

***Supporting of Entrepreneurship Education, Entrepreneurial Orientation, and Factors  
Related to the Intention of Being an Entrepreneur of Generation Z***

Sasithon Yuwakosol, Srinakharinwirot University, Thailand

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**Abstract**

This research aimed to study the entrepreneurial characteristics of Generation Z students, the relationship between the population characteristics, supporting of entrepreneurship education, entrepreneurial orientation and entrepreneurial intention. It also examined the relationship between psychological factors that affect entrepreneurial intention and the ways to promote new entrepreneurial skills in educational institutions. Data was collected by survey research of Generation Z students, focus group and in-depth interview. The results showed that Generation Z students had all 5 entrepreneurial characteristics, creative and innovativeness, Competitive aggressiveness, proactiveness, risk-taking, and autonomy. In addition, Individual entrepreneurial orientation were positively correlated with entrepreneurial intention. The population characteristics, especially number of activities to promote entrepreneurship of educational institutions, work experience during study and having their own business, are related to Individual entrepreneurial orientation and entrepreneurial intention. Self-efficacy, entrepreneurial attitude and social norms of influential individuals also related positively correlated with entrepreneurial intention. The guidelines for educational institutions to promote entrepreneurial skills for students include creating opportunities for students to gain experience in the industry, creating a space for students to have the opportunity to showcase their work and their creativity, providing appropriate courses and teaching methods to promote entrepreneurial characteristics for students and having a center or agency in the university that serves to support students.

Keywords: Entrepreneurship Education, Entrepreneurial Orientation, Entrepreneurial Characteristics, Entrepreneurial Intention

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## **Introduction**

The meaning of an entrepreneur is a person who is important in the capitalistic economic system as a person who finds new ideas and business opportunities and gathers capital to establish a business, to organize the business internally, and to manage the operation of the business in order to serve the public (Rumakhom, 1997). Entrepreneurs are considered growth agents of a country because they bring changes to economical, technological and organizational environments. Some of their major accomplishments include the creation of new job possibilities and the development of new goods, services, and industrial processes.

Thailand was ranked one best country to start a business (Best Countries to Start a Business) in 2020 out of 73 countries (surveyed by U.S. New & World Report). Moreover, the number of small and medium enterprises (SMEs) at the end of 2018 totaled 3,077,822 companies and was increasing every year until 2021 there were 3,171,429 companies. Supporting the growth of SMEs is another approach that meets the national strategy to reduce social inequality and create economic and social growth.

Today's world is being rapidly changed from new technologies and innovations. Many businesses have been disrupted by new technologies and new business models. Many businesses are shrinking the size of their organization, reducing employment and unnecessary costs. One thing that will be a solution to the problem is the development of human resources, especially adolescents. Encouraging new generations to become more interested in being an entrepreneur that help create jobs and promotes self-reliance.

Generation Z (born from 1997 to 2012) are entering the world of work and will be an important force in driving the economy and society of the country. They grew up with digital technology and in an era of global economic downturn. They therefore have different motivations from previous generations in terms of work. The study of Ernst & Young (2015), a major global accounting firm, found that the Generation Z is a group of people who are more able to support themselves as they grow and are more aware of their own abilities, more determine than previous generations, and have a creative and effective mindset with clear goals and realistics rather than the world of dreams, resulting in this group being more entrepreneurial than previous generations. The survey results of Ernst & Young clearly stated that this group wants to do their own business more than work within an existing organization.

The growth of new enterprises (start-ups) in the age of digital technology challenges the younger generation to be a competitive producer of goods and services in today's world. Promoting entrepreneurship can be done even before becoming an entrepreneur or while studying, in order to prepare to become an entrepreneur in the future. Many studies have shown the importance of entrepreneurship education in developing the desire to become an entrepreneur (Farashah, 2013; Kuehn, 2008).

Understanding the factors that lead a person to become an entrepreneur is important in developing new entrepreneurs, as entrepreneurship is a complex process involving both cognitive systems and behavior (Hisrich et al., 2013). A key characteristic that leads to entrepreneurship is entrepreneurial intention, which is an individual's awareness and confidence in their tendency to create a business and have a plan to do so in the future. This is the first step in starting a business because entrepreneurial intention is a significant variable that affects future behavior according to the theory of planned behavior (Ajzen, 1991).

This research aims to study the entrepreneurial characteristics of Generation Z who are currently in education, as well as the intention of being an entrepreneur and to find factors related to entrepreneurial intention. This work benefits educational institutions and various business incubators to increase the level of willingness to become an entrepreneur and create a new digital business of the Generation Z, as well as being a way to develop the potential of people to support the growth of the country by job creation and promote self-reliance.

### **Objectives of the study were to investigate**

- 1) The relationship between the population characteristics, supporting of entrepreneurship education, entrepreneurial orientation and entrepreneurial intention.
- 2) The relationship between psychological factors that affect entrepreneurial intention.
- 3) The ways to promote new entrepreneurial skills in educational institutions.

### **Entrepreneurial orientation**

Academics and researchers give importance to the study of entrepreneurial orientation (EO) because it is important for overall growth and innovation in business. Dess and Lumpkin (2005) pointed out that entrepreneurial orientation has a direct and sustained impact on organizational performance. Moreover, Rauch and colleagues (2009) said that entrepreneurial orientation is important for top managers in setting organizational goals, maintaining organizational vision, and creating strategies to create a competitive advantage over competitors.

Entrepreneurial orientation (EO) is a concept originated from Miller (1983) which consists of three dimensions, namely innovativeness, pro-activeness and risk-taking. Dess and Lumpkin (2005) had developed the concept and proposed five dimensions for entrepreneurial orientation that can be used in synergy to improve the operational capability of the business.

- 1) Creativity/Innovativeness: is the tendency to pursue creativity and experimentation.
- 2) Risk taking: refers to decisions and actions under uncertain circumstances.
- 3) Proactiveness: is the tendency to anticipate and act on future needs rather than reacting to events after they unfold.
- 4) Autonomy: refers to whether an individual or team of individuals within an organization has the freedom to develop an entrepreneurial idea and then see it through to completion.
- 5) Competitive aggressiveness: is the tendency to intensely and directly challenge competitors rather than trying to avoid them.

Khara Sawai, et al. (2012) studied that entrepreneurial orientation has nine components: self-reliance, achievement orientation, innovation, perseverance, creativity, risk-taking, self-confidence, problem-solving, and responsibility. These components have a relationship with the success of businesses in the lower northern region of Thailand.

From the characteristics of entrepreneurs that had been studied, this study will be used the 5 characteristics of Dess and Lumpkin (2005), because it is comprehensive and used as a framework for studying in many countries.

## Entrepreneurial intention

Entrepreneurship is an intentional and planned behavior (Krueger et al., 2000). The concept of entrepreneurial intention means the conscious state of mind that precedes action and directs attention toward entrepreneurial behaviors such as starting a new business and becoming an entrepreneur (Moriano, et al., 2012). It is the first step of starting a business because intention is an important variable that affects future behavior. (Ajzen, 1985). A number of studies have employed intention-based theories such as Theory of Planned Behavior (TPB) as a framework for study entrepreneurial intention (Moriano, et al., 2012). Several academics were interested in studying entrepreneurial intention among university students because they have a high potential to become successful entrepreneurs. During their studies, students must complete various projects, including planning their own life projects, which differ depending on their characteristics and social context" (Hong et al., 2012).

## Theory of planned behavior (TPB)

Theory of planned behavior (TPB) is a behavioral theory that investigates the reasons that lead to the production of human behavior (Ajzen, 1985).TPB proposed three core components, namely, attitude, subjective norms, and perceived behavioral control, together shape an individual's behavioral intentions and then lead to the production of human behavior. Attitudes towards user behavior are influenced by the user's feelings or attitudes associated with performing a particular behavior. Social norm refer to the people's perception of behavioral expectations by individuals and groups who serve as an important reference for a person, such as family, friends and teacher. Perceived behavioral control is an individual's perceived ease or difficulty of performing the particular behavior. The TPB model is applied from many studies in the field of entrepreneurship intention to help develop the field of entrepreneurship and support the entrepreneurship intention of young people at the university level (Yang, 2013; Al-Mamary, 2022).

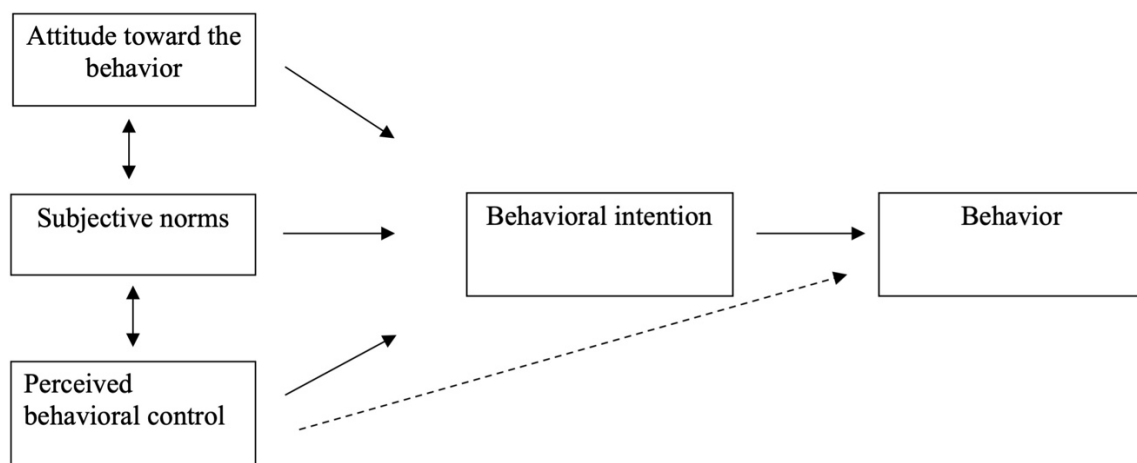


Figure 1: Theory of planned behavior model

In this research, the psychology factors that affect the entrepreneurial intention from the framework of theory of planned behavior were used. In this case, attitude towards entrepreneurship means feeling or personal desirability in becoming self-employed. Subjective norms means the perception of significant persons about being an entrepreneur. Entrepreneur's self-efficacy is an individual's perceived ease of being an entrepreneurship or start their own business.

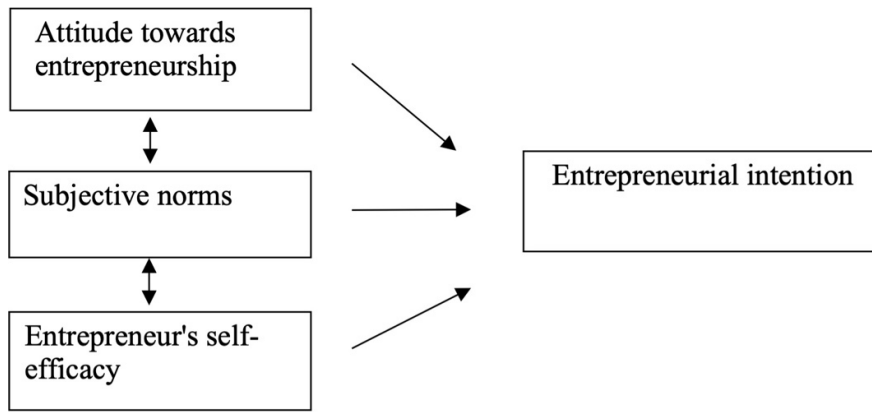


Figure 2: The TPB Model in the study

### The role of education institution on supporting of Entrepreneurship

The university environment has a significant impact on developing students' entrepreneurial intention. Education about entrepreneurs and support from the university is a way for students to gain skills and knowledge related to entrepreneurship and to have an impact on the career expansion of students who are interested in entrepreneurship (Henderson & Robertson, 2000). In addition, supporting and providing knowledge from educational institutions affect the entrepreneurial intention of the students (Kuehn, 2008; Farashah, 2013). Universities that educate students on entrepreneurship (e.g. training programs or financial support) will increase the chances that students will be involved in generate a new business (Turker & Selcuk, 2009; Maheshwari et al., 2022). A study conducted in the university level student group by Anong Rungsuk (2016) found that attitudes towards entrepreneurship, self-perceived ability to control behavior, and management of education towards entrepreneurship had an effect on the intention of business administration students to become entrepreneurs. Kusumawardhany and Dwiarta's study (2020) found a positive relationship between an individual's attitude towards entrepreneurship and institutional support on the intention of students to become entrepreneurs.

Encouragement of proper entrepreneurship education is important in developing an individual's entrepreneurial abilities. Robinson and Stubberud (2014) found that norwegian and American students who completed an entrepreneurship program in their study agreed that they were more creative and innovative and demonstrates a higher entrepreneurial intention than ever before.

### Research framework

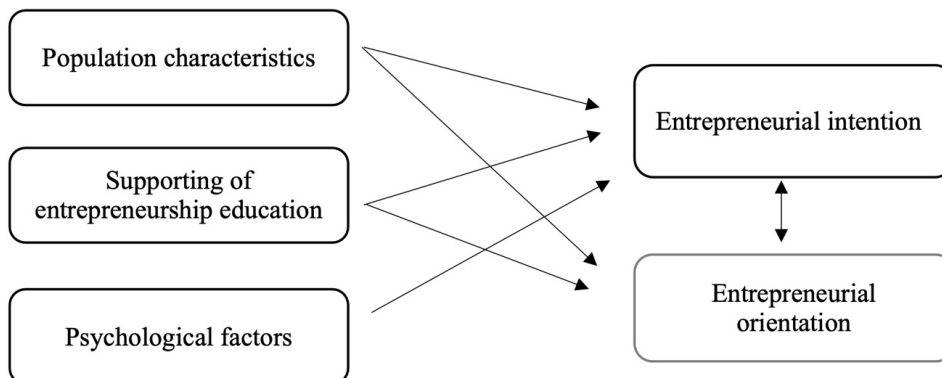


Figure 3: Research framework

## **Methodology**

Mixed Method was used in the study, including survey research, focus group, and in-depth interview. The sample group of the survey research consisted of 523 Generation Z university students in Bangkok and outskirts, 8 students in focus group, 8 students and 3 university professors in in-depth interview.

The questionnaire consisted of a series of question items to assess each variable; population characteristics, supporting of entrepreneurship education, psychological factors, entrepreneurial intention and entrepreneurial orientation. The details are as follows: close ended question on population characteristics and supporting of entrepreneurship education, and five-point Likert Scale questions on psychological factors, entrepreneurial intention and entrepreneurial orientation and the score ranged from strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). The data was subsequently analyzed using descriptive statistics and inferential statistics method.

## **Result**

The study results can be analyzed and presented according to the research method and the objectives of the study as follows:

### **Data from quantitative research**

Most of the 523 respondents were female (60.6%), aged between 17-24 years old, with an average age of 20.30 years old of respondents. Most of them were third-year students (47.0 %) and from social science students (44.2%). Nearly half of all students (48.9%) don't have their own business but are interested in having, 36.7% having a business at home, 14.1% having their own business, only 10.9% didn't have their own business and don't be interested in having a business. Forty-three percent of them had work experience in an agency/job related to business, 38.0% without experience, while 14.3% had work experience that was not related to the business, and 38.0 % never do an internship.

#### **1) An analysis of the relationship between population characteristics and entrepreneurial orientation**

The result showed that students with business-related work experiences have higher entrepreneurial orientation than those without work experience in Creativity/Innovativeness, Risk taking, Proactiveness, and Competitive aggressiveness. Students without their own businesses and not interested in having a business had less entrepreneurial orientation than other groups. Students from different fields of study (science, social science, humanity), however, didn't differ in their entrepreneurial orientation.

#### **2) An analysis of the relationship between population characteristics and entrepreneurial intention**

Students from different fields of study didn't differ in their entrepreneurial intention. Students with business-related work experiences have higher entrepreneurial intention than those without work experience. Students without their own businesses and not interested in having a business had less entrepreneurial intention than other groups.

### 3) Support from educational institutions to promote entrepreneurship for student

When asked about support from the university in promoting entrepreneurship, the majority of the samples reported that the university provides a wide range of entrepreneurial-related subjects to choose from (51.1%), the university adds entrepreneurial knowledge and skills into subjects that are not directly related to business (47.8%), the university encourages students to do internships in companies (47.8%), and the university has activities to build entrepreneurship, such as student fairs, business plan contest, model company, club, etc. (37.7%). On the other hand, only 9.9% addressed the university was not support in any way.

Supported activities of educational institutions	Frequency	Percentage
The university provides a wide range of entrepreneurial-related subjects to choose from.	267	51.1
The university adds entrepreneurial knowledge and skills into subjects that are not directly related to business.	250	47.8
The university has seminar activities or study visits that promote entrepreneurship.	157	30.0
The university has activities to build entrepreneurship, such as student fairs, business plan contest, model company, club, etc.	197	37.7
The university has centers or incubator that give advice on entrepreneurship to students	79	15.1
The university encourages students to do internships in companies	250	47.8
The university has activities or projects to help promote products or services of students who have their own businesses.	86	16.4
The university is not support in any way.	52	9.9

Table 1: Number and percentage of supported activities of educational institutions

### 4) The relationship between the number of supported activities of educational institutions and the entrepreneurial orientation of the respondents

In terms of the relationship between the number of supported activities of educational institutions and the entrepreneurial orientation of the respondents, the positive relationship was found in proactiveness ( $r^2 = .129$ ), autonomy ( $r^2 = .125$ ), and competitive aggressiveness ( $r^2 = .089$ ). The more activities the educational institution provided for students, the more characteristics it would have.

<b>The number of supported activities of educational institutions and the entrepreneurial orientation</b>	<b>Correlation Coefficient (r)</b>	<b>Sig.</b>
1. Creativity/Innovativeness	.080	.069
2. Risk taking	.073	.094
3. Proactiveness	.129	.003*
4. Autonomy	.125	.004*
5. Competitive aggressiveness	.089	.043*

\*P-value  $\leq 0.05$

Table 2: The relationship between the number of supported activities of educational institutions and the entrepreneurial orientation of the respondents

### 5) The relationship between the number of supported activities of educational institutions and entrepreneurial intention of Gen Z Student

From the analysis of the relationship, a small positive relationship was found between the number of supported activities of educational institutions and entrepreneurial intention of Gen Z Student ( $r^2 = .092$ ).

	<b>Correlation Coefficient (r)</b>	<b>Sig.</b>
<b>The number of supported activities of educational institutions and entrepreneurial intention</b>	<b>.092</b>	<b>.035*</b>

\*P-value  $\leq 0.05$

Table 3: The relationship between the number of supported activities of educational institutions and entrepreneurial intention of Gen Z Student

### 6) The relationship between psychological factors and entrepreneurial intention of Gen Z Student

The study of variables according to Theory of Planned Behavior (TPB) framework, namely, entrepreneurial attitude, entrepreneur's self-efficacy, and subjective norm of influential individuals, had positive relationship with entrepreneurial intention. The variable with the highest correlation coefficient was Entrepreneur's self-efficacy ( $r^2 = .682$ )

<b>Psychological factors and entrepreneurial intention</b>	<b>Correlation Coefficient (r)</b>	<b>Sig.</b>
1. Entrepreneurial attitude	.650	.000*
2. Entrepreneur's self-efficacy	.682	.000*
3. Subjective norm of influential individuals	.503	.000*

\*P-value  $\leq 0.05$

Table 4: The relationship between psychological factors and entrepreneurial intention of Gen Z Student



## 7) Relationship between Entrepreneurial orientation and Entrepreneurial intention of Gen Z student

All dimensions of Entrepreneurial orientation had positive relationship with Entrepreneurial intention of Gen Z student. The correlation coefficient ( $r^2$ ) was between .543 to .393.

Entrepreneurial orientation and Entrepreneurial intention	Correlation Coefficient (r)	Sig.
1. Creativity/Innovativeness	.543	.000*
2. Risk taking	.481	.000*
3. Proactiveness	.479	.000*
4. Autonomy	.393	.000*
5. Competitive aggressiveness	.490	.000*

\*P-value  $\leq 0.05$

Table 5: Relationship between Entrepreneurial orientation and Entrepreneurial intention of Gen Z student

### Data from qualitative research

According to the focus group and in-depth interviews, the instructors indicated Generation Z has a higher entrepreneurial nature than other generations that have been taught. The major factors would come from the changing in social environment and communication technology that facilitate doing business today easier than before. In addition, students do not want to work in organizations because they lack flexibility and independent, therefore they are turning to find freelance jobs or have their own business. Moreover, new technology encourage students be able to work in parallel while studying.

The instructors also pointed out the important characteristics for successful entrepreneurship in today's world are being courageous, taking risks, and the ability to quickly recover from failures in a constantly changing world.

In terms of educational institutions, some of them had a goal of creating a student's identity as a business literate person, including organizing internships for students to create a great experience that is different from studying in the classroom and will make the learners know their own interest faster.

The student samples viewed that Gen Z students are born with technological talent and have the skills to be able to work in a variety of tasks at the same time. Self-employment or have their own business is one of the ways to earn money in today's world. Gen Z want success in an entrepreneurial career higher than being a full-time employee. Then university's support for entrepreneurship both inside and outside of the classroom will give them the skills and inspiration to start their own businesses.

Regarding the influence of psychological factors, students saw that people around them, such as friends, peers, or mentors, could be sources of inspiration or examples of how being an entrepreneur is not too difficult for themselves. In addition, in the digital world social media influencers also play an important role for young people as role models for the success of

having their own business. Besides, student that had a positive attitude towards entrepreneurship would have motivation to be an entrepreneur or invest in their own ventures both now and in the future.

### **The guidelines for educational institutions to promote entrepreneurial skills**

For educational institutions to promote entrepreneurial skills among Gen Z student require the following strategies:

- 1) Creating opportunities for students to have experience with the industry, for example, create partnerships with companies in co-teaching, send students to train in company. Creating a space for students to have the opportunity to showcase their creative work or innovation.
- 2) Creating suitable courses and teaching methods to promote entrepreneurial qualities among students.
- 3) Establishing an entrepreneurial incubation center or unit in the university that serves to support students.

### **Conclusion**

Generation Z is a group of people who grown up to be more self-reliant, focus on goals, want to be independent, be realistic, etc. According to the Ernst & Young (2015) survey, it is clear that Gen Z people prefer to run their own business rather than work within a traditional organization.

Entrepreneurial orientation is the specific characteristics of an entrepreneur that will help them succeed in business. Entrepreneurship orientation is considered as a skill that can be developed through education and training in entrepreneurship and affects one's motivation to become an entrepreneur (Ibrahim and Lucky, 2014; Bolton and Lane, 2012). The results of this study found that the student in Generation Z had good levels of entrepreneurship orientation in each of the following areas: proactiveness, creativity and innovativeness, competitive aggressiveness, except for risk taking and autonomy in managing work. In addition, entrepreneurial orientation was also quite positive related to entrepreneurial intentions, similar with the result of many previous researches (Keat, et al., 2011; Wei-Loon, 2016). Then the entrepreneurship training should focus on enhancing students entrepreneurial orientation ability and increasing their entrepreneurial intention.

In addition, having work experience, particularly in a business-related organization or job, has a higher level of entrepreneurship orientation than those without work experience. It can be said that providing opportunities and encouraging students to try working in various businesses is a way to develop the characteristics of entrepreneurship from a young age.

In part of the psychological and social factors that are related to the intention to be an entrepreneur, the study found that the factors according to the framework of the Theory of Planned Behavior (TPB) were all related to the intention to be an entrepreneur of Generation Z students, including the support received from the educational institutions in various forms. Then providing knowledge related to entrepreneurship, creating opportunities and encouraging students to experiment to work in various enterprises, therefore, help to developed the character, skill, and positive attitude of being an entrepreneur at a young age. Besides, creating a good role model for students by seniors or teachers will help build students' self-confidence in being entrepreneurs. Consistent with the findings of

Kusumawardhany and Dwiarta (2020), who found a positive relationship between an individual's attitudes and the intention to become an entrepreneur, as well as support from educational institutions, on students' entrepreneurial intentions. Fayolle and Liñán (2014) similarly found that knowledge about entrepreneurship was positively related to entrepreneurial intentions, and that the support of the environment, such as through the development of students' attitudes and the increase in their entrepreneurial intentions, was also an important factor.

The results of the study can be applied for curriculum administrators to encouraged an entrepreneurial mindset that not only study in an executive or management-related field but integrated in various subjects that can build important soft skills. The business owner should understand the characteristics of Generation Z to be able to draw on the potential and manage the team together with the new generation to achieve the goals of the business. Finally, at the level of national policy, national agencies must jointly set up a framework for working together to create continuity in developing new entrepreneurs because entrepreneurs are referred to as 'economic growth engines' in the business world.

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**Contact email:** [sasithony@g.swu.ac.th](mailto:sasithony@g.swu.ac.th)