

DOI: 10.5281/zenodo.8351061

BRAINSTORING, PERSPECTIVE-TAKING, METAPHORICAL AND ANALOGICAL THINKING, INCUBATION, IMAGERY, AND FLOW OF SMALL BUSINESS ENTREPRENEURS IN THAILAND POST-COVID-19

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Abstract

Creativity is an important skill for business entrepreneurs to use in running their businesses successfully after the outbreak of the coronavirus disease (COVID-19). Therefore, the objectives of this research are: 1) to study the level of creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs and 2) To compare the differences between creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified by general information of the respondents. The sample group used in this research was 251 small business entrepreneurs using purposive random sampling from business owners. The data collection tools were questionnaires. Statistics used for data analysis according to research objectives were frequency, percentage, mean, standard deviation, t-test, and One-Way ANOVA. If differences were found, the data were analyzed by POSTHOC, Scheffe's method. Most small business entrepreneurs are male, operate a service business, and are between 30 - 40 years old, have completed less than a bachelor's degree, have an average monthly income of the business (approximately) 20,001 - 30,000 baht and have been doing business for 5-10 years. Analysis of the mean values revealed that creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow found that the overall mean value was at a high level. The comparison of the differences found that 1) different ages had different levels of creativity in incubation and imagery; 2) different educational levels had different levels of creativity in brainstorming, metaphorical and analogical thinking, and flow 3) Different periods of business operation had significant different level of creativity in perspective-taking at the 0.05 level. In addition, it was found that gender, education level, average monthly income of businesses, and different types of businesses were found to have no difference in creativity.

Keywords: Brainstorming, Perspective-taking, Metaphorical and Analogical Thinking, Incubation, Imagery, Flow, Small Business Entrepreneurs, Post-COVID-19.

INTRODUCTION

The coronavirus disease (COVID-19) pandemic has caused chaos around the world to control the spread of the disease. So, cities were closed all over the world. This negatively affected economic growth (Elgin et al., 2021), physical health (Shamim et al., 2021), well-being (Ripp et al., 2020), and business management (Verbeke & Yuan, 2021). Small businesses have suffered more than large businesses from the coronavirus disease (COVID-19). Small businesses are key institutions that help boost a country's economy and with the outbreak of the coronavirus disease (COVID-19) affecting the economy around the world and facing the severity of the coronavirus disease (COVID-19) outbreak. Most businesses struggled to be able to survive for about 5 months in such a situation (Engidaw, 2022). The coronavirus disease, (COVID-19) pandemic has also resulted in significant changes in consumer behavior. Consumers are sensitive to price and consider value as the main reason for deciding to purchase





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products or services, including those products and services that must be worthwhile, available, and convenient. The desire to support local businesses is the key driver behind the main reasons for consumer purchasing decisions (Xu & Jia, 2022). These situations have caused cultural and lifestyle changes for both consumers and small, medium, and large enterprises. As businesses face unprecedented challenges, interest in how entrepreneurs can respond with creativity and innovation to survive is increasing (Ratten, 2020).

Entrepreneurs are repeatedly affected by outbreaks that come in waves, and the health of entrepreneurs is also threatened by the pandemic. These things resulted in a decrease in business income because the business had to stop operating, affecting the survival of the entrepreneurs. When compared to large businesses, small businesses have been hit hard by the coronavirus disease, (COVID-19) pandemic as small businesses such as retail stores, restaurants, entertainment businesses, and others. As a result, the behavior of small business entrepreneurs has changed. Some small businesses have responded to the crisis by using creativity to find ways to deal with the problem with flexibility, finding opportunities amidst the chaos, and surviving in uncertain times (Thukral, 2021).

The situation of the outbreak of the coronavirus disease (COVID-19) does not occur often and has a high degree of uncertainty, as the coronavirus disease (COVID-19) continues to be around and there is no cure, it causes significant behavioral changes, resulting in serious challenges to the survival of small businesses. Entrepreneurs, therefore, need to focus on how to respond to situations that arise with creativity and innovation (Ratten, 2020). In addition, entrepreneurs are viewed as creative people who can solve problems, people who will help society or generate benefits for society.

Small business owners are under pressure to overcome problems by creating solutions based on evaluating opportunities and using creativity. Small business entrepreneurs need to be creative to come up with new ways of operation (Thukral, 2021). According to Fillis and Rentschler (2010), creativity is the invention of an idea or product that is new and useful. Creativity is also seen as a key component in solving problems. Therefore, being a creative entrepreneur or being a creative person is considered more important than traditional management methods to find business management under uncertain and unpredictable environments.

From the literature review, it was found that most of the studies on creativity measurement used cognitive processes associated with the creativity (CPAC) scale which was created by Wallas (1926) and was developed by Miller (2014) consists of 6 aspects which are brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow. Therefore, this research aims to study the level of creativity of small business entrepreneurs in adapting and using them to solve business problems in a global situation where changes are occurring in many areas and pressure from the outbreak of the coronavirus disease (COVID-19) that has occurred in the world society.

This situation has important impacts, leading to both opportunities and obstacles to the development of entrepreneurial and business capabilities. Entrepreneurs must have the ability





DOI: 10.5281/zenodo.8351061

to find ways to increase their competitiveness. The results from this research reveal the level of creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow including knowing the different levels of creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs in Muak Lek Subdistrict, Muak Lek District, Saraburi Province classified by general information.

RESEARCH OBJECTIVES

- 1. To study the level of creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs in Thailand post-COVID-19
- 2. To compare the different levels of creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs in Thailand post-COVID-19 classified by general information of the respondents

RESEARCH METHOD

Population and sample

The population for this research included small business entrepreneurs in Muak Lek Subdistrict, Muak Lek District, Saraburi Province. There was a total of 670 people. After that, a formula was used to calculate the sample size. In the case where the population is known, Yamane (1970) at the confidence level of 95 percent and the error level of 5 percent, the sample size is equal to 251 people. Therefore, the researcher collected a total sample of 251 people using Convenience sampling.

Research Instrument

The tool used to collect data for this research is a questionnaire created by the researcher from a review of past literature. It was divided into 2 parts as follows: Part 1: General information on small business entrepreneurs in the Muak Lek Subdistrict, Muak Lek District, Saraburi Province. The nature of the questions is closed-ended and part 2 is about creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs. It was developed from the research of Miller (2014) as a questionnaire using a rating scale, the Likert scale, in which only one answer can be chosen. It is divided into 5 satisfaction levels as follows: 5 scores mean 'the highest', 4 scores mean 'high', 3 scores mean 'moderate', 2 scores mean 'low', and 1 means 'the least'. After collecting 251 sets of data, the researcher calculated the reliability value of the entire questionnaire, and it was found to be equal to 0.80. Cho and Kim (2015) stated that if a questionnaire has a reliability equal to or greater than 0.70, it is considered that the questionnaire can be used to calculate statistical values.





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Data Collection Method

This research is quantitative, collecting data using questionnaires for small business entrepreneurs to inquire about creative ideas in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow. The data collection process consists of (1) Secondary data from research academic documents, articles, theses, research reports, and information from the Internet and (2) Primary data gathered from questionnaires collecting data from 251 samples of entrepreneurs in Muak Lek Subdistrict, Muak Lek District, Saraburi Province.

Research Statistics

Data analysis in this study used a statistical computer program. The statistics used in data analysis include Frequency, Percentage, Mean, and Standard deviation: S.D. As for the interpretation of the mean, the evaluation criteria used the method of dividing the interpretation range according to the principle of Class Interval, dividing the highest score into 5 levels. From the average score received from the questionnaire, the lowest score is 1 point, and the highest score is 5 points. The mid-range is found by using the amplitude formula (Vanichbuncha, 2002) with the following average scores: An average score between 4.21 - 5.00 means 'the highest'. An average score between 3.41 - 4.20 means 'high'. An average score between 2.61 - 3.40 means 'moderate'. An average score between 1.81 - 2.60 means 'low'. And an average score between 1.00 - 1.80 means 'the least'. Analysis differences between variables were calculated using t-test and F-test statistics. When differences were found, they were calculated using Scheffe's statistics.

RESEARCH RESULTS

1. Data analysis using frequencies and percentages

General information for small business entrepreneurs in Muak Lek Subdistrict, Muak Lek District, Saraburi Province: Most of them are male, 153 people, accounting for 61.0%. Most entrepreneurs are between 30 - 40 years old, the majority, 85 people, accounting for 33.9%. Most entrepreneurs have a lower level of education; bachelor's degree, 128 people, accounting for 51.0 percent. Having an average monthly income of the business (approximately) 20,001 - 30,000 baht, 180 people, account for 71.7 percent, having a business operation period of 5 - 10 years, 94 people, and account for 37.5 percent and the type of business is service business, 159 people, account for 63.3 percent.

2. Data analysis using the Mean and Standard Deviation

The results of the analysis of the mean and standard deviation of creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow found that the overall average was at a high level (x = 4.01). When considering each variable separately, it was found that flow had the highest average which is at a high level (x = 4.08) and the variables, perspective-taking and brainstorming have the same lowest average which is at a high level (x = 3.98) as shown in Table 1.







Table 1: Means and Standard Deviations of the cognitive processes of creativity in the areas of brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow

Variable	Mean Std. Deviat		Interpretation	Level
Brainstroming	3.98	0.48	High	6
Perspective-taking	3.98	0.41	High	5
Metaphorical and analogical thinking	3.99	0.62	High	4
Incubation	4.01	0.47	High	2
Imagery	4.00	0.41	High	3
Flow	4.08	0.45	High	1
Total	4.01	0.32	High	

3. Analysis of differences using t-test statistics

The results of the analysis of the difference in the level of opinions about the creativity of brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow classified by sex and type of business using t-test statistics showed that different types of businesses had the same levels of opinions about creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow as shown in Table 2.

Table 2: Results of t-test analysis of differences by gender and type of business

Variable	Male	(153)	Female (98)		4	_
variable	$\bar{\mathbf{x}}$	S.D.	$\bar{\mathbf{x}}$	S.D.	t	p
Brainstroming	3.95	0.50	4.03	0.44	-1.40	0.16
Perspective-taking	3.99	0.37	3.98	0.48	0.19	0.85
Metaphorical and analogical thinking	3.98	0.73	4.01	0.42	-0.35	0.73
Incubation	4.05	0.44	3.96	0.52	1.49	0.14
Imagery	4.00	0.40	4.02	0.42	-0.49	0.63
Flow	4.04	0.46	4.14	0.44	-1.65	0.10
Variable	Retail/Who	olesale (92)	Serv	ice (159)	t	P
Brainstroming	3.99	0.54	3.98	0.45	0.24	0.81
Perspective-taking	3.99	0.44	3.98	0.40	0.15	0.88
Metaphorical and analogical thinking	4.08	0.84	3.94	0.44	1.78	0.08
Incubation	4.06	0.46	3.99	0.47	1.08	0.28
Imagery	4.04	0.38	3.99	0.43	0.89	0.37
Flow	4.13	0.51	4.05	0.42	1.28	0.20

4. Differences were analyzed using F-test statistics

4.1 Age

The results of the analysis of the mean differences in opinions regarding creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified by age by testing with One-way ANOVA showed that different ages and their creativity in metaphorical and analogical thinking, incubation, and imagery were significantly different at the 0.05 level. However, it was found





DOI: 10.5281/zenodo.8351061

that creativity in brainstorming, perspective-taking, and flow was no different as shown in Table 3.

Table 3: Analysis of differences between the means of opinions regarding creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified by age

Variable	F	Sig.
Brainstroming	1.80	0.15
Perspective-taking	0.60	0.62
Metaphorical and analogical thinking	2.83	0.04*
Incubation	4.45	0.01*
Imagery	3.75	0.01*
Flow	2.35	0.07

When the mean value of the different opinions on creativity in the areas of metaphorical and analogical thinking, incubation, and imagery were tested in pairs using Scheffe's method, the following differences were found.

- 1. Creativity in metaphorical and analogical thinking: It was found that small business entrepreneurs of different operation periods had different creativity in metaphorical and analogical thinking. However, when testing the pairwise means, it was found that there was no difference.
- 2. Creativity in incubation: It was found that small business entrepreneurs who were younger than 30 years old had different creativity in incubation from small business entrepreneurs who were over 50 years old. It was found that small business entrepreneurs who were younger than 30 years old had a higher level of creativity ($\overline{X} = 4.10$) than small business entrepreneurs who were over 50 years old who had a high level of creativity ($\overline{X} = 3.72$). It was found that small business entrepreneurs who were 30 40 years old had different creativity in incubation than small business entrepreneurs who were over 50 years old. It was found that small business entrepreneurs who were 30-40 years old had creativity in incubation at a high level ($\overline{X} = 4.06$) higher than those of small business entrepreneurs who were over 50 years old had creativity in incubation at a high level ($\overline{X} = 3.72$).
- 3. Creativity in Imagery: It was found that small business entrepreneurs who were 30 40 years old had different creativity in imagery than small business entrepreneurs who were over 50 years old. It was found that small business entrepreneurs who were 30 40 years old had creativity in imagery at a high level ($\overline{X} = 4.08$), higher than small business entrepreneurs aged over 50 years who had creativity in imagery at a high level ($\overline{X} = 3.79$).

4.2 Educational level

The results of the analysis of the mean differences in opinions regarding creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified by educational level, by testing with one-way ANOVA statistics, showed that entrepreneurs with different educational levels had





DOI: 10.5281/zenodo.8351061

different creativity in brainstorming, metaphorical and analogical thinking, and flow at a significant value of 0.05 level. However, it was found that there was no difference in creativity regarding perspective-taking, incubation, and imagery as shown in Table 4

Table 4: Analysis of differences between the means of opinions regarding creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified by educational level

Variable	F	Sig.
Brainstroming	4.71	0.01*
Perspective-taking	2.32	0.10
Metaphorical and analogical thinking	3.37	0.04*
Incubation	2.26	0.11
Imagery	0.89	0.41
Flow	7.61	0.00*

The average opinions regarding creativity in brainstorming, metaphorical and analogical thinking, and flow were tested in pairs using Scheffe's method, and the following differences were found.

- 1. Creativity in brainstorming: It was found that small business entrepreneurs with an education level lower than a bachelor's degree had different creativity in brainstorming from a small business entrepreneur who had a bachelor's degree. It was found that small business entrepreneurs with a bachelor's degree had creativity in brainstorming at a much higher level $(\overline{X} = 4.08)$ than small business entrepreneurs with an education level lower than a bachelor's degree which had creativity in brainstorming at a high level $(\overline{X} = 3.92)$.
- 2. Creativity in metaphorical and analogical thinking: It was found that small business entrepreneurs with an education level lower than a bachelor's degree had different creativity in metaphorical and analogical thinking from small business entrepreneurs who had a bachelor's degree. It was found that small business entrepreneurs with a bachelor's degree had creativity in metaphorical and analogical thinking at a very high level ($\overline{X} = 4.10$) which is higher than small business entrepreneurs with an education level lower than a bachelor's degree with a high level of creativity in metaphorical and analogical thinking ($\overline{X} = 3.89$).
- 3. Creativity in flow: It was found that small business entrepreneurs with an education level lower than a bachelor's degree had different creativity in flow from small business entrepreneurs who had a bachelor's degree. It was found that small business entrepreneurs with a bachelor's degree had creativity in flow at a much higher level ($\overline{X} = 4.19$) than small business entrepreneurs with an education level lower than a bachelor's degree with a high level of creativity in flow ($\overline{X} = 3.97$).

4.3 Average monthly income of the business

The results of the analysis of the mean differences in opinions regarding creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified according to the average monthly income





DOI: 10.5281/zenodo.8351061

of the business, by testing with one-way ANOVA statistics, showed that small business entrepreneurs with different average monthly income had the same creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow as shown in Table 5.

Table 5: Analysis of differences between the means of opinions regarding creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified according to the average monthly income of the business

Variable	F	Sig.
Brainstroming	1.20	0.31
Perspective-taking	0.08	0.97
Metaphorical and analogical thinking	0.10	0.96
Incubation	1.09	0.35
Imagery	1.51	0.21
Flow	1.82	0.15

4.4 Period of Business Operation

The results of the analysis of the mean differences in opinions regarding creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified by period of business operation, by testing with One-way ANOVA, showed that the different duration of business operations had creativity in perspective-taking that were significantly different at the 0.05 level. However, it was found that creativity in brainstorming, metaphorical and analogical thinking, incubation, imagery, and flow were not different as shown in Table 6.

Table 6: Analysis of differences between the means of opinions regarding creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified by business operation periods

Variable	F	Sig.
Brainstroming	2.02	0.11
Perspective-taking	4.23	0.01*
Metaphorical and analogical thinking	2.18	0.09
Incubation	0.48	0.70
Imagery	0.51	0.67
Flow	1.45	0.23

When taking the mean value of opinions regarding creativity in perspective-taking that are different to be tested in pairs using Scheffe's method, differences in creativity were found. It was found that small business entrepreneurs who have been in business for between 11 - 15 years had different creativity in perspective-taking from small business entrepreneurs who have been in business for more than 15 years. It was found that small business entrepreneurs who have been in business for more than 15 years had creativity in perspective-taking at the highest





DOI: 10.5281/zenodo.8351061

level ($\bar{x} = 4.25$), higher than small business entrepreneurs with a period of business between 11 - 15 years who had creativity in perspective-taking is at a high level ($\bar{x} = 3.89$).

RESEARCH FINDING AND DISCUSSION

The results of the analysis of the level of creativity in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow found that the mean value was at a high level. This is consistent with the research of Gustiawan et al. (2014) which found that the creativity level of the respondents was high, indicating that entrepreneurial creativity leads to the ability to develop entrepreneurial creativity. This is in line with the research of Nzewi and Nwaduhu (2015) stating that creativity has a high level of influence on entrepreneurial development. All entrepreneurs must develop a high level of creativity to search for problems and then convert them into opportunities and recognize the power of creativity to lead to innovational development. This is also consistent with previous studies on creativity by many scholars. People who had presented their views and findings, such as Vijayarani and Radjamogary (2013), had researched employee creativity. It was found that organizational factors and personal factors affected creativity. It was also found that survival in industry depends on the ability to use creativity. Uche and Timinepere (2012) found that employee creativity affects organizational citizenship behavior. In addition, it was found that the level of creativity of employees was at a high level. Wang and Tsai (2014) found that expertise, creative skills, and intrinsic motivation have a positive direct effect on creativity. Bosiok (2013) found that leadership style and creativity are related and affect creativity structure, and Ürü (2009) found that leadership style affects creativity. The results of the data analysis showed that higher creativity is generated by leadership and leaders with creative personalities lead employees to creative behaviors. Therefore, the high level of creativity of business entrepreneurs helps to discover problems or find solutions for solving them, have the ability to change operational processes according to the situation that arises, find a different perspective on solving problems by thinking outside the box, and by taking advantage of the experience and converting the obstacles into business opportunities. This enables business entrepreneurs to use initiative and creativity to enhance their organization's capabilities and enable them to survive in crisis situations.

The results of the analysis of differences in the creativity of brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified by gender, type of entrepreneurship, and the average monthly income of different businesses showed that small business entrepreneurs are creative in brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow with no difference. This is in line with the research of Kwaśniewska (2004), which found that different genders were not different in creativity, indicating that both males and females had their own unique processes of creativity and had certain qualities in common with all types of creativity. Bosiok (2013) found that different genders have similar patterns of creativity. The personality of a business entrepreneur is a combination of the behaviors and the characteristics of a leader who is creative, confident, open-minded, and independent in decision-making. Developing creativity and innovation helps business entrepreneurs achieve their goals and get





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work done faster. Business entrepreneurs need to recognize that leadership, and flexibility in decision-making are qualities of any creative entrepreneur who can run a business. In addition, Brück et al. (2021) noted that different incomes or salaries showed no differences in creative development. This indicates that creativity depends on individual talents, not income or rewards.

The results of the analysis of differences in the creativity of brainstorming, perspective-taking, metaphorical and analogical thinking, incubation, imagery, and flow of small business entrepreneurs classified by age and education level showed that 1) Small business entrepreneurs who were younger than 30 years old had more creativity in incubation than entrepreneurs who were older than 50 years old. It was found that small business entrepreneurs who were 30 - 40 years old had higher creativity in incubation than entrepreneurs who were over 50 years old. In addition, small business entrepreneurs aged 30-40 had higher creativity in imagery than entrepreneurs who were over 50 years old. 2) Small business entrepreneurs with a bachelor's degree had higher creativity in brainstorming than small business entrepreneurs with an education level lower than a bachelor's degree and small business entrepreneurs with a bachelor's degree had higher creativity in metaphorical and analogical thinking than small business entrepreneurs with an education level lower than a bachelor's degree. In addition, small business entrepreneurs with a bachelor's degree had higher creativity in flow than small business entrepreneurs with an education level lower than a bachelor's degree. 3) Small business entrepreneurs who have been in business for more than 15 years have higher creativity in perspective-taking than small business entrepreneurs who have been in business for 11-15 years. This is in line with the work of Sternberg and Lubart (1991), stating that the level of creativity of individuals varies and fluctuates throughout life. Some evidence has been found to suggest that creativity, which involves cognitive processes, knowledge, intellectual styles, personality, motivation, and the individual's environment, declines with age. Entrepreneurial creativity is an art. It can be found and inspired by things that exist. Inspiration can come from conversations with other creative people and through the use of ideas such as brainstorming, incubation, and metaphorical and analogical thinking. These involve rational and stepwise processes (Kelly & Amburgey, 1991). In addition, creativity is thinking outside the box. It is free and open thinking. This out-of-the-box thinking style helps business operators use their creativity to solve problems.

SUGGESTIONS

- 1. The development of the research should emphasize designing a research framework that consists of Independent Variables, Mediator Variables or Moderator Variables, and Dependent Variables. Since the study of entrepreneurial creativity can be caused by many factors and at the same time may affect many factors as well, therefore, future research should investigate the relationship or causal influence caused by creativity. This will make the research findings more valuable to business operators.
- 2. From Suggestion 1, future research should consider using other advanced statistical data analysis methods, such as Regression Analysis or Structural Equation Modeling (SEM).





DOI: 10.5281/zenodo.8351061

This will make the statistical values accurate and reliable.

- 3. This research collected data from a limited population and sample which included only small business entrepreneurs. Therefore, future research should expand the population and sample to be larger and more inclusive, such as being at the regional or national level. In addition, data should be collected from medium and large business operators. This will reveal the creativity of business entrepreneurs operating in different business sizes. The data analysis will provide useful information to apply to the business operations of the business world in the future.
- 4. The research in this study used a questionnaire created from past research and translated from English, which is an instrument designed and developed in the context of other countries which is not in the context of Thailand and not for Thai people although the said tools had accuracy and reliability according to statistical conditions. Therefore, future research should create measurement tools that are appropriate for the context of the sample by creating a unique measurement tool using qualitative research combined with quantitative research such as in-depth interviews or focus group discussions to create a measurement tool or questionnaire that will make the research more reliable.

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