondent profile information and another containing statements related to the research variables. The indicators for Capability, 12 items from Liao et al. (2007) were used, organized into three dimensions. Strategic Intuition Capability were adapted from Aujirapongpan et al. (2020) and included 15 items across three dimensions. Managerial Cognitive Capability was based on Teece's (2014) framework, covering the dimensions of sensing, seizing, and reconfiguring, with 12 items. Absorptive Capacity was measured using indicators from Tho (2017) and Cohen and Levinthal (1990), including 13 items. These indicators assess an individual's ability to identify new issues, absorb new information, integrate this knowledge, and apply it effectively. In terms of Innovation

A total of 300 questionnaires with a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) were distributed directly to micro and small business owners in Sabu Island, as many young entrepreneurs in the region operate in areas with limited infrastructure and internet connectivity. Out of the 300 distributed, 260 questionnaires were returned, yielding a response rate of 87%. After excluding incomplete responses and samples from incorrect age categories, 244 valid samples were used for analysis.

Descriptive data analysis was first conducted, including calculating mean values for the relevant variables. For hypothesis testing, Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed, using SmartPLS 4.0 software to examine the relationships between latent variables like Absorptive Capacity, Managerial Cognitive Capability, Strategic Intuition Capability, and Innovation Capability.

Results and Discussions

Results

The respondents profile can be summarized as follows:

Table 1. Gender and Age Range

Age range	Male	Female	Total
21-30 years old	66	82	148
31-40 years old	60	36	96
Total	126	118	244

Table 1 shows that the study's respondents include entrepreneurs aged 21-30 years (66 males and 82 females, totaling 148 entrepreneurs) and those aged 31-40 years (60 males and 36 females, totaling 96 entrepreneurs).

Table 2. The Education of The Respondents.

Education	21-30 years old	31-40 years old	Total
Junior High School		2	2
High School or Equivalent	62	34	96
Diploma	38	15	53
Bachelor Degree	48	45	93

Total	148	96	244
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As indicated in Table 2, the majority of respondents aged 21-30 had completed Senior High School or its equivalent, with 62 entrepreneurs falling into this category. Meanwhile, among those aged 31-40, most had a Bachelor's Degree, comprising 45 entrepreneurs.

Table 3. Types of Respondents' Business

Type of Business	Total
Food and beverages	71
Retail	65
Fishery and cattle breeder	47
Plantation and farm	34
Services	15
Lodging and housing	4
Others	8
Total	244

Table 3 reveals that the majority of respondents are involved in food and beverage businesses (71 entrepreneurs), followed by retail (65 entrepreneurs), fishery and cattle breeding (47 entrepreneurs), plantation and farming (34 entrepreneurs), services (15 entrepreneurs), lodging and housing (4 entrepreneurs), and other types of businesses (8 entrepreneurs).

Table 4. Means of Each Indicator and Variable

Variables	Indicators	Mean of Each Indicator	Mean of Variables
Innovation Capability (IC)	Product Innovation (PDI)	3.513	3.674
	Process Innovation (PSI)	3.733	
	Managerial Innovation (MI)	3.791	
Absorptive Capacity (AC)	Acquisition (ACQ)	3.785	3.733
	Assimilation (ASM)	3.701	
	Transformation (TRF)	3.748	

	Exploitation (EXP)	3.679	
Managerial Cognitive Competences (MCC)	Sensing (SEN)	3.869	3.817
	Seizing (SEI)	3.638	
	Reconfiguring (RCF)	3.970	
Strategic Intuition Capability (SIC)	Opportunity Recognition (ARO)	3.759	3.753
	Proactive Thinking (APT)	3.682	
	Proactive decision Making (AMD)	3.833	

Table 4 shows that the means for each indicator and variable are all sufficiently high, exceeding 3.40. The highest mean for the Innovation Capability (IC) indicator is Managerial Innovation (3.791), indicating that most entrepreneurs demonstrate a strong level of managerial innovation. For Absorptive Capacity (AC), the highest mean is for acquisition (3.785), suggesting that the majority of entrepreneurs possess the ability to identify and acquire valuable external knowledge.

Furthermore, the highest mean for Managerial Cognitive Competences (MCC) is for configuring (3.970), which indicates that most entrepreneurs are adept at adapting to dynamic business environments in order to grow and remain competitive. Lastly, the highest mean for Strategic Intuition Capability (SIC) is for proactive decision-making (3.833), implying that most entrepreneurs are capable of making strategic decisions that align with their organizational goals.

With the help of smartPLS 4.0, the results of the validity and reliability are obtained from the outer model test, which are shown in Table 5 below.

Table 5. Convergent Validity Test, Reliability Test, and Determinant Coefficient

Latent Variable	Indicator	Outer Loadings	Latent Variable	Indicator	Outer Loadings
Absorptive Capacity AVE = 0.693 CR = 0.964 R2 = 0.748	ACQ01	0.762	Innovation Capability AVE = 0.591 CR = 0.946 R2 = 0.528	MI01	0.843
	ACQ02	0.850		MI02	0.817
	ACQ03	0.781		MI03	0.818
	ACQ04	0.818		PDI01	0.775
	ASM01	0.774		PDI02	0.572
	ASM02	0.851		PDI03	0.594

	ASM03	0.876		PDI04	0.696
	EXP01	0.838		PSI01	0.781
	EXP02	0.836		PSI02	0.812
	EXP03	0.789		PSI03	0.864
	TRF01	0.899		PSI04	0.797
	TRF02	0.864		PSI05	0.793
	TRF03	0.872		RCF01	0.882
Strategic Intuition Capability AVE = 0.737 CR = 0.973 R2 = 0.894	AMD01	0.859	Managerial Cognitive Capability AVE = 0.717 CR = 0.965	RCF02	0.848
	AMD02	0.859		RCF03	0.900
	AMD03	0.821		SEI01	0.699
	AMD04	0.805		SEI02	0.841
	APT01	0.923		SEI03	0.788
	APT02	0.893		SEI04	0.902
	APT03	0.739		SEN01	0.854
	APT04	0.882		SEN02	0.843
	APT05	0.908		SEN03	0.888
	ARO02	0.755		SEN04	0.862
	ARO03	0.886		SEN05	0.835
	ARO04	0.892			
ARO05	0.895				
ARO06	0.879				

The evaluation of the measurement model shows that the indicators used to measure the four key constructs demonstrate strong convergent validity. All outer loadings exceed the 0.50 threshold, with many exceeding 0.80, indicating that the observed variables reliably measure their respective latent constructs. For the Absorptive Capacity (AC) construct, the loadings range from 0.762 to 0.899, showing that the indicators effectively capture the construct. Similarly, the Innovation Capability (IC) indicators have loadings between 0.572 and 0.864, and the Managerial Cognitive Competency (MCC) indicators show strong loadings, mostly above 0.80. While some indicators for the Strategic Intuition Capability (SIC) construct have slightly lower loadings, the overall set still meets acceptable convergent validity.

Regarding construct validity, the Average Variance Extracted (AVE) values range from 0.591 (for IC) to 0.737 (for SIC), all exceeding the recommended threshold, confirming satisfactory convergent validity. The composite reliability values range from 0.946 (for IC) to 0.973 (for SIC), all above the 0.70 threshold, indicating strong internal consistency. Overall, the AVE and composite reliability results confirm that the measurement model is both reliable and valid in capturing the key constructs of interest.

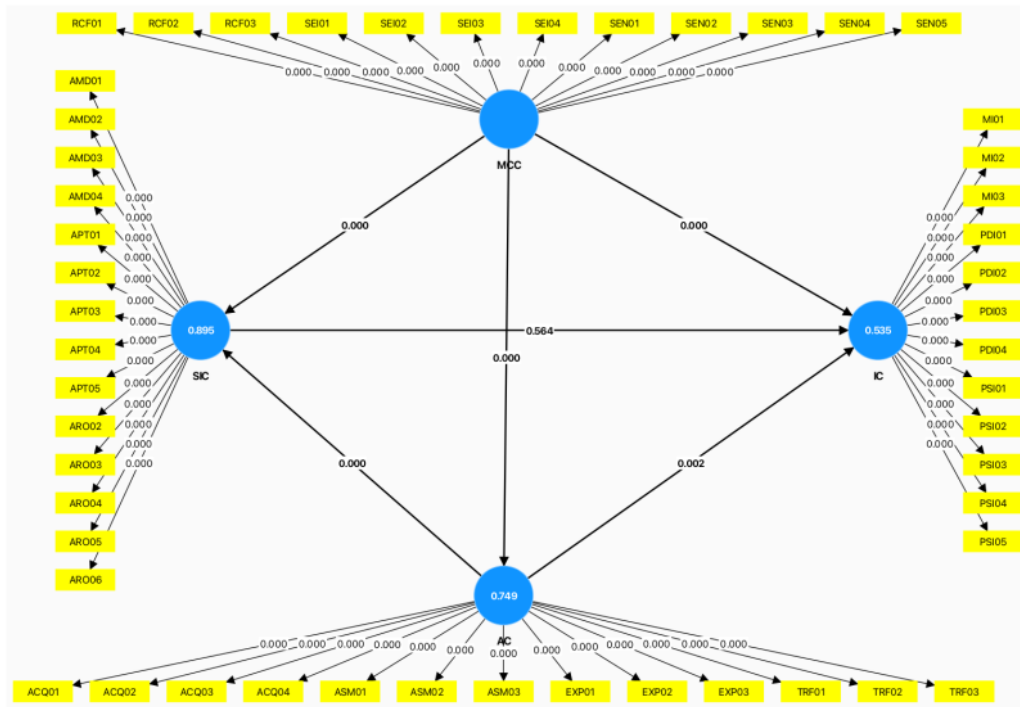


Figure 2. Path Diagram

The coefficient of determination (R-square) values show the explanatory power of the independent variables on the dependent constructs. The R-square for Absorptive Capacity (AC) is 0.748, meaning that the independent variables account for 74.8% of the variance in AC. For Strategic Intuition Capability (SIC), the R-square is 0.904, indicating that 90.4% of the variance in SIC is explained by the independent latent variables. Lastly, the R-square for Innovation Capability (IC) is 0.530, showing that 53.0% of the variance in IC is explained by the antecedent constructs.

Table 6. Hypothesis Testing

Hypothesis	Path Coefficient	T-Statistics	P values	Remarks
H ₁ : MCC → IC	0.343	3.626	0.002	Accepted
H ₂ : AC → IC	0.348	3.139	0.000	Accepted
H ₃ : SIC → IC	0.067	0.576	0.564	Declined
H ₄ : MCC → SIC	0.546	7.334	0.000	Accepted

H ₅ : MCC \square AC	0.866	38.899	0.000	Accepted
H ₆ : AC \square SIC	0.433	5.835	0.000	Accepted

The key findings in Table 6 indicate that both Managerial Cognitive Capability and Absorptive Capacity have significant and positive effects on Strategic Intuition Capability as well as on Innovation Capability. Besides that, Absorptive Capacity is significantly and positively influenced by Managerial Cognitive Capability. However, the hypothesis suggesting a direct link between Strategic Intuition Capability and Innovation Capability was declined. Overall, the hypothesis testing results provide valuable insights that Absorptive Capacity and Managerial Cognitive Capability have strong influences on Innovation Capability among young entrepreneurs in Sabu Island.

Discussions

This study offers valuable theoretical insights into the innovation capabilities of young entrepreneurs, particularly those living in rural areas. While many studies have investigated innovation capabilities at the corporate level (Somwethee et al., 2023; Maldonado-Guzmán et al., 2019; Rad, 2017; Nazarpouri et al., 2017; Liao et al., 2010; Lawson & Samson, 2001), research focused on the innovation capabilities of young entrepreneurs is still limited. The study examines how the innovation capabilities of young entrepreneurs are shaped by strategic innovation capability, managerial cognitive capability, and absorptive capacity. The findings demonstrate that managerial cognitive capability and absorptive capacity have a significant impact on innovation capability. Additionally, the study shows that strategic intuition capability is strongly influenced by both managerial cognitive capability and absorptive capacity. However, it also reveals that strategic intuition does not significantly influence innovation capability.

The findings of this study contribute to the existing body of research on the innovation capabilities of young entrepreneurs. While many scholars have examined innovation capability as a key factor influencing organizational or business performance (Saiz-Alvarez et al., 2013; Exposito & Sanchis-Llopis, 2018), research on the variables that shape innovation capability remains limited. This study helps fill that gap by exploring the factors that contribute to the development of innovation capability. Additionally, it suggests new avenues for further research, particularly in examining the relationship between intuition and innovation, as the study found that strategic intuition capability does not significantly impact the innovation capability of young rural entrepreneurs. This contrasts with some previous studies that strongly suggest a significant link between strategic intuition capability and innovation capability (Songkajorn et al., 2020; Aujirapongpan et al. 2020).

Research by Czakó et al. (2023), Hincapié (2020) and Gelhof et al. (2014) suggest that young entrepreneurs develop their entrepreneurial skills through learning-by-doing and by absorbing the experiences of others to build their capabilities. For young entrepreneurs in Sabu Island, limited exposure to business practices and formal business education means that their entrepreneurial

drive is largely influenced by external factors, such as seasonal changes and natural resources, as well as subjective norms like social control and religiosity. It is reflected by the highest indicator of managerial cognitive capability, which is reconfiguring their resources ($x=3.970$). This study offers valuable insights on the role of managerial cognitive capability in enhancing both strategic intuition and innovation capability. Furthermore, learning-by-doing, as the primary source of managerial cognitive capability, forms the foundation of absorptive capacity. Entrepreneurs' ability to absorb external knowledge for business growth relies heavily on their prior knowledge, which is shaped by hands-on learning and personal experiences. It is reflected by the highest indicator of absorptive capacity, which is acquiring knowledge ($x=3.875$). The study confirms that absorptive capacity plays a critical role in strengthening both strategic intuition capability and innovation capability.

Moreover, the innovation capability of young entrepreneurs is significantly influenced by both managerial cognitive capability and absorptive capacity. Among the different types of innovation, managerial innovation is the most dominant, followed by process innovation and product innovation. When compared to young entrepreneurs in urban areas, the innovation capability of those in Sabu Island is relatively lower, with a mean score of 3.674, which is just slightly above average. To enhance their innovation capability, young entrepreneurs in Sabu need to improve their business knowledge. Business experience and prior knowledge are not sufficient to fully support the managerial cognitive capability of these entrepreneurs, as reflected in a mean score of 3.817, also just above average. Therefore, strengthening their ability to absorb external knowledge and expand their capacity could significantly boost their innovation capability.

The lack of impact of strategic intuition capability on innovation capability requires some explanation. Looking at the R-square values, it is clear that the R-square for strategic intuition capability is much higher than that for innovation capability. This suggests that managerial cognitive capability and absorptive capacity substantially affect strategic intuition capability of young entrepreneurs, meanwhile they moderately affect innovation capability of young entrepreneurs in Sabu Island. One possible explanation is that young entrepreneurs prioritize developing their business intuition, given the highly uncertain and complex business environment they face. Their survival often depends on strategic intuition to navigate seasonal anomalies and unpredictable weather, which can isolate the island from nearby islands for extended periods. As a result, their intuition is more focused on decision-making rather than driving innovation, which is reflected in the highest mean score ($x=3.833$) for strategic intuition capability.

Strategic intuition capability is strongly influenced by managerial cognitive capability and absorptive capacity. In line with previous studies by Aujirapangpan et al. (2020) and Suprpto et al. (2024b), the young entrepreneurs in Sabu excel in reconfiguring resources and sensing changes or opportunities. Additionally, they are effective at acquiring and transforming knowledge to shape their business decision making, which is reflected by the mean of $x=3.833$.

Conclusion

This study is grounded in knowledge management, where external knowledge is acquired and integrated with internally gained expertise for the benefit of the business. The focus of this study is the young entrepreneurs of Sabu Island. As one of the outermost islands, Sabu island imposes unique challenges that are not possessed by many other islands in Indonesia because it is an arid island with limited natural resources. The people of Sabu have to diligently find breakthroughs to overcome their hostile environments, therefore, they dominate the business landscape in the eastern region of Indonesia. Focused on young entrepreneurs in Sabu Island, this research provides valuable insights into rural entrepreneurship.

The uncertain and complex environment has shaped their entrepreneurial spirit, driving them to seek better opportunities on nearby islands. Unlike other tribes that focus on achieving prosperity through professions or government roles, the people of Sabu prioritize business development, despite limitations in education, resources, and skills. The findings of this study show that managerial cognitive capability and absorptive capacity have a significant impact on innovation capability. Both of these factors also significantly influence strategic intuition capability. However, strategic intuition capability does not appear to directly affect innovation capability. Another key finding is related to the mean scores and descriptive statistics, which provide further understanding of the subject. So, for more robust insights into rural entrepreneurship, similar studies can be replicated to offer a deeper understanding of the unique conditions in different regions of Indonesia.

Research Implications

This study makes several important theoretical contributions to entrepreneurship and innovation literature. First, it extends the understanding of innovation capability development in the context of rural young entrepreneurs, departing from the traditional corporate-focused research. The findings demonstrate that the pathways to innovation capability in rural entrepreneurship may differ from established theoretical frameworks primarily developed in corporate settings.

Second, the study enhances our theoretical understanding of the relationship between managerial cognitive capability, absorptive capacity, and innovation capability. While previous literature has established these connections in corporate contexts, this research validates their significance in rural entrepreneurship settings, particularly highlighting how resource reconfiguration and knowledge acquisition become crucial elements in building innovation capability under resource-constrained environments.

Third, the study challenges existing theoretical assumptions about the relationship between strategic intuition and innovation capability. The finding that strategic intuition capability does not significantly influence innovation capability among rural young entrepreneurs suggests that theoretical models of innovation capability may need to be reconsidered when applied to different contextual settings, particularly in rural and developing regions.

Future Research Directions

Based on the findings of this study, there are several promising directions for future research. First, longitudinal studies are needed to understand better the dynamic nature of capability development among young rural entrepreneurs. Such research could track how managerial cognitive capability and absorptive capacity evolve over time, providing insights into the learning processes and developmental patterns that shape innovation capabilities in rural settings. Second, we suggest that future studies should examine how environmental factors unique to rural areas - such as seasonal changes, geographical isolation, and limited natural resources - moderate the relationships between key capabilities. This will help explain the reason of certain capabilities may be effective in different environmental contexts and how entrepreneurs adapt their strategies accordingly. Finally, future research should consider the relationship between innovation capability and various performance outcomes specifically in rural entrepreneurship contexts. Understanding these performance linkages can provide valuable insights for both theory development and practical implication aimed at supporting rural entrepreneurship development.

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