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P U B L I S H I N G

Research Article

Successful Entrepreneurs of Online Small and Medium Enterprises in Thailand

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Abstract

This study aimed to analyze a confirmatory factor analysis of successful entrepreneurs of online small and medium enterprises in Thailand. This research uses a mixed methodology approach that collects and analyzes both qualitative and quantitative data. Step 1 describes the qualitative research using the e-Fuzzy Delphi technique. Data was collected using an online questionnaire submitted to 21 experts. The questionnaire was divided into an open-ended questionnaire and a closed-ended questionnaire with a 7-level rating scale. Step 2 describes the quantitative research using simple sampling to obtain data from a total of 975 online business entrepreneurs. The results of the study found that the creative component had the highest component weight of 0.98. The second factor was the innovation and attitude components with an element weight of 0.97, the traits component with an element weight of 0.96, the intention component and self-efficacy component with an element weight of 0.93, and the subjective norm component with an element weight of 0.82, respectively.

Keywords: Successful Entrepreneurs, Intention, Creativity, Self-efficacy, Innovation

1. Introduction

The National Strategy includes a master plan for 20 years, Issue 08, Modern Entrepreneurs Small and Medium Enterprises. The purpose is to create and develop Thai entrepreneurs to be "New Generation Entrepreneurs" who keep pace and take advantage of technology and innovation to drive businesses, especially, small and medium enterprises as business operations, which play an important role in stimulating economic growth, and whose strength will help the country compete at a global level. The new generation of entrepreneurs will need to have the skills for the future and be ready in terms of attitude. Also, they will need the skills and know-how to cope with the intense competition, which will be intensified by rapid changes in technology. These entrepreneurs will have an increasing role in the economy (Master plan for the national strategy Issue 08 for entrepreneurs, small, and medium enterprises in the new era, 2020, p.8) Data in the year 2020 showed that Thailand had more than 3 million small and medium-sized enterprises (SMEs), accounting for 99.8% of the total number of enterprises in the country. It is important to reach consumers and service recipients in all areas. More

than 12 million people are currently employed in SMEs, accounting for 82.2% of the country's total employment, which creates an added economic value of 6,551,718-million baht, which accounts for 42.2% of GDP (Vajragupta, 2021).

Education programs were established in 1970 and developed rapidly. According to the Global Entrepreneurship Monitor (GEM), a seven-year survey of entrepreneurship studies from 232 countries, 54 countries with entrepreneurship programs had a significant impact on entrepreneurship activity and the potential for better entrepreneurship (Sun, Lo, Liang, & Wong, 2017). Young people are interested in becoming entrepreneurs from an early age and they see opportunities for success in small and medium enterprises. All entrepreneurs, therefore, need to adapt to the era of globalization to keep up with the times, and they need to develop a conceptual framework and career vision. This includes executives at all levels of enterprises, who need to be competent. They will need to develop their work experience, then think about and plan a business because entrepreneurship is very useful (Office of Small and Medium Enterprises Promotion, 2019). The increasing use of technology in the E-commerce sector is now creating new business-related businesses in the supply chain through online channels, and the technology can also reduce costs and increase efficiency in business management (Huang, J. et al., 2019). Product manufacturers require a variety of distribution channels for marketing because business models are changing. If the entrepreneurial sector wants to survive, it will inevitably have to adapt to the new situation.

2. Conceptual Framework

For this research, the researchers studied the composition of small and medium-sized online enterprises in Thailand. The study consists of 1) Traits 2) Attitude 3) Subjective Norms 4) Intention 5) Creativity 6) Self-Efficacy and 7) Innovation as shown in Figure 1.
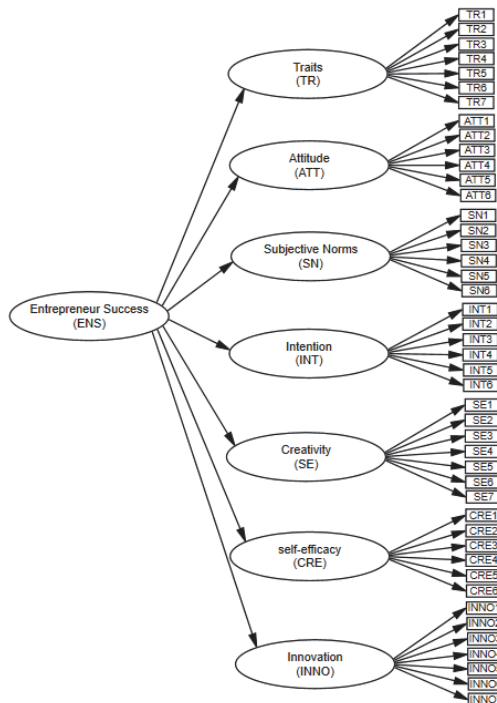

Figure 1: Study's Model

3. Literature Review

3.1 Traits (TR)

The word "personality" is derived from the Latin word "persona," which means a mask worn by ancient Greek characters during dramatic performances to show the audience the difference in the role the character is playing. People with different personalities experience different pressures. Emotionally unstable people are more likely to deal with negative emotional states. This condition is found in people with nervous personality types. Unlike people who are open to experience, neurotics cannot tolerate obstacles. Be ready to accept and adapt. Furthermore, conscientiousness is a person with self-discipline. Follow the rules and be afraid of doing the wrong thing. Therefore, it leads to stress and a changeable personality. (Pollak, Dobrowolska, Timofiejczuk, & Paliga, 2020)

3.2 Attitude (ATT)

According to Gibson (2018), attitude is a behavioral determinant because it combines perceptions of personality and motivation and is a positive or negative state of mind that affects how a person responds to people or things. Gibson proposed the concept of attitude as part of an individual's character. A person's attitude includes three aspects: affective, cognitive, and behavioral. Attitudes are the feelings and tendencies of the mind toward those around it. An evaluation of something, such as a person, object, or situation, indicates that it is a satisfactory or unsatisfactory thing, or something with which you agree or disagree.

3.3 Subjective norm (SN)

Norms refer to behaviors and roles in a society or group that define the rules that regulate behavior and coordinate interactions with others. Subjective norms are a person's perception of their expectations or social needs. A person's behavior stems from their beliefs about society's needs (normative beliefs). (Liobikiene et al., 2018).

3.4 Intention (INT)

Vesci and Botti (2019) say that intentions can be predicted by relational attitudes toward affinity groups. Cognitive behavioral control involves possessing one's identity, according to the theory of the person's intentions. Planned behavior (TPB) is accepted to predict behavior. Research on entrepreneurship should emphasize the importance of entrepreneurial intent. Entrepreneurship is long-term, conscious, and planned behavior and should provide a model for examining entrepreneurial intentions. These intentions require an understanding of the factors and influences that led to the desire to create the company in the first place. (Al-Shammari & Waleed, 2018)

3.5 Creativity (CRE)

Fishelson (2021) states that pointing out that individual creativity is the ability of the brain to try to hold on to ideas that differ from the original idea and can lead to new ideas. According to Potjanajaruwit & Girdwichai (2019), creativity is a person's ability to think and solve problems. Deep thinking goes beyond the usual levels of thought and is therefore an intrinsic quality that enables a person to think in many ways.

3.6 Self-Efficacy (SE)

Self-efficacy theory evolved from social learning theory (SCT), which has greatly influenced the
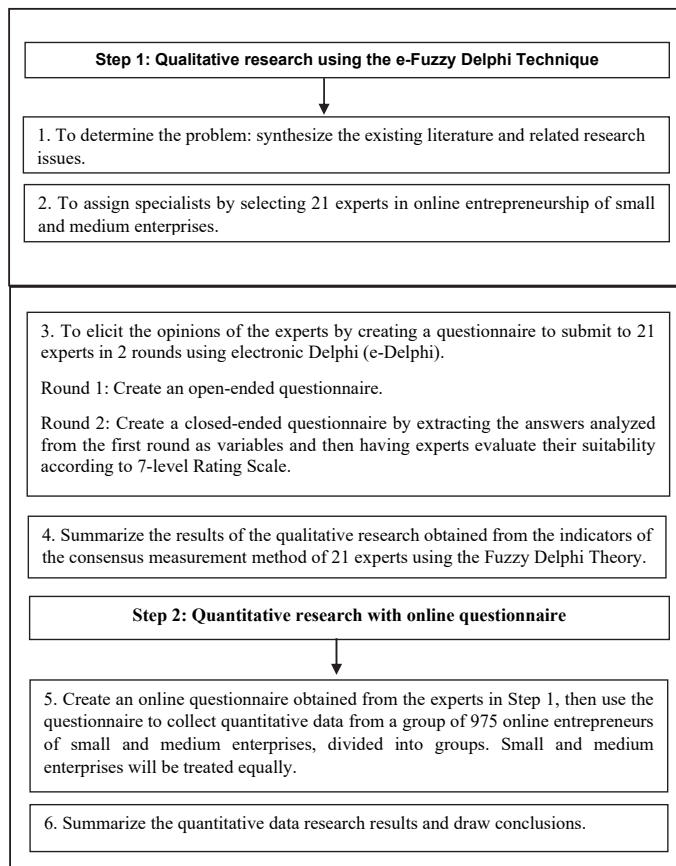
development of behavior change techniques. This theory was developed by a Canadian psychologist (Albert Bandura), who studied a person's beliefs about their ability to do something. Engchuan & Jadesadalug (2017) indicated that self-efficacy has a positive impact on performance.

3.7 Innovation (INNO)

Innovation has been studied for a long time. However, the definition of innovation varies according to each scientist's interpretation and conceptual framework. The root of the word "innovation" comes from the Latin "innovation," which means "to create something new" (Office of the National Economics and Social Development Council, 2017). Ahmetoglu, Akhtar, Tsivrikos & Chamorro (2018) to use the phrase " entrepreneurial focus." This is the method companies use to set organizational goals and involve the organization in going to market. It presents a conceptual framework and perspective for the engagement of entrepreneurs, which is reflected in their organizational processes.

4. Research Methodology

This research uses a mixed methodology approach that analyzes both qualitative and q data. The purpose of this research was to analyze a confirmatory factor analysis of successful Entrepreneurs of Online Small and Medium Enterprises in Thailand. The research steps in the analysis of the qualitative and quantitative data are shown below.

Step 1: Qualitative research using the e-Fuzzy Delphi Technique

1. To determine the problem: synthesize the existing literature and related research issues.

2. To assign specialists by selecting 21 experts in online entrepreneurship of small and medium enterprises.

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3. To elicit the opinions of the experts by creating a questionnaire to submit to 21 experts in 2 rounds using electronic Delphi (e-Delphi).

Round 1: Create an open-ended questionnaire.

Round 2: Create a closed-ended questionnaire by extracting the answers analyzed from the first round as variables and then having experts evaluate their suitability according to 7-level Rating Scale.

4. Summarize the results of the qualitative research obtained from the indicators of the consensus measurement method of 21 experts using the Fuzzy Delphi Theory.

Step 2: Quantitative research with online questionnaire

5. Create an online questionnaire obtained from the experts in Step 1, then use the questionnaire to collect quantitative data from a group of 975 online entrepreneurs of small and medium enterprises, divided into groups. Small and medium enterprises will be treated equally.

6. Summarize the quantitative data research results and draw conclusions.

4.1 Qualitative research using the e-Fuzzy Delphi Technique

4.1.1 Population and sample

The participants in this study were divided into 4 groups: Group 1, government and private agencies involved with entrepreneurship (5 people), Group 2, online business entrepreneurs (5 people), Group 3, university teachers in the development of entrepreneurship (5 people), and Group 4, entrepreneurs from online small and medium enterprises that have been successful (6 people). Thus, there were a total of 4 groups, consisting of 21 people.

4.1.2 Research Instruments

The tool used to collect data for this research was an online questionnaire, in which the researcher researched the relevant research tables and compiled the data to design a questionnaire to be submitted to 21 experts. create an open-ended questionnaire. Round 1 was designed to cover all the issues to be researched, and Round 2 was designed as a closed-ended questionnaire by extracting data from the answers in the first round as variables. Then the experts were asked to evaluate the suitability of a 7-level rating scale to apply the Fuzzy Delphi Technique.
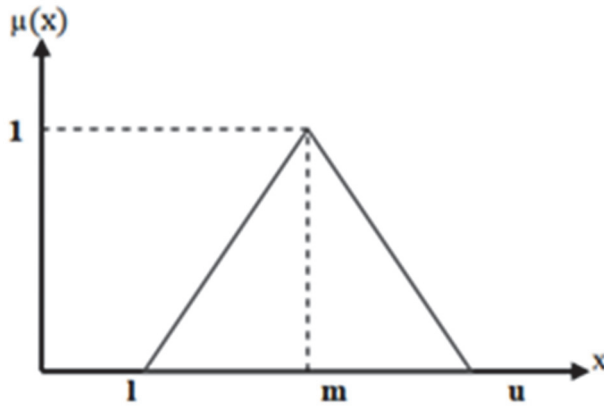
4.1.3 Data Collection

The researcher obtained the data from an online questionnaire sent via email. There were 2 rounds each over a period of 3 months, from January to April 2021.

4.1.4 Data analysis

To analyze the data the researcher applied the Fuzzy Delphi Theory. This is a new mathematical approach to sets and the uncertainty of their members. The ambiguity and uncertainty of the data from the responses to the opinions of the 21 experts were examined by extracting only the relevant factors and indicators with an acceptance criterion of 0.83. This helped to increase the efficiency in selecting factors and indicators that matched the decisions of the researcher as much as possible. It is a procedure that is suitable for multi-criteria decision-making and that can help resolve any conflict in the experts' scoring as it allows each expert to express their opinions fully. This helped to make a consensus of measurement results of the group of experts more accurate and complete (Thongchai Prawit, 2012). The following steps were taken:

By configuring the function member shift to a triangle.

Configure the equation of the function member shift as follows:

$$\mu_f(x) = \begin{cases} \dfrac{x-l}{m-l} & l < x < m \\[2mm] \dfrac{u-x}{u-m} & m < x < u \\[2mm] 0 & otherwise \end{cases}$$

F=(l,m,u) l = The smallest numerical value of a member of Fuzzy.

M = The largest numerical value of a member of Fuzzy.

u = Fuzzy's greatest membership fee

Table 1: Language Variables and Weighting of Fuzzy Numbers

Linguistic	Fuzzy numbers
Very Important - VI	(0.9, 1.0,1.0)
Important - I	(0.7,0.85, 1.0)
Above Moderate - AM	(0.5,0.7,0.9)
Moderate - M	(0.3,0.5,0.7)
Below Moderate - BM	(0.1,0.3, 0.5)
Low Importance - LI	(0, 0.15,0.3)
Very Low Importance - VLI	(0, 0, 0.1)

To convert values from opinions on the Likert scale to Fuzzy numbers, the fuzzy mean method was used to combine expert opinions as (l+m+u)/3. In this study, the researchers set thresholds = 0.83, In which the question expressed as accepted, a value exceeding 0.83 is used, and the question that has not been reached and the result is Rejected.

4.2 Quantitative research with an online questionnaire

4.2.1 Population and sample

The population of this research is online operators of SMEs in Thailand, with total assets of 3,176,055 (data as of November 12, 2021).

The sample of this research is SMEs online operators in Thailand. A total of 975 people were used for simple sampling.

4.2.2 Research Instruments

The tool used for collecting the data for this research was an online questionnaire concerning a confirmatory factor analysis of successful entrepreneurs of Online Small and medium enterprises in Thailand. The researchers researched various relevant textbooks and collected the opinions of 21 experts to help draw up a questionnaire.

4.2.3 Data Collection

The researcher obtained the data by using online questionnaires submitted to small and medium-sized online enterprises in Thailand. There was 1 screening question: Are you an online business entrepreneur of a small or medium-sized enterprise? If the respondents answered 'no' the data were not analyzed. The data were collected from June-August 2022, over a total of 3 months. There was a total of 1,050 respondents. After all the data was obtained, the researcher was able to draw up a complete questionnaire, which was sent to a total of 975 respondents. The data will be available to all for further statistical analysis.

4.2.4 Data analysis

The data was analyzed using a first- and a second order confirmatory factor analysis by means of a ready-made program. The parameters were estimated using maximum likelihood (ML). By considering the statistical measure of the level of conformity, namely the Chi-square statistic (X_2), the relative chi-square (CMIN/df), the goodness of fit index (GFI), the adjustment of the goodness of fit index (AGFI), the comparative fit index (CFI), the standardized root mean square residual (SRMR), and the root mean square error of approximation (RMSEA), it was determined whether the confirmation element for the development of an entrepreneurial structure equation model for the success of online small and medium enterprises (SMEs) in Thailand was viable. We also considered whether the empirical data was suitable for the model (Rangsoongnoen, 2011).

5. Results

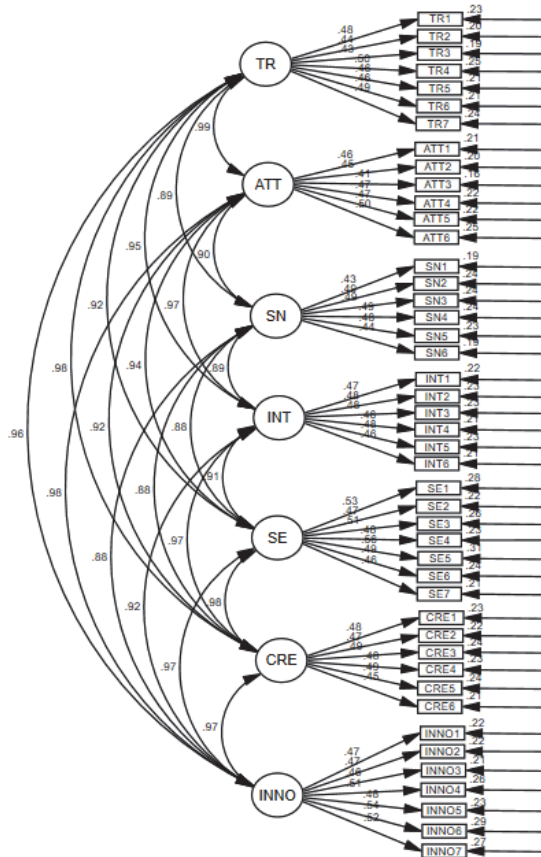### 5.1 First order confirmatory factor analysis

Figure 2: First order confirmatory factor analysis

Table 2: shows the harmonization of first order confirmatory factors

Statistical values used in the audit	Criteria for consideration	Statistics obtained	consideration
CMIN/DF	≤ 2.00	1.02	Qualified
GFI	≥ 0.90	0.96	Qualified
AGFI	≥ 0.90	0.95	Qualified
TLI	≥ 0.90	0.99	Qualified
CFI	≥ 0.90	0.99	Qualified
SRMR	≤ 0.08	0.02	Qualified
RMSEA	≤ 0.08	0.005	Qualified
HOELTER	> 200	1046	Qualified

In Table 2 it is shown that CMIN/df is 1.00, is less than 2.00, GFI is 0.96, AGFI is 0.96, CFI is 1.00 is 0.90 or more, and the RMSEA estimation error is equal to 0.002, SRMR is 0.005, and is less than 0.08.

It can be concluded that the confirmatory components of the success of SME online operators in Thailand fit the empirical data very well.

5.2 *Second order confirmatory factor analysis of Successful Entrepreneurs of Online Small and Medium Enterprises in Thailand based on the empirical data.*
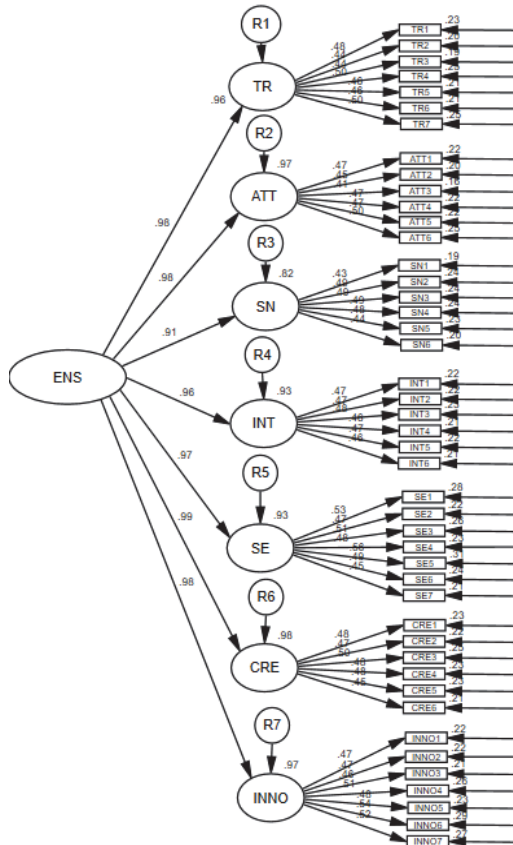

Figure 3: Second order confirmatory factor analysis

Table 3: The results of the confirmatory factor analysis of successful entrepreneurs of online small and medium enterprises in Thailand

| Variable | Statistical values | | | R² |
	b	SE	t	
Traits (TR)	1.00	-	-	0.96
TR1: You are always striving to learn good entrepreneurial skills.	1.00	-	-	0.23
TR2: You are fully responsible for your assigned duties.	0.94	0.09	10.77***	0.20
TR3: You have leadership qualities in working with employees in the organization.	0.92	0.09	10.65***	0.19
TR4: You are always willing to listen to the opinions of others.	1.04	0.09	11.57***	0.25
TR5: You can solve immediate problems that arise quickly.	0.97	0.09	11.04***	0.21
TR6: You are consistent, disciplined, and have patience in your work every time.	0.98	0.09	10.98***	0.21
TR7: You know how to create your own identity in creating a memorable business.	1.08	0.09	11.60***	0.25

Variable	Statistical values			R^2
	b	SE	t	
Attitude (ATT)	0.97	0.88	11.05***	0.97
ATT1: You are proud of being a successful entrepreneur.	1.00	-	-	0.22
ATT2: You feel satisfied being a good entrepreneur.	0.99	0.09	10.68***	0.20
ATT3: You like being an entrepreneur more than any other profession.	0.87	0.09	10.03***	0.16
ATT4: You are happy to communicate with many people.	1.02	0.09	11.02***	0.22
ATT5: You believe that being an entrepreneur has more advantages than being a full-time employee	1.05	0.10	10.99***	0.22
ATT6: You feel confident that being an entrepreneur always has advantages.	1.14	0.10	11.51***	0.25
Subjective norm (SN)	0.84	0.08	10.07***	0.82
SN1: Your family makes you feel like an entrepreneur.	1.00	-	-	0.19
SN2: The people around you make you feel like an entrepreneur.	1.21	0.12	10.25***	0.24
SN3: Colleagues make you feel like an entrepreneur.	1.19	0.12	10.21***	0.24
SN4: Close friends make you feel like an entrepreneur.	1.20	0.12	10.20***	0.24

Variable	Statistical values			R^2
	b	SE	t	
SN5: Famous people make you feel like an entrepreneur.	1.12	0.12	10.10***	0.23
SN6: Social and environmental conditions make you feel like an entrepreneur.	1.04	0.11	9.64***	0.20
Intention (INT)	1.01	0.09	11.04***	0.93
INT1: You intend to be a successful entrepreneur.	1.00	-	-	0.22
INT2: You intend to become an entrepreneur as your first career.	1.01	0.09	11.06***	0.22
INT3: You intend to continue to be an entrepreneur.	1.01	0.09	11.17***	0.23
INT4: You intend to be an entrepreneur in the future.	0.97	0.09	10.85***	0.21
INT5: You intend to help your acquaintances to become good entrepreneurs.	0.98	0.09	11.06***	0.22
INT6: You intend to study how to develop your business.	0.95	0.09	10.82***	0.21
Self-Efficacy (SE)	1.16	0.10	11.87***	0.93
SE1: You have a good knowledge of your business.	1.00	-	-	0.28
SE2: You have knowledge of how technology can be used in your business.	0.85	0.07	11.86***	0.22
SE3: You have the knowledge to plan a successful business.	0.90	0.07	12.65***	0.26
SE4: You have good business management skills.	0.86	0.07	11.98***	0.23
SE5: You have good time management skills.	1.04	0.08	13.37***	0.31
SE6: You attend regular training sessions to help you develop your business.	0.92	0.08	12.27***	0.24
SE7: You can build and develop a strong team.	0.81	0.07	11.56***	0.21
Creativity (CRE)	0.99	0.09	11.28***	0.98
CRE1: You are always creative in your work.	1.00	-	-	0.23
CRE2: You are happy when you use your creativity in your work.	1.02	0.09	11.31***	0.22
CRE3: You always enjoy working creatively.	1.06	0.09	11.69***	0.25
CRE4: You like to experiment with different ways of doing business.	1.02	0.09	11.42***	0.23

Variable	Statistical values			R^2
	b	SE	t	
CRE5: You are always flexible in your work.	1.04	0.09	11.49***	0.23
CRE6: You always create products that are different from others.	0.98	0.09	11.03***	0.21
Innovation (INNO)	0.95	0.09	11.07***	0.97
INNO1: You always use modern technology in your business.	1.00	-	-	0.22
INNO2: You use innovations in your business to keep it up-to-date.	1.08	0.10	11.07***	0.22
INNO3: You regularly use innovations to increase the value of your products and services.	1.01	0.10	10.96***	0.21
INNO4: You continually use innovations to meet market demands.	1.17	0.10	11.64***	0.26
INNO5: You use innovations to reduce costs and increase profits for your business.	1.11	0.10	11.27***	0.23
INNO6: You use innovations that reduce the work time of the team as much as possible.	1.28	0.11	12.04***	0.29
INNO7: You use innovations that can help analyze business data for the team as much as possible	1.20	0.10	11.73***	0.27

*** p-Value < 0.01

Table 4: Harmonization Test Index Values

The index indicates harmonization.	Criteria for consideration	Statistics obtained	Indications
1. Chi-square: χ^2	not statistically significant	950.928	Harmonious
2. P-Value (p)	$p \geq 0.05$	0.38	Harmonious
3. Relative Chi-square: χ^2/df	$\chi^2/df \leq 2.00$	1.01	Harmonious
4. Goodness of Fit Index: GFI	≥ 0.90	0.96	Harmonious
5. Root Mean Square Error of Approximation: RMSEA	≤ 0.08	0.004	Harmonious
6. Comparative Fit Index: CFI	≥ 0.90	0.99	Harmonious

6. Discussion

The model for this study was consistent with the empirical data. There were 7 factors of development that were taken into account. In order of importance, they were: 1) Creativity; 2) Innovation; 3) Attitude; 4) Traits 5) Intention 6) Self-Efficacy, and 7) Subjective norm.

The creativity component had the most weight in the success of online SMEs' entrepreneurs, because Creativity plays an important part in differentiating products and services. Thus, this factor enabled entrepreneurs to outperform other competitors. In line with the research by Sri Harini, Dwi Gemina and Erni Yuningsih (2020). Based on HR Competency and Market Potential in the Era of IR 4.0, it was found that creativity helps business management. To compete in both domestic and international markets, the influence of creativity shows that it gives entrepreneurs greater marketing opportunities than their competitors. So, promoting business creativity can greatly increase innovation in inputs, processes, and products.

The innovation component had less weight in the success of online entrepreneurs of small and medium-sized enterprises, because entrepreneurs need modern technology to do business. Innovation can be used to increase the value of products and services and meet market demands. Furthermore, innovation can reduce costs and increase profits for successful businesses according to research by Sri Harini, Dwi Gemina and Erni Yuningsih (2020), who found that increasing the limits of innovation encourages more sales and gives entrepreneurs the opportunity to develop and become successful entrepreneurs.

Attitude adds weight to the other factors in the success of online entrepreneurs of small and medium enterprises. This is because entrepreneurs who want to be successful tend to be the ones who tackle problems resolutely, cope with solving problems, and are proud, satisfied, and confident in their choice to be entrepreneurs (Agolla, Monametsi and Phera (2019)). Teaching students about entrepreneurship has a positive impact on their future careers, and it encourages them to want to be successful. Such a background leads to most entrepreneurs starting their careers with the possibility of a high success rate.

7. Suggestions

7.1 Suggestions for applying the research results

Successful entrepreneurs of online small and medium enterprises in Thailand need to have many skills equally, whether they are Creativity (CRE), Innovation (INNO), Attitude (ATT) or Traits (TR).

7.2 Suggestions for future research

This research obtained qualitative data to help develop a questionnaire. There were 4 groups of 21 experts in total, who were able to provide information related to online business entrepreneurs in small and medium enterprises. Following this study, future research should be able to expand the

investigation to other groups of specialists with different experiences, so that further useful data can be obtained.

Further research should also add factors other than those shown in this study in order to find out what other factors should be included in the development of an equation model for the success of online small and medium enterprises in Thailand.

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