

**The Causal Relationship between Small Entrepreneurial Skills and Innovation
Competencies Affecting the Survival of Small Businesses:
Empirical Evidence from Thailand**

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Abstract

This research aims to study the influence of small entrepreneurial skills and innovation competencies on the survival of small businesses. The sample group is 364 small business entrepreneurs. The tools used were questionnaires and statistics used in data analysis including frequency, percentage, confirmatory factor analysis, and structural equation modeling. The research results found that the CFA of all latent variable indicators showed consistency between the research framework and empirical data. In addition, the SEM analysis found that three areas of small entrepreneurial skills, namely digital skills, leadership skills, and management skills, directly influence small business entrepreneurs' innovation competencies, and innovation competencies have a positive direct influence on the survival of small businesses. The finding shows that small entrepreneurial skills lead innovation in small businesses, driving them to expand efficiency, reduce costs, enhance product quality, and improve alignment with consumer demands. By leveraging innovation competencies, small entrepreneurs can anticipate consumer requirements, develop new ideas, and quickly deliver products and services, ultimately ensuring the business's survival and success.

Keywords: Small Entrepreneurial Skill, Innovation Competencies, Business Survival

1. Introduction

Small businesses in Thailand are considered important to the overall economic development of the country, including being a source of employment. Small businesses are a source of jobs, creating employment and reducing the unemployment rate within the country. As a result, people earn income and increase wealth (UNICEF, 2020) which promotes innovation and creativity. Small businesses are often the center of innovation and creativity in every country. Supporting small businesses stimulates the development and introduction of

new products or services (Somwethee et al., 2023) and helps promote the development of local knowledge. Small businesses often have operations close to the local community and culture. This allows these businesses to help promote the development of local wisdom and build strong business networks (Sungkharat et al., 2010). Small businesses also play an important role in generating income at the local level and promoting domestic consumption and helping increase efficiency in the use of resources within the country (OECD, 2017). Since the end of 2019, the COVID-19 virus outbreak has occurred. As a result of this pandemic, it has affected the economy around the world including all small businesses. There are many reasons why the spread of the COVID-19 virus affected the survival of small businesses, such as lockdowns and various restrictive measures of government agencies causing small businesses to temporarily close operations or reduce capacity. Closing operations results in decreased revenue and increases uncertainty for business survival (Nicola et al., 2020), as well as changes in consumer behavior that must be adjusted according to the situation and taken into account. Increasing cost responsibilities have forced small businesses to adjust their business practices to meet changing needs (Baker et al., 2020), including remote work and the use of technology. Digital comes to help businesses need to improve the way they work with technology, and as a result, small business entrepreneurs need to develop digital skills to keep their businesses operating in the changing environment. Using digital skills in combination with other skills so that businesses can produce products and services and can communicate with customers conveniently, quickly and efficiently (Brynjolfsson et al., 2020).

The concept of adopting digital technology capabilities for business is therefore very important for the survival of the business. The study found a connection and complementarity between innovation competencies and small entrepreneurial skills which business entrepreneurs need to have skills and abilities including being able to learn and develop abilities to keep up with technological changes that focus more on management skills combined with digital technology (Acemoglu & Autor, 2011). Additionally, the literature review found that small entrepreneurial skills and abilities are significantly linked to adopting innovative technology as an effective way for businesses to increase productivity and efficiency. Entrepreneurs are critical in adapting technology to benefit the business and increase efficiency (Pfano & Beharry, 2016). Entrepreneurs with good management skills are essential in planning technological adaptation and pace to organizational success (Asghar et al., 2023). According to Prochno (2001), small entrepreneurial skills and abilities are broad and complex, making them difficult to understand, interpret and differentiate. This concept has been studied by many academics. For example, Heckman and Kautz (2012) and Weinberger (2014) found that small entrepreneurial skill development is an important research topic that influences business competitiveness and small entrepreneurial skills are recognized as a strategic management tool to deal with the current business environment (Nyhan, 1998) due to changes resulting from the COVID-19 pandemic. As a result, business entrepreneurs must rely on technology to build innovation competencies. This change has led to a situation where small businesses struggle to deal with issues such as new customers, cultural diversity in the market, market fluctuations, Increased customer expectations regarding the quality of products and services, and the impact of the Internet on the core importance of business (Akerman et al., 2015). Therefore, entrepreneurs must devise new methods of operation to adapt to the operations of their business.

As mentioned above, small businesses are important to Thailand's economy. The research team therefore reviewed past research on the link between small entrepreneurial skills, innovation competencies, and small business survival during the COVID-19 outbreak. It was found that there were studies on the importance of small business management skills in Thailand to lead small businesses through crises that require adaptation and work to develop skills in risk management, strategy setting, and business capacity building (Kongnun et al., 2022), research on innovation competencies on business survival and growth in the COVID-19 situation by using communication technology, online marketing, and data management (Ahmad et al., 2021) and research on small business survival through adaptation, innovation development and offering products or services that are consistent with the situation (Boonmalert et al., 2021). The researchers found that there is still a lack of research that brings together the variables of small entrepreneurial skills, innovation competencies, and small business survival. Therefore, the research team has developed these variables into a research concept. The objective of the research is to study the influence between small entrepreneurial skills (including digital skills, leadership skills, and management skills) and innovation competencies that influence the survival of small businesses. Data collection is only from small business owners who are founders or the owners. This is to recognize the perspectives and skills of entrepreneurs that influence the innovation competencies necessary for business operators to survive. The findings from this research can be used as a reference for agencies to promote and support small business entrepreneurs to develop various skills; to effectively lead to innovation competencies and to lead small businesses to survive in the long term sustainably. Planning to promote and support the operations of small businesses requires empirical data to accommodate changes in the internal situation in the short, medium, and long term. Therefore, the goal of this research is to confirm and demonstrate that small entrepreneurial skills are critical to innovative capabilities affecting small business survival after the difficult period created by the COVID-19 pandemic and to enable small business entrepreneurs to develop entrepreneurial skills and apply them to small businesses in order to succeed and create sustainable stability for communities and society in the future.

2. Literature Review

2.1 Small Entrepreneurial Skill (ES)

Small entrepreneurial skills are abilities such as knowledge, management, etc. related to entrepreneurship. Entrepreneur will own and know the operations required to support their business success. Therefore, entrepreneurs must be competent and should be constantly updated due to the ever-changing business conditions (Ana et al., 2016). Business entrepreneurs must work together with other people. It is considered a resource and an important factor for business operations and is a complex management function. The individual abilities or skills of an entrepreneurs are important in predicting the performance and future success of a business. Past literature such as Papula (1995) stated that small business entrepreneurs must be creative, intuitive, goal-oriented, responsible, self-confident, initiative, independent, careful and cautious, disciplined, diligent, optimistic, and have a broad imagination. This research has applied theory related to the internal management of small businesses after the COVID-19 outbreak by Teece and colleagues (1997) who proposed the theory of dynamic capabilities. The reason is that the theory deals with entrepreneurial competencies by combining business and management theory with various aspects of innovation, leadership, and management, especially in the context of businesses that require

constant adaptation and change. Dynamic capabilities involve an organization's ability to integrate, build, and reconfigure internal and external capabilities to deal with a rapidly changing environment. This theory concerns the survival of small businesses in the post-COVID-19 pandemic. This is because it emphasizes the need for various organizations to adapt and create new things continuously in response to external changes. From a study of the literature, it was found that the small entrepreneurial skills used in running a small business include:

Digital Skill (DS)

Digital skill refers to the ability to effectively use and implement digital technology tools, which includes a wide range of knowledge such as basic computer knowledge, social media management, data analysis, cyber security, digital marketing, cloud computing, and others (Załoga & Bryczek-Wróbel, 2023). Digital skills are interconnected with all other small entrepreneurial skills required in the workplace and entrepreneurial activities. These skills are used for interacting with customers and other people for both personal matters and work duties. It is used as a medium of communication through applications and digital devices (Hakim et al., 2022). Skills in using digital technology in the future will become more important and business operators must demonstrate a variety of abilities related to digital skills (Skare et al., 2023). In addition, business operators must have information literacy, which is considered an important competency for entrepreneurs in every business. In this digital age, digital technology is a medium of communication. It is also a way to share and promote creative expression and innovation (Drydak, 2022). Therefore, we propose the following hypothesis.

Hypothesis 1: Digital skills have a direct influence on the innovation competencies of small business entrepreneurs.

Leadership Skill (LS)

Leadership skill consists of abilities or strengths that come from people who play organizational management roles. It is the ability to guide and support others to achieve common goals. These capabilities include communication, negotiation, conflict resolution, decision-making, motivation, and others (Thambusamy & Bekiroğulları, 2020). Leadership skills are an important variable discussed in the dynamic capabilities' theory because business leaders or entrepreneurs are responsible for creating a vision that keeps pace with change, fosters a culture of innovation, and guides the business by taking advantage of new opportunities. Leadership in the entrepreneurial context that must be adopted post-pandemic will involve strategic vision and the ability to inspire and facilitate business transformation (Freze et al., 2023). Therefore, we propose the following hypothesis.

Hypothesis 2: Leadership skills have a direct influence on the innovation competencies of small business entrepreneurs.

Management Skill (MS)

Management skill is the entrepreneur's ability to adapt and manage external change. Therefore, the entrepreneur must be able to manage change effectively (Malinao & Ebi, 2022). Dynamic capabilities theory emphasizes that organizations should develop management capabilities to identify, innovate, and manage change processes in order for the business to

survive and compete (Werner et al., 2022). Therefore, this research has identified small entrepreneurial skills consisting of 3 important skills: digital skills, leadership skills, and management skills which have been developed and applied using measurement tools based on the research of Sousa and Rocha (2019). Therefore, we propose the following hypothesis.

Hypothesis 3: Management skills have a direct influence on the innovation competencies of small business entrepreneurs.

2.2 Innovation Competencies (IC)

Innovation competencies are a variable that has been extensively studied since McClelland's (1973) paper and has been studied extensively and continuously until today. Spencer and Spencer (2008) stated that innovation competencies are specific capacities and abilities that consist of various skills which include individual characteristics such as being flexible, creative, having conceptual ideas, having imagination, and being able to think in different ways including having analytical thinking and being able to tolerate stress. These abilities are supporting factors that lead to innovative competencies. The characteristics of business entrepreneurs with innovative competencies are consistent with the concept of Ambidextrous leadership, a theory developed by Duncan (1976) that focuses on leadership having the ability to predict changes and learn to adapt in changing situations, being a person who can create a working environment that supports innovations, developing his own and employees' skills, choosing the methods, various tools and equipment with value, and can solve the problems quickly and make the organization grow and having the stability in the future (Alghamdi, 2018). Therefore, we propose the following hypothesis.

Hypothesis 4: Innovation capability has a direct influence on the business survival of small business entrepreneurs.

2.3 Business Survival (BS)

Business survival after the COVID-19 outbreak based on the theory of Darwin and Wallace, it was proposed that only the fittest survive, not necessarily the strongest. Darwin and Wallace suggested the mechanism of natural selection and the method of survival. Survival requires competition between members to survive (Jovanović, 2020). Therefore, survival means the existence that can adapt appropriately to the current situation. Business survival refers to the ability of a business to perform in a small business entrepreneur's capacity to overcome challenges arising from the internal and external environment (Ifekwem & Adedamola, 2016). Organizational survival; Romanelli (1989) suggests that structural factors and their interactions with the environment include the business landscape, strategy, technology, and organizational size. It has a strong influence on organizational survival. Sadiq and Bala (2018) studied the impact of leadership and strategy on organizational survival and found that the latter occurs through strategic management and implementation. Leadership affects the survival of the organization through these implementations and senior leaders of an organization may affect the survival of the organization after passing on their management skills. Moreover, Alfrian and Riani (2018) studied the impact of the environment on the change management of an electric rail system operator in Jakarta, Indonesia. It was found that the environment and culture within an organization affect goals, motivation, participation, team communication, cooperation, conflict management change management guidelines, and the

response of the management of the workers. From a review of the literature on small business survival, the research team applied a tool to measure the survival of small businesses from the concept of Abomaye-Nimenibo et al. (2019) and Putsom (2021).

From the literature review, it was found that the concepts are related to small entrepreneurial skills, innovation competencies, and small business survival. Therefore, in this research, the research team is interested in studying how small entrepreneurial skills affect innovation competencies and the survival of small businesses or whether they are different from past research results. The conceptual framework for this research consists of three variables which are small entrepreneurial skills; (consists of three sub-variables: digital skills, leadership skills, and management skills), innovation competencies, and survival of the business. Therefore, this study determines the role of innovation competencies as a mediator variable influenced by the independent variable, namely, small entrepreneurial skills, and the dependent variable, which is the survival of small businesses. The details are shown in Figure 1.

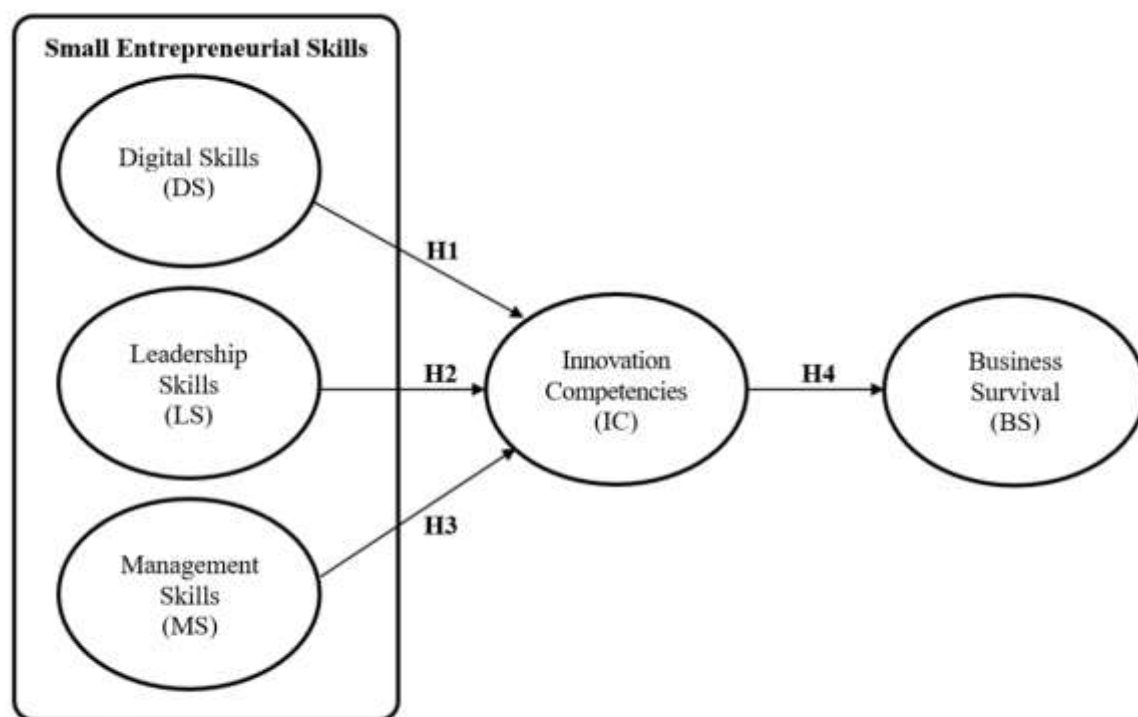


Figure 1 Conceptual Framework

3. Research Methodology

3.1 Population

The population used in this study is 4,034 small business entrepreneurs in Ubon Ratchathani Municipality, Mueang District, Ubon Ratchathani Province (Ubon Ratchathani Municipality, 2023). The researchers plan to use Structural Equation Modeling: SEM statistics. Therefore, the method for determining sample size according to the concept of Hair and colleagues (2014) was used to determine the conditions for data analysis using Structural Equation Modeling. There should be a sample size of 200 samples or more in cases where the model is not complex and the concept of Kline (2016) states that the sample size should be at least 200 to provide an adequate sample. A widely accepted rule of thumb is 10 times the

number of questions (Nunnally, 1967). This research has a total of 5 observable variables with 34 questions, so the sample size should not be less than 340 samples (34 questions x 10 times). Therefore, the sample size of 364 is appropriate and meets the conditions of the statistics used.

3.2 Sample Selection

This research collected data from a sample group of small business entrepreneurs in Ubon Ratchathani Municipality, Mueang District, Ubon Ratchathani Province. In selecting the sample for the research, the research team used Purposive Sampling for selection because the research team wanted to collect data from respondents who have knowledge, abilities, skills, experience, and expertise in managing a small business and is a person who can answer questions in the questionnaire as accurately as possible. After improving the questionnaire according to the suggestions, the research team used the questionnaire to collect data by going into the field to collect data from entrepreneurs at the locations of small business operators in Mueang District, Ubon Ratchathani Province.

3.3 Research Instrument

Figure 1 shows the conceptual framework of this research. Therefore, the researchers created a tool to measure the variables, which is a questionnaire consisting of four parts: Part 1: personal information of the respondents, totaling seven items, including gender, age, education level, business experience, monthly business income, type of business and form of business establishment. Part 2: Opinions on small entrepreneurial skills, totaling 22 items developed from past research by Sousa and Rocha (2019) and Thambusamy and Bekiroğulları (2020) consist of Digital Skills (DS), Leadership Skills (LS), and Management Skills (MS). Part 3: Opinions about Innovation Competencies (IC), seven items, and measurement tools developed from the research by Ismail (2022) and Mokbel Al Koliby et al. (2024) and Part 4: Business Survival (BS), having five items, measurement tools are taken from the concepts and research of Abomaye-Nimenibo et al. (2019) and Putsom (2021). The nature of questions from parts 2 to 4 were developed and adapted from past research. Part 1 of the questionnaire is a checklist question, measuring data at the nominal scale and ordinal scale. The questionnaire for parts 2 to 4 uses a Likert scale and interval scale at 5 levels: 5 means strongly agree, 4 means agree, 3 means moderate, 2 means disagree, and 1 means strongly disagree.

3.4 Testing the reliability and validity of the instrument

This research had the reliability of the tool tested by three experts checking the content validity by measuring the index of consistency between the questions and objectives (IOC). The IOC value from the expert examination of every question has value equal to 1.00. After that, the questionnaire that was checked for content validity was tried out with a sample group that had similar characteristics to the sample group from which the actual data were collected, namely small business entrepreneurs operating in the Muak Lek Subdistrict Municipality, Muak Lek District, Saraburi Province for 30 sets. It was found that the confidence value of small entrepreneurial skills was equal to 0.87, divided into digital ability equal to 0.70 and business survival equal to 0.78. After collecting 364 sets of data, it was found that the confidence value of small entrepreneurial skills was equal to 0.89, innovation competencies were equal to 0.74, and business survival was equal to 0.87. Therefore, the confidence value of all variables was equal to 0.92, and Cho and Kim (2015) confirmed that the confidence value

of the variable should be greater than 0.70, showing that the tool used to measure the variable is accurate enough to be able to calculate statistical values.

3.5 Data Analysis

This study used descriptive statistics to describe the characteristics of the sample, including Frequency, Percentage, Mean, S.D., and Correlation Analysis while all of the constructs validation testing included Confirmatory Factor Analysis (CFA). The criteria used to consider conditions include the following indicators: the relative chi-square value (χ^2/df) is less than 4.00. The p-value must not be statistically significant or not less than 0.05. The Comparative Fit Index (CFI) value must be greater than 0.97. The value of the Comparative Consistency Index of Tucker and Lewis (TLI) is greater than or equal to 0.95. The value of Root Mean Square Error of Approximation (RMSEA) is less than or equal to 0.05 and the value of Root Mean Square Residual (RMR) is less than 0.05 (Choi and Seltzer, 2010; Hair et al., 2014) and the hypothesis testing uses Path Analysis according to Structural Equation Modeling (SEM) which tests the harmony of the research concept with empirical data according to the standard criteria used, which are the relative chi-square with the value (χ^2/df) of less than 4.00, The p-value must not be statistically significant or not less than 0.05, the value of Goodness of Fit Index (GFI) is greater than 0.90, the value of Adjusted Goodness of Fit Index (AGFI) is greater than 0.90, the value of Root Mean Square Error of Approximation (RMSEA) is less than or equal to 0.05, the value of Normal Fit Index (NFI) is greater than or equal to 0.90, the value of Incremental Fit Index (IFI) is greater than or equal to 0.90 and the value of Comparative Fit Index (CFI) is greater than or equal to 0.90 (Kline, 2016; Hair et al., 2014).

4. Research Results

4.1 Descriptive Statistics

The results of the research found that of the 364 small business entrepreneurs who responded to the questionnaire, the majority were male, 196 people, representing 53.8 percent, aged between 30 years and 39 years, 135 people, representing 37.1 percent, graduated with a bachelor's degree, 221 people, accounting for 60.7 percent, having experience in operating a small business for less than 5 years, 145 people, accounting for 39.8 percent, having an average monthly income from operating a small business of less than 20,000 baht, 133 people, accounting for 36.5 percent, operating service businesses, 237 people, accounting for 65.1 percent, and is a small business with a single owner, 330 people, accounting for 90.7 percent.

The analysis of the Mean and Standard Deviation (S.D.) revealed that among the variables, Innovation Competencies (IC) had the highest average, rated at a high level ($\bar{X} = 4.16$). Both Digital Skill (DS) and Management Skill (MS) had the same high average score ($\bar{X} = 4.14$), followed by Leadership Skill (LS), which also scored at a high level ($\bar{X} = 4.13$). Lastly, Business Survival (BS) received a medium-level average score ($\bar{X} = 3.33$), as summarized in Table 1. In addition, Table 1 presents the Correlation Analysis of each variable in this study, showing correlation values ranging from 0.27 to 0.82, which exceed the threshold of 0.70 and may indicate potential Multicollinearity issues between variables. However, the VIF values for each variable were tested and found to range from 2.93 to 4.09, which are below the threshold of 10.00, confirming that none of the independent variables exhibit Multicollinearity problems (Hair et al., 2014).

Table 1 Mean, S.D., Correlation Analysis, and VIF

Variables	\bar{X}	S.D.	DS	LS	MS	IC	BS	VIF
Digital Skill (DS)	4.14	0.39	1.00					2.93
Leadership Skill (LS)	4.13	0.41	0.76	1.00				3.93
Management Skill (MS)	4.14	0.40	0.75	0.82	1.00			3.95
Innovation Competencies (IC)	4.16	0.41	0.77	0.81	0.82	1.00		4.09
Business Survival (BS)	3.33	0.68	0.27	0.30	0.29	0.32	1.00	-

4.2 Confirmatory Factor Analysis (CFA)

The confirmatory factor analysis results of the latent variable indicators in the measurement model were consistent between the components based on the research concept and the empirical data. The details are shown in Table 2.

Table 2 Results of Confirmatory Factor Analysis of Latent Variables

Good Fit Index	χ^2/df ≤ 4.00	p-value ≥ 0.05	CFI ≥ 0.97	TLI ≥ 0.95	RMSEA ≤ 0.05	RMR ≤ 0.05
Digital Skill (DS)	0.75	0.65	1.00	1.01	0.00	0.01
Leadership Skill (LS)	0.48	0.83	1.00	1.03	0.00	0.01
Management Skill (MS)	1.77	0.07	0.98	0.96	0.05	0.01
Innovation Competencies (IC)	1.30	0.27	1.00	0.99	0.03	0.01
Business Survival (BS)	0.02	0.90	1.00	1.01	0.00	0.00

4.3 Path Analysis

Figure 2 shows the influence analysis based on the research concept and empirical data on small entrepreneurial skill variables (consisting of 3 sub-variables: digital skills, leadership skills, and management skills), innovation competencies, and business survival which found that the conceptual framework was consistent with the empirical data under the specified conditions. It was found that the relative chi-square value (χ^2/df) was equal to 0.84, the p-value was equal to 0.47, the value of Goodness of Fit Index (GFI) was equal to 1.00, the value of Adjusted Goodness of Fit Index (AGFI) was equal to 0.99, the value of Root Mean Square Error of Approximation (RMSEA) equal to 0.00, the value of Normal Fit Index (NFI) equal to 1.00, Incremental Fit Index (IFI) equal to 1.00 and the value of Comparative Fit Index (CFI) equal to 1.00.

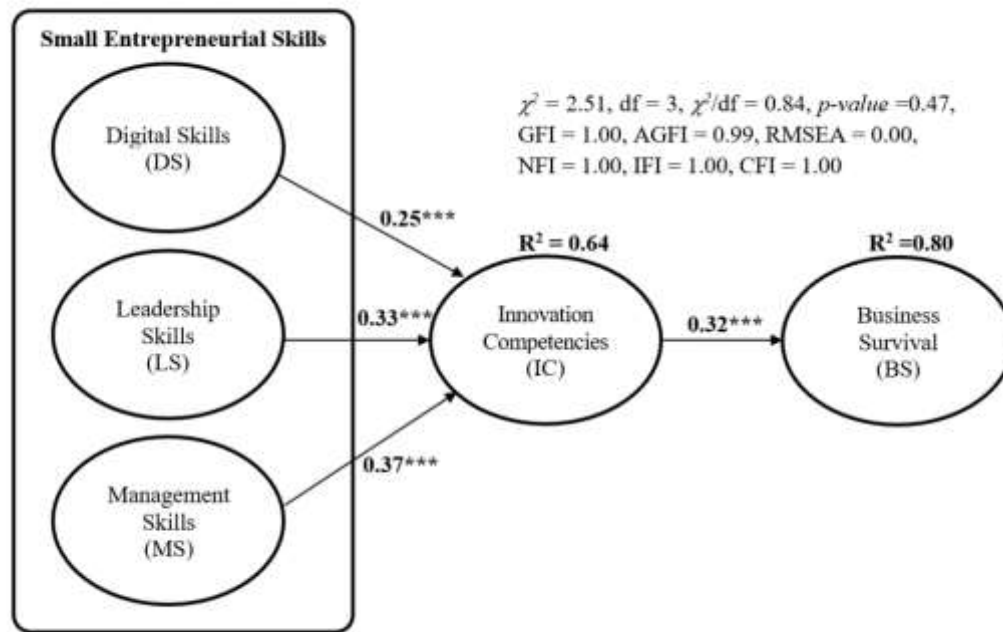


Figure 2 Path analysis of variables

The results of the analysis of the Path Coefficient found that Management Skills: MS had the highest direct positive relationship with Innovation Competencies (IC). The path coefficient is equal to 0.37, followed by Leadership Skills (LS) which has a direct positive relationship with Innovation Competencies (IC). The path coefficient is equal to 0.33. Then, Innovation Competencies (IC) have a positive, direct relationship with Business Survival (BS). The path coefficient is equal to 0.32 and Digital Skills (DS) have a direct positive relationship with Innovation Competencies (IC). The path coefficient is equal to 0.25 with a statistical significance of 0.01 for all paths. The results of the hypothesis testing are shown in Table 3.

Table 3 Hypothesis, Path Analysis, Path Coefficient, and Result

Hypothesis	Path analysis	Path Coefficient	t-value	Result
H1	DS → IC	0.25***	5.81	Accepted
H2	LS → IC	0.33***	6.77	Accepted
H3	MS → IC	0.37***	7.64	Accepted
H4	IC → BS	0.32***	6.37	Accepted

*** $p < 0.01$

4. Discussion

The research is on the influence between small entrepreneurial skills and innovation competencies that affect the survival of small businesses after the COVID-19 outbreak: A case study of small business entrepreneurs, Ubon Ratchathani Province. The results can be summarized and discussed as follows.

Digital skills have a direct influence on the innovation competencies of small business entrepreneurs. The path coefficient is 0.25, thus **supporting Hypothesis 1**, which explains that small business entrepreneurs with digital skills help them adapt to changing roles, embrace new

technology, and drive business innovation. This allows small businesses to adopt new strategies, tools, and processes. Entrepreneurs must have the right digital skills to lead to business success and growth (Rexhepi Mahmutaj & Jusufi, 2023). Digital skills are important for entrepreneurs as they involve the use of information and communication technology (ICT) and computer knowledge. This is considered a basic skill in using computers or internet technology. These skills affect digital skills, which are modern skills in the 21st century. They are important abilities for entrepreneurs to use to improve and cope with new skills. The digital aspect allows entrepreneurs to have innovation competencies that promote entrepreneurship, create jobs, and increase competitiveness (Soto-Acosta, 2020). Moreover, Hakim and colleagues (2022) stated that digital skills cover all skills related to digital technology. These range from basic skills or literacy to general skills for all employees, and specific skills for those using information technology. Digital skills include the ability to use logic, ideas, concepts, and creativity to take action, change, or create something more meaningful to add value to a job. Entrepreneurs should have skills that are able to translate knowledge into practice to achieve the desired results, which will be a driving force that promotes and supports the ability to develop innovations in the business workplace. Therefore, this study confirms the findings that small business entrepreneurs with digital skills will be able to apply modern technology to their business duties appropriately and efficiently, resulting in an organization that has Innovation competencies that will be used to develop the potential of large businesses and become a competitive advantage for the organization.

Leadership skills have a direct influence on the innovation competencies of small business entrepreneurs. The path coefficient is 0.33, thus **supporting Hypothesis 2**. It can be explained that leadership skills are skills that leaders in every organization use to find and implement solutions to problems that will affect the organization. Leadership skills have become a focus for entrepreneurs to employ so that their business can operate with best practices for management and monitor the operations within the organization that are most appropriate for the enterprise (Vlok, 2012). Huang and colleagues (2022) found that innovation success is achieved through entrepreneurial leadership in presenting ideas and dedicated operational efforts. The use of leadership skills is related to work behavior that leads to new innovations, and organizational innovation is also affected by the personal characteristics of leaders. It has also been found that leadership influences innovative behavior, such as rewarding employees. This is an important variable that leads to creativity, stimulating thinking and finding new solutions to problems, strengthening ideas and operational goals in work. It is an important process that results from leadership skills that lead to innovation. Leadership skills are important because they are integrated into creating comprehensive innovation for practice and aligning performance with established goals through creativity (Jiang & Chen, 2018). Additionally, Jaiswal and Dhar (2016) stated that leaders also play an important role in employee creativity, such that leader behavior determines individual creativity in the work environment. Employee creativity is therefore promoted through leadership skills. In the current environment, businesses face rapid changes in technology. Leadership therefore plays an important role in fostering employee creativity and leading to innovative competencies to enable businesses to operate efficiently and remain competitive in the market. Therefore, the findings from this study confirm that small business entrepreneurs with leadership skills will develop innovative competencies that will help solve various problems that arise in the organization in order for the organization to have the ability to compete and survive in the long term.

Management skills have a direct influence on the innovation ability of small business entrepreneurs. The path coefficient was 0.37, thus **supporting Hypothesis 3**, explaining that management skills affect knowledge acquisition and innovation. This leads to improved efficiency, effectiveness, and business performance (Kasongo et al., 2023). Competencies that arise from management skills are related to a company's competitiveness and performance. Management skills of entrepreneurs come from learning through training to help increase the efficiency of entrepreneurs' work, increase employee productivity, and affect overall business performance and increase the ability to make profits according to the desired goals (Khan & Jalees, 2017). Practices related to developing the potential of entrepreneurs and employees in the organization are important in improving the efficiency and growth of the organization. Organizational leaders with management skills such as strategic planning, technical knowledge and motivational skills can be used to motivate entrepreneurs and employees to perform tasks that work toward the organization's vision, improving employee performance, and achieving business goals. Entrepreneurs must be competent and provide advice and consultation to all employees (Khan et al., 2021). Studies also confirm that management skills are the most important to increase a company's performance. Businesses should focus on proper training to develop management skills and research has shown that management skills are most useful to help businesses achieve their goals, human resource management, and conflict management, improving communication and measuring decision-making results. Moreover, management skills are necessary to promote product development or innovation processes within a company (Asghar et al., 2023). Therefore, this study confirms the findings that small business entrepreneurs with managerial skills lead to innovative competencies that enhance long-term business performance and efficiency.

Innovation competencies have a direct influence on the business survival of small business entrepreneurs. It has a path coefficient of 0.32, thus **supporting Hypothesis 4**. It explains that innovation competencies are essential for contemporary organizations that want to survive in a world of intense change and competition especially technological changes and unexpected crises (Adam & Alarifi, 2021). According to a study by Huang and colleagues (2022), innovation is essential for the sustainable growth of organizations and is used to maintain competitiveness. Every business should have its innovation competencies properly promoted because innovation is essential for small businesses. This will affect the production of efficient products and services. Leadership plays an important role in employee creativity in facilitating their performance in achieving the established organizational goals (Yi et al., 2017). A study by Adam and Alarifi (2021) found that innovation competencies and practices affect the performance and survival of SMEs.

Moreover, the research found that innovation competencies are related to business survival, i.e. innovation is a key factor behind the survival and continued operation of a business which leads to expansion and growth of the organization and increases future success (Janjić and Rađenović, 2019) and businesses that can use innovation in their organizations will be able to overcome obstacles and challenges to their success and survival (Loo et al., 2023). Therefore, this study confirms the findings that innovation competencies implemented by small business entrepreneurs can lead to the survival of the enterprise, which is a positive outcome for the organization.

Small entrepreneurial skills are important and necessary to be used to improve the efficiency and results of every organization, the role of competent entrepreneurs and effective management. This includes the role that management skills and abilities in affecting the efficiency and effectiveness of a business (Murphy, 2020). Small entrepreneurial skills involve bringing together digital technology, leadership, and management skills to positively influence innovation and organizational performance (Cockburn et al., 2018). Additionally, organizations that focus on using their capabilities to develop innovative products can improve efficiency, reduce operating time and costs, increase the quality of products and services, and meet consumer demands better (Najafi-Tavani et al., 2018). Innovation competencies are therefore important for inventing and creating products and services, and delivering them quickly. Therefore, small entrepreneurial skills lead to the development of innovation within the organization. This is because entrepreneurs can predict consumer needs and can develop new ideas through innovation to lead to the survival of the organization.

5. Implication

5.1 Theoretical Implication

The findings from this study showed that there is a direct influence of small entrepreneurial skills, such as digital, leadership, and management skills, in driving innovation competencies on the survival of organizations. This influence is supported by the principles of dynamic capabilities theory, which highlights the importance of leveraging and developing internal resources and skills to acclimate to changing environments. Furthermore, the importance of promoting adaptability and innovation follows the survival theory of Darwin and Wallace, emphasizing the demand for businesses to continuously improve to succeed in competitive environments. The emphasis on developing a culture that welcomes experimentation and change also demonstrates the principles of Ambidextrous leadership theory, which promotes balancing exploitation and exploration to motivate sustainable and innovative growth. In conclusion, the result highlights the need to integrate theoretical frameworks like dynamic capabilities theory, survival theory, Ambidextrous leadership theory, and management theory into business performance to improve organizational success and survival in changing business environments.

5.2 Practical Implication

The results show that small entrepreneurial skills including digital skills, leadership skills, and management skills have a direct influence on innovation competencies and innovation competencies have a direct influence on the survival of the organization. Therefore, small business entrepreneurs should focus on small entrepreneurial skills, aiming to create a learning and training process that leads to the entrepreneur's ability to promote and create innovation which is based on technical skills, knowledge and understanding, being able to think analytically and have the creative and innovative ideas necessary to run a business, can develop and formulate digital strategies with determination and put forth the utmost effort to apply them to the business and aim to support change by using digital technology in business. Digital technology is used to communicate and work together, developing an efficient two-way communication model within the business. There's adaptation to technological change and promotion of experimentation and innovation development with a focus on strategic benefits, recognition of the impact of digital technology on business and development of digital emotional intelligence, promotion of work culture with digital technology, and acknowledging the shift from conventional culture to digital culture. This includes small business operators

who should have the ability to direct employees to work efficiently and to be able to develop new opportunities.

For the operation of the business, motivating and satisfying employees in the business to perform their jobs, communicating effectively with various people, being able to manage the expectations of themselves and others appropriately and integrating cultural differences in operations, devising appropriate operating models for the business, exploring new technology for use in business operations, taking initiative and making decisions using the concept of responsibility and business growth, analyzing data to support every decision, adjusting operations according to changing situations, being able to deal with strategic agreements with business partners or allies, having the ability to build relationships and live together in society, being able to create new innovations and creative ideas, managing diversity in business operations, being able to identify and find new business opportunities, using management skills in connection with the operational goals of the business, having the ability to be aware of potential risks, being able to provide the necessary resources to respond to emerging opportunities, and creating and developing networks to develop innovations both within and outside the business. These skills and abilities will enable business operators to survive in the future.

6. Suggestions for Future Research

Small entrepreneurial skills are digital skills, leadership skills, and management skills that have a direct influence on innovation competencies. (The influence values are 0.25, 0.33, and 0.37, respectively.) Meanwhile, innovation competencies have a direct influence on business survival. (The influence value is 0.32). Therefore, the small entrepreneurial skills and innovation competencies of small business entrepreneurs are important factors affecting the survival of the business. Therefore, there should be a study using qualitative research to extract knowledge about the process of developing small entrepreneurial skills and innovation competencies of business entrepreneurs from successful businesses and leaders in innovation development. There should also be a study to find and confirm other factors or variables and the relationship between factors that affect small entrepreneurial skills, innovation competencies, and the survival of the organization.

This research study was a collection of data from small business entrepreneurs in Ubon Ratchathani Province, Thailand, in which the sample was not separated according to the size of the business. This is because the population used in the study is only one area. Therefore, future research should study samples that are divided according to size and type of business and should use regional or national populations to conduct comparative analysis between each group of models. This will result in a more accurate application of the theoretical principles to the size and type of business.

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