

## A Guideline for Building Competency for Digital Entrepreneurs in Thailand

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### Abstract

*A previous study showed an opportunity for Thai entrepreneurs to expand their businesses into the global market. This research proposes a guideline to build competency for digital entrepreneurs in Thailand. This qualitative research collected data from an online focus group and consensus measurement by fuzzy set theory from the opinions of 21 experts. The findings revealed that to be competent, digital entrepreneurs in Thailand must have these abilities: 1) digital awareness and creativity: digital entrepreneurs in Thailand should be trained or studied on the ability to develop digital content, market, forecast, and create new ideas so they have adequate knowledge and skill in developing digital content and creating a marketing campaign. 2) Data and strategic analysis: government agencies responsible for digital business should host a training for digital enterprises on planning and analysis using digital content as a basis. The program example can be the ability to do a strategic plan and create the vision, the ability to analyze the business digitally, the ability to analyze the market correctly and interpret the market behavior, or the ability to solve the problems digitally. 3) digital communication skills: Thai digital entrepreneurs should create the ability to achieve proper network capacity so they can collaborate with other teams or other people and adjust their presentation, the ability to motivate other people, and 4) Digital problem-solving skills: Thai digital entrepreneurs should upskill their reading knowledge in order to use digital tools effectively. Additionally, the government agencies responsible for promoting digital businesses can use this model to develop an appropriate training program for digital business entrepreneurs.*

**Keywords:** *Digital Entrepreneurs, Competency Development, Thailand, Digital Economy.*

### Introduction

Global trade under digital technology is rapidly changing, propelling a knowledge-based economy and a creative economy, which is something that many countries should do and desire, especially for income and wealth distribution. Countries that embrace creative economies have high incomes, such as Japan, Italy, France, and other countries in the region (United Nations Conference on Trade and Development, 2022). On the other hand, the creative economy may seem unattainable as the economic goal of stabilizing the prices of many goods and services changes quickly. Along with the volatility of economic conditions, it can be considered that less than half of economic growth is driven by production factors and natural resources that depend on weather and natural hazards alone. Therefore, the introduction of digital technology to increase efficiency and add value to the production of products and services of entrepreneurs is inevitable

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(Kietsarapipop, 2015); Entrialgo (2002) suggested that behavior of those who will be an entrepreneur in running a business to be widely accepted by all parties must have three skills and abilities: innovation ability (innovativeness), Risk-taking and proactive work (pro-activeness), so being entrepreneurs in the digital economy era, Thai entrepreneurs in every economic field need to rely on innovation capability taking risks and working proactively at all times related to offering products and services with core value proposition to consumers or customers accurately and with the highest satisfaction under the world economy that changes every second. Therefore, it is seen as an opportunity for Thai entrepreneurs who have the potential to expand their businesses into the global market. Therefore, this article aims to present knowledge and give advice on entrepreneurship. The digital economy era, with changes from digital technology (digital disruption), will happen. In every fraction of a second in this world, the digital economy can be considered the driving force of the country's economy by bringing digital technology to increase efficiency and add value to the country's GDP, which has resulted in economic development and increased quality of life and employment. Adjustment changes the structure of economic activity from the production process to trade, service education, public health, and other social processes, including the interaction between a person who will change completely. Digital technology systems make information management possible. There is a standard for creating a huge database that can be linked together. exchange of information and services to facilitate trade, such as electronic invoices (e-invoices), electronic tax invoices (e-tax invoices), and certificate request systems (e-certificates) from government agencies in the form of files that can be used for various transactions. The growth of e-commerce can create opportunities and income for entrepreneurs internationally to jointly push Thailand towards becoming a fully digital economy, as seen in the Digital Development for Economic and Social Act of 2017 (Digital Development for Economic and Social Act, 2017). The digital economy can benefit Thai entrepreneurs as follows: 1) helps reduce the cost of operations, whether in terms of production or sales; 2) facilitates the convenience of being able to expand the production of new products and services to the market to meet consumer needs, such as by bringing new information from other sources around the world to help design products and services; 3) the growing expanse of e-commerce amid situations in which operating costs are reduced, such as selling products via the internet without the need for a shop and the convenience of buyers not having to travel to buy products. Farmers can open applications and know immediately from the GPS position that they are in that area or that year what kind of agricultural products are grown; 4) they can expand employment and create employment as a result of product birth marketing promotion and new product offerings such as social media marketing strategists, e-commerce consultants, or advertisers of products through social media, etc., (5) can facilitate cross-border investment internationally, such as hotel reservations and travel programs, stock investment in foreign countries, foreign currency trading, etc. (Kietsarapipop, 2015). Therefore, Thai digital entrepreneurs must be competitive to succeed in their businesses. Thus, this study explores the factors influencing Thai digital entrepreneurs' competency and the guidelines to develop this competency to be more competitive in the modern digital era.

## **Literature review**

### **Efforts to improve digital competencies in Thailand**

The national strategy "Thailand 4.0" was formally integrated into the 12th National Economic and Social Development Plan B.E. 2560–2564 (2017–2021) (Ministry of Information and Communication Technology, 2016) aimed to accelerate digitization, innovation, as well as creative thinking. In addition, Thailand had the 20-year national strategy in 2016 (Srichan and Kosolkittiamporn, 2023) that pushed for development of

science, research and development and innovation that will make digital competencies more important than ever.

Since the COVID-19 pandemic, there have been many research works focusing on digital competencies as a way to mitigate risks associating with lockdowns and lack of transportation. The Thai government founded the Office of SMEs Promotion (OSMEP) which the main task was to enhance competencies and digital skills among the entrepreneurs. (Ariya et al, 2021), as the lack of which skills can lead to business failure (Rachapaettayakom and Jutimongkonkul, 2022), especially during the pandemic era that many businesses suffered under lockdown (Haider et al., 2023).

#### Digital awareness and creativity

Information technology is essential to human beings, and the application of knowledge in technology to information can be of great use and facilitate daily use more, for example, to search storage for various transactions, as well as swift communication, which enables users to know the information or news about the work that can be done conveniently and quickly, which is a good result when information technology plays a role. Human behavior has changed from before, such as being able to order online. Order food through delivery without needing to leave the house because they use online media to communicate with each other. Information technology is valuable and suitable for modern times that are advancing rapidly. Therefore, there must be adjustments in all sectors in terms of the work of employees who need to change their position by working from home using technology to communicate work meetings through the conference application, a collaboration of everyone in the organization online. In business, it was found that companies have become more interested in online marketing and use technology as efficiently as possible for the industry to have income and continue to take care of employees, thus creating a new way of life.

However, the use of information technology, in addition to producing good results, can have negative consequences, such as difficulty accessing technology. Many other factors or reasons need to be more conducive to use, thus causing problems. Therefore, the public and private sectors must work together to develop new learning channels and create a temporary learning platform to support and solve such issues.

Skills for digital awareness and creativity consist of 1) the ability to create digital content, including editing, improving, and integrating information into marketing campaigns or marketing concepts (Law et al., 2018), 2) the ability to foresee and predict whether the market will accept or ignore the new idea, 3) the ability to learn at a fast speed and be able to develop new ways of thinking and practicing, and 4) the ability to design and visualize the digital data to communicate quantitative content visually. Data may be displayed in various formats, such as lines, graphs, and scatter plots, depending on the feature (Ataiea et al., 2020).

#### Data and strategic analysis

Strategic analysis is an essential initial process of strategic management to develop and apply strategies to suit the organization. Strategic analysis is the way to analyze the factors and conditions related to the organization and organizational system to have a more precise knowledge and understanding of these factors and the state of the organization. Strategic analysis tells us what the external environmental factors look like, change in any way, and create opportunities and limitations. How can it limit the organization? In addition, strategic analysis will help the organization know the resources and capabilities that exist in the organization, whether they are strengths or weaknesses. Therefore, data and strategic analysis are two of the critical competencies that entrepreneurs must possess. There are four components to data analysis: 1) the ability to do a strategic plan and create the vision; 2) the ability to analyze the business digitally; 3)

the ability to analyze the market correctly and interpret the market behavior; and 4) the ability to solve the problems digitally.

#### Digital communication skill

Digital communication is an organization’s effort to communicate online. Most businesses today use a variety of online channels, from distributing data and news through their websites, mobile applications, or social media platforms, to connect and communicate with their stakeholders, such as customers, employees, and investors. Sharing digitally through electronic devices is convenient, cost-saving, and less time-consuming. However, due to digital communication, which is mainly done through electronic devices. The resulting form of communication is no longer one-way but a communication that aims to interact directly with the recipient to respond more to consumers’ individuality. Therefore, digital communication must be conducted by experts who understand the benefits of different technologies and ways of disseminating messages to develop effective marketing and customer communications. There are four components of digital communication skills: 1) the ability to achieve proper network capacity; 2) the ability to collaborate with other teams or other people; 3) the ability to do the presentation verbally and by text; and 4) the ability to motivate other people.

#### Digital Problem-Solving Skill

Problem-solving with digital tools, citizens develop and use digital tools or technology to solve problems differently and use them creatively, including being able to update digital skills to be up-to-date. It includes identifying needs and resources and making intelligent decisions on the right digital tools for their purposes and needs. Able to solve problems that are interconnected with tools. Digital can use technology creatively, solve technical issues, and improve and develop competencies to keep pace with the world. Problem-solving skills include flexibility and adaptability, digital social and cultural awareness, initiative and self-directed learning, productivity, entrepreneurship, and leadership. There are four components of digital problem-solving skills: 1) the ability to read the content; 2) the ability to use digital tools; 3) problem-solving knowledge; and 4) the ability to adapt.

### Conceptual Framework

After reviewing the literature and research, the researcher has established a conceptual framework for this study. There are four observed variables and 16 latent variables, as shown in Figure 1.

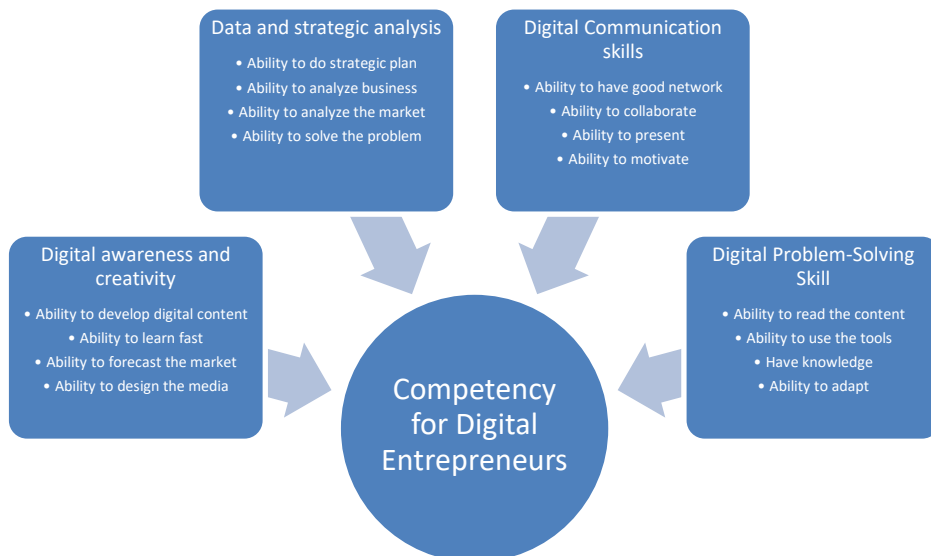


Figure 1 Conceptual framework (Note: Author’s Compilation)



Table 1 Language variables and fuzzy number values in weighting

Linguistic	Fuzzy numbers
Very Important - VI	(0.8 - 1.0)
Important - I	(0.7 - .09)
Above Moderate- AM	(0.6 – 0.7)
Moderate - M	(0.4- 0.7)
Below Moderate - BM	(0.2 – 0.4)
Low Important - LI	(0 – 0.2)

Note: From Saaty, T. L. (1977). A scaling method for priorities in hierarchical structures. *Journal of mathematical psychology*, 15(3), 234-281.

Figure 4 below is a fuzzy theory graph in selecting factors.

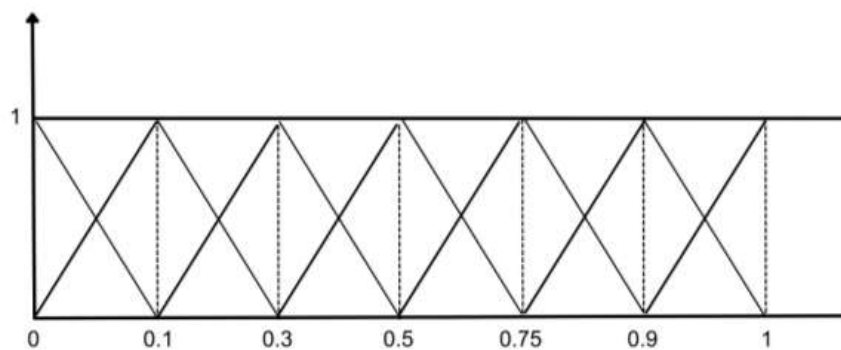
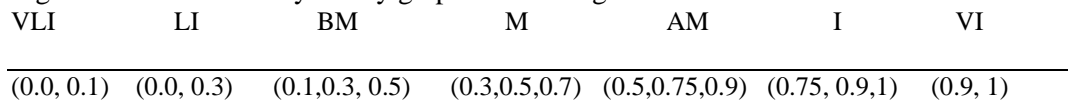


Figure 4 Fuzzy theory graph in selecting factors (From Saaty, T. L. (1977). A scaling method for priorities in hierarchical structures. *Journal of mathematical psychology*, 15(3), 234-281.).

### Results

The findings showed that competencies for digital entrepreneurs in Thailand consisted of four main components: digital awareness and creativity factors, data and strategic analysis factors, digital communication skills, and digital problem-solving skills. Each significant component had four sub-components, for a total of 16 components.

First, digital awareness and creativity factors were comprised of the ability to develop digital content, the ability to forecast the market and create new ideas, the ability to learn at a fast speed and adapt the content at an agile speed, and the ability to design the media and make the visualization. Secondly, the data and strategic analysis factor consisted of the ability to do a strategic plan and create the vision, analyze the business digitally, correctly interpret market behavior, and solve the problems digitally. Thirdly, digital communication skills include the ability to achieve proper network capacity, the ability to collaborate with other teams or other people, the ability to do the presentation verbally and by text, and the ability to motivate others. Lastly, digital problem-solving skills were made up of the ability to read the content, the ability to use digital tools, problem-solving knowledge, and the ability to adapt.

Table 2 Collection of comments from 5 experts on a seven scale (16 questions)

Component	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Interpretation
11	I	I	VI	VI	M	I-Important
12	I	I	I	VI	I	VI -Very Important
13	AM	M	AM	BM	M	AM- Above Moderate
14	M	AM	BM	M	M	M-Moderate
21	VI	VI	VI	VI	VI	VI-Very Important
22	VI	I	VI	VI	VI	VI-Very Important
23	I	VI	VI	I	I	VI-Very Important
24	VI	VI	VI	I	I	VI-Very Important
31	I	I	VI	I	I	I-Important
32	VI	VI	VI	VI	I	VI-Very Important
33	I	VI	I	I	I	I-Important
34	VI	I	VI	I	VI	VI-Very Important
41	I	I	I	I	I	I-Important
42	VI	I	VI	VI	I	VI-Very Important
43	I	I	I	I	I	I-Important
44	VI	VI	VI	I	VI	VI-Very Important

Note: From Authors' compilation.

According to Table 2, the findings on the competency of digital entrepreneurs in Thailand showed that digital awareness and creativity factors were important. The ability to develop digital content gains a "I" significant level. Meanwhile, forecasting the market and creating new ideas achieved a "VI" critical level. Next, the ability to learn quickly and adapt the content at an agile speed gained "AM" above a moderate level. Lastly, the ability to design the media and the visualization achieved an "M" intermediate level. The ability to forecast the market and create new ideas has the highest rank.

Then, data and strategic analysis factors were performed, showing the ability to do a strategic plan and create the vision of the level "VI" significant level. Later, the ability to analyze the business digitally achieved a "VI" significant level.) Next, the ability to analyze the market correctly and interpret the market behavior gained a "VI" considerable level. Lastly, the ability to solve problems digitally was very important.

Similarly, digital communication skills were essential to achieving proper network capacity at an "I" critical level. While collaborating with other teams or people was at a "VI" significant level, the ability to do the presentation verbally and by text attained an "I" critical status. The ability to motivate other people reached a "VI" significant level. After all, the ability to collaborate with other teams and encourage other people was the greatest and most important.

Last but not least, digital problem-solving skills included the ability to read the content at the "I" critical level and the ability to use digital tools at the "VI" (significant) level. Whereas the problem-solving knowledge was at the "I" necessary level, the ability to

adapt was at the "VI" essential level. The ability to use digital tools and adjust was the most important.

## **Discussion**

This study's findings revealed that Thai digital entrepreneurs must possess capacities for 1) digital awareness and creativity factors; 2) data and strategic analysis factors; 3) digital communication skills; and 4) digital problem-solving skills.

Digital awareness and creativity are competent characteristics that Thai digital entrepreneurs must have to achieve competency in digital business operations. This finding is in line with the study of Khoury et al. (2012) and Suwanroj et al. (2019) that entrepreneurial skills are an essential tool that helps economic pressure, which originated from entrepreneurs who have brought skills and created innovation through new things or brought old stuff into practice in a unique way to grow and develop even more (Khoury et al., 2012; Suwanroj et al., 2019), which are the skills that modern digital management should have to lead the organization to grow steadily, namely skills to know financial information and the possibility of basic business preparation. Skills account for years of experience in that profession and are ready to develop. Always bring new experiences that can be adjusted to the concept and application skills of new information technology. (Phungphol et al., 2018) found that communication interactions between societies were fundamental to start-up businesses due to having to communicate in many forms.

The entrepreneurial model must be reliable to be able to build confidence in the employer's consumption and create acceptance in industry (Saekuo et al., 2020). Talking about information technology, Saekuo et al. found that human resource development under Thailand's economic competitiveness requires leaders to have skills in the use of information technology and innovation to increase productivity and work efficiency and achieve good changes in both management and operations. Including skills in human resource development by planning strategies for human resource development, vision, mission, and goals, brainstorming with relevant personnel to design activities for human resource development, and training to increase knowledge to be current with events In addition, the research work of Kaewchuea et al. (2019) stated that entrepreneurs must have skills to find and satisfy customer needs. To create market opportunities quickly. The research of Boonnapha (2014) discusses that entrepreneurs should have skills, courage, and like to work in challenges, in line with the investigation of Rattanachokkul (2018) that entrepreneurs should have the characteristics of risk tolerance, good human relations, courage skills to decide, the ability to try and work, and use intelligence to solve obstacles until success can be achieved.

Data and strategic analysis are some of the competencies that Thai digital entrepreneurs must have to achieve competency in digital business operations. This finding is in line with Keawchuer and Klaysung's (2019) finding that the characteristics of entrepreneurs that affect the online business success of Thai entrepreneurs show that online business entrepreneurs must constantly develop to keep up with the market. In doing business, problems in the production process, organizing distribution, delivery, and even customers create many problems to solve. To succeed in this business, one must be interested in knowledge, capabilities, products, and brand potential to enter the market. Another characteristic is honesty with customers, creating trust and sustainability for the business.

Another important thing is the need for success in doing business. This can be done by setting up the goal, and then focusing on the goal and, importantly, integrity and virtue are critical for success. Do not blind the business to the fact that rightness or responsibility is good if business people see it, but the pursuit of profit alone will eventually fail. This may be because the characteristics of business operators are the



things that bring success or failure to the business through their behavior and actions. Examples of this kind of virtue and ethics are shown in Wang et al. (2015).

Digital communication skills are one of the competencies that Thai digital entrepreneurs must have to achieve competency in digital business operations. This observation is in line with the study of Shen et al. (2020), which promotes the use of technology and digital innovations in business management. Using innovative digital technology as a medium of contact to buy, sell, and trade goods and services, such as creating a Facebook page shop, creating a web service for the central marketplace for various community entrepreneurs to offer shop information, products, online trading, searching for new knowledge, etc., will make the business of operators more comfortable. As well as helping to reduce costs, entrepreneurs must be mindful of online trading to keep the information current, provide fast responses, and build confidence with customers by maintaining the standard quality of the product or service.

Digital problem-solving skill is one of the competent characteristics that Thai digital entrepreneurs must have to achieve competency in digital business operations, which is consistent with the research results of Wongrat (2010), who researched the development of operational competency of production managers in the electrical and electronics industries. The results of the study concluded that competency components in performing duties of production managers in major electrical and electronic factories include strategic planning and management competencies, people management and leadership competencies, visionary competence, self-control, and communication competencies, focus performance achievement in tasks and problem-solving, initiative and systematic competencies, technology management focus, and teamwork performance.

## **Conclusion**

The study's results on developing competencies for digital business entrepreneurs in Thailand revealed that the proposed model is consistent with the empirical data. The model consisted of four significant components, sixteen sub-components, and fifty-one variables. These major components and sub-components are digital learning and development (content development and marketing, anticipation and creativity, ability to learn at a fast speed and adapt the content at agile pace, digital media design and visualization), data analysis (ability to do strategic plan and create the vision, digital business analytics, ability to analyze the market correctly and interpret the market behavior, ability to solve the problems digitally), digital communication (networking, ability to collaborate with other teams or other people, presentation skills, persuasion, knowledge on the digital field (reading data, tool ability, problem -solving with digital tools, adaptability). Therefore, digital business entrepreneurs can apply these findings to further develop themselves and their employees to acquire the knowledge, skills, and competencies necessary to manage a digital business successfully. In addition, government agencies promoting digital business entrepreneurs can apply this model to create a curriculum that can generate income for business owners and the country's economy.

## **Recommendation**

From the findings of this research, the researcher would like to propose the following recommendation to develop the competency of digital entrepreneurs in Thailand. Digital awareness and creativity development: Digital entrepreneurs in Thailand should be trained or studied on the ability to develop digital content, market, forecast, and create new ideas so they have adequate knowledge and skill in developing digital contacts and creating marketing campaigns. Thai digital entrepreneurs should be trained to design the media and make the visualization, as these skills are essential for competitiveness in

digital business. Data and strategic analysis development: Government agencies responsible for digital business should host training for digital enterprises on planning and analysis using digital content. Based on the program, an example could be the ability to do a strategic plan and create the vision, the ability to analyze the business digitally, the ability to analyze the market correctly and interpret the market behavior, or the ability to solve problems digitally. Digital communication development: Thai digital entrepreneurs should create the ability to achieve proper network capacity so they can collaborate with other teams or other people and adjust their presentation ability to motivate other people's skills. Thai digital entrepreneurs should upskill their reading knowledge and ability to use digital tools effectively. Developing the potential of small and medium enterprises in online marketing, which has to increase the value of sales and the number of new customers, including channel development; and Online marketing model for small and medium enterprises by developing content including online marketing strategies, planning, online marketing management distribution through platforms and social media digital branding, Facebook marketing, and Facebook Live to be popular with sale content structure, knowing leading market places both Lazada and Shopee. Search marketing by focusing on entrepreneurs to understand the working mechanisms of search marketing through Google or YouTube Using Google Ads, entrepreneurs can understand the operating mechanisms of Google Ads, the LINE official account, and Instagram marketing in 3 steps. First, promoting goods and services is the initial step in using electronic commerce to promote products and services. At this stage, the website will act like a window to the web to provide one-way communication of business product and service information. To consumers, the website will look inactive. Integration with internal and external processes is often used to attract new customers. Secondly, providing information and services is a two-way communication between businesses, customers, and businesses. Lastly, the processing of transactions (transaction processing stage) focuses on commerce rather than conducting. The web integrates functionality and various safety features like data encryption, the installation of intrusion defenses (firewalls) for security in both transactions, databases, including support systems within the organization, and electronic commerce in stages. This component includes online sales and a secure online payment system. owners and the country's economy.

#### Authors' Contributions

The first author sought approval from the ethics committee, designed the study, carried out the survey, processed the result, made conclusions, and wrote the manuscript with guidance from the second author. Both authors read and approved the final manuscript.

#### Conflict of Interest

The authors declare no conflict of interest in this research work.

#### Ethics Statement

This study was approved by the Ethics Committee of Rangsit University with exemption.

#### Funding Statement

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