Factors affecting students' entry into entrepreneurship in Higher education institutions under the network of the upper central region of the Office of the Commission on Higher Education in Thailand

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Abstract

This research aims to analyze the factors affecting the entry into entrepreneurship of students in higher education institutions under the network of the upper central region of Thailand. The primary data was collected from an online questionnaire sent to 400 samples, obtained by random sampling method selected from students in public and private institutions. The structural equation model was applied for analysis. The results showed that economic factors were risk tolerance, returns in monetary terms, and the cost of starting a new business. The motivation factors were being the boss, having the highest success, and social acceptance. The commitment factors include acquiring the necessary knowledge and skills, perseverance, and belief in success to influence entry into successful entrepreneurship of students in Thai higher education institutions under the upper central region network.

Keywords: Factor affecting, Entry into entrepreneurship, Higher education, Thailand

Introduction

Entrepreneurship for students in higher education institutions arises from the teaching and learning process in higher education institutions that nurture students to become successful entrepreneurs in the future when graduating. Go out to be an entrepreneur who owns the business as his boss. Entrepreneurship is the ability, willingness, inspiration and motivation to start and manage a new company by raising funds and finding co-founders. Ready to accept the risk, and there is a goal of business management for profit (Navavongsathian & Rungruang (2020). It also means finding and using opportunities to transform innovation and ideas. Creativity or new technologies to be used to support the creation of new businesses by using innovation and creativity or new technologies to extend

for commercial use as well (Scott & Venkatraman, 2000) where entrepreneurship that occurs in higher education institutions is the result of learning, which is the result that arises to learners through the learning process derived from education, training, or experience that arises from practice. Alternatively, he is learning to be a real entrepreneur in an actual workplace during his studies. In this research, we want to study whether, for Thai higher education institutions, the key factors affecting students' entry into entrepreneurship in higher education institutions affiliated with the upper central region network of the Office of the Higher Education Commission of Thailand. It will study only students in higher education institutions under the upper central region network of the Office of the Higher Education Commission in Thailand, despite establishing an incubator center. Under construction or no business incubation centers in higher education institutions, this is to obtain various samples and the ability to represent populations with different context characteristics.

Research objectives

This study aims to study with the following objectives.

1. To study and analyze factors affecting motivation for entrepreneurial success of students in higher education institutions affiliated with the upper central region network in Thailand.

2. To create a structural equation model and forecasting factors affecting motivation for entrepreneurship success of students in higher education institutions affiliated with the network of the upper central region in Thailand.

Literature review

Economics factors

An essential factor in entrepreneurship for students comes from their economic factors. Economic factors, directly and indirectly, influence students' entry into entrepreneurship in higher education institutions. (Pangestu, Nicky, & Kumar, 2014) found that entrepreneurship requires high returns by assessing one's abilities, having a risk-aware attitude, and deciding to accept the risk. Those already, Monetary and non-monetary returns are important motivating factors for entrepreneurship, whether for yourself or others—the critical point of research on motivations for entrepreneurship (Locke, 2003). Ndovela (2017) suggests that prospective entrepreneurs will have a comparative analysis of the monetary and non-monetary returns of self-employment versus those of employees or employees. Employment

or self-employment if it is found that the salary and benefits received as an employee are less than paid self-employment in both aspects. Money, independence, self-employment and the ability to generate income from being an entrepreneur.

Hypothesis 1: Economic factors positively influence students entering entrepreneurship in higher education institutions.

Motivations factors

Motivation supports the self-selection of goals and values combined with "time horizons". Achieving the value of a given purpose may be covered over a while, and however long it may be. If there is enough motivation, it can lead people to achieve their goals Locke, & Latham (1990). Motivation can be external and internal, and motivation is a critical factor in job success (Ryan & Deci (2017). It is essential for organizational psychology and organizational management (Latham, 2012), as well as goals for success in life: study and work. Abraham H. Maslow developed a hierarchical theory of needs. According to Maslow, people are motivated by unsatisfied needs. Requirements expressed from the ground up to the most complex, Maslow hypothesized that a person is only aroused when his needs are fulfilled. The needs start from the lowest level basic needs and increase gradually as the lower level needs are met. Frederick Herzberg's two-factor theory concludes that some workplace factors contribute to job satisfaction (motivators), while others (hygiene factors), in their absence, lead to dissatisfaction. Nevertheless, not related to satisfaction, Hygiene factors are applied because, like hygiene, its presence will not improve health. However, deficiencies can worsen health, factors that motivate people to change. Some motivating factors (Satisfaction) include achievements, acceptance of work, responsibility, advancement and growth. Some hygiene factors include company policies, governance, working conditions, interpersonal relationships, salaries, job security status, and personal life (Fishbein & Ajzen, 1975).

Hypothesis 2: Motivation factors positively influence students entering entrepreneurship in higher education institutions.

Commitment factors

Self-commitment theory (SDT) is a macro-theory of human motivation and personality that deals with people's natural growth tendencies and innate psychological needs. It deals with the motivations behind people's choices without outside influence and intervention. SDT focuses on the degree to which an individual's behavior is self-motivated and self-determining (Deci, 1971). The self-commitment theory sees that humanistic psychology influences an individual's commitment to one's achievements for self-efficacy and self-realization

Hergenhahn, 2009). Must reach it to maintain motivation (Serino & Buccino, 2019). Entrepreneurs who go into starting and building a new business need determination and perseverance to ensure success for themselves and their business through an inspiring attitude, motivation and entrepreneurial spirit. It is the entrepreneur's inherent willpower to make the business successful during his or her lifetime (Ajzen, 1991).

Hypothesis 3: The Commitment factors positively influenced the entrepreneurial decision of students in higher education institutions

Success factors

Critical success factors are management terms for the elements necessary for an organization or project to achieve its mission. It achieves the goal, and it is necessary to be aware of Key Success Factors and variations between the priorities and critical outcome areas of different roles (Stewart & Roth, 2007), entrepreneurial personality government support Ability to access funding sources management, marketing, accounting and production skills dedication to hard work Skills in interacting with people including customers, reputation, ability to make money. Moreover, having enough motivation is an essential factor that makes students, graduates, and the new generation decide to become entrepreneurs and be able to succeed in running a business. In addition, the study of Navavongsathian & Rungruang (2020) on the entrepreneurial success of on the Entrepreneurial Intention of Students in Higher Education Institutions within the Network of the Upper Central Region of Thailand found that knowledge, entrepreneurial skills, motivation, success, and determination affect the intention to be an entrepreneur of students in higher education institutions.

Hypothesis 4: Entrepreneurial entry factors positively influence the entrepreneurial success of students in higher education institutions.

Conceptual Framework

After an intensive review of the literature, the conceptual framework of this research is

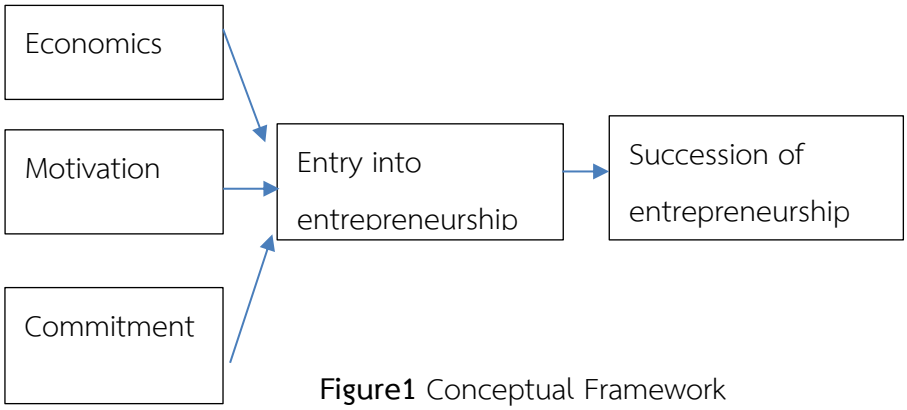


Figure1 Conceptual Framework

Research Method

In this research, the researcher will start by creating an accurate and reliable measurement based on criteria and concepts. The researcher will provide three academicians and business incubation and entrepreneurship experts to advise and make corrections. Before collecting data, this allows the gauge to be used to measure what it wants to measure. Before the questionnaire design and data collection, the scale's reliability it tested using Cronbach's Alpha. The reliability of the questionnaire consisted of 50 samples. The Cronbach's alpha coefficient was used to measure the reliability or Internal consistency of the measures used in this study. The mean correlation between alphas was .886 to .890. All 16 items had Cronbach's alpha coefficient of .889. High level of reliability and can be used in this research further.

Population and sample

The population consisted of 44 university students and students in higher education institutions both in the public and private sectors under the upper central region network, with Chulalongkorn University as the host institution (Office of the Higher Education Commission, 2018)

Sample

1) sample size This research used a random sampling method from 44 students studying in the regular and part-time sectors in higher education institutions, both in the public and private sectors under the upper central region network, to obtain a total sample size. This research uses 400 samples by calculating the appropriate number of samples according to the general rules for choosing the confidence coefficient (Alpha level). The acceptable error value is Alpha = 0.05, and the acceptable error value, Yes, is 5%, considered reasonable (Krejcie & Morgan, 1970). Therefore, the proportion of the population to be randomized was set at 20% or 0.2 at a confidence level of 95% and a margin of error of 5% or 0.05 by using the formula for calculating the appropriate number of samples using the Cochran (1977) formula. The 384 samples, but a sample size of 400 is used in this study, which covers the optimal number of samples according to the Cochran (1977) formula while at the same time obtaining a larger sample size, which has advantages in terms of reliability and stability— representing the population according to Newman (1997) concept.

2) Techniques for sampling Use a non-probabilistic sampling method. (Non-Probability Sampling) using Purposive sampling by selecting a sample from the population

that is students and students in higher education institutions both in the public and private sectors under the network of the upper central region, totaling 44 institutions and selecting Complete the required number of samples with no rules for selecting a total of 400 samples.

3) Research tools Tools used in this research It is a questionnaire with continuous data in the form of Likert-type scales (Likert, 1932), which classifies the scale as follows: "Strongly agree" gives a value equal to 5, representing the highest relationship. "Agree" gives a value. Equals 4, representing a more significant relationship, a score equal to 3, representing an "unsure" relationship, and a score equal to 2, representing a weak relationship, is "disagree", giving a value equal to 1 instead. The last relationship is "strongly disagree".

Statistics and research variables

1) Descriptive stage

In this research, the researcher will use statistics to describe the variables, such as percentage, mean, maximum, and minimum, for describing independent and single dependent variables (Univariate statistics).

2) Analysis and modeling stage

Use statistics to analyze structure equation model to create a model for testing whether the independent latent variables are economic factors, motivation factors, or determination factors. Through intermediate variables that are latent variables, including entering into operators to predict the influence on the latent dependent variable, namely, the success of entrepreneurship. To use the model to explain how much of the appropriateness to predict the influence of the independent variable on the dependent variable.

Exploratory factor analysis (EFA) uses the Common Factor Analysis Principle Axis Factoring (PAF) method to study and analyze factors affecting students' entry into entrepreneurship in higher education institutions. Upper Central Region Network of the Office of the Higher Education Commission using Kaiser-Meyer-Olkin (KMO) and Barlett's Test of Sphericity

The statistics χ^2, $\chi^2/df.$, CMIN/DF, GFI, TLI, AGFI, CFI and RMSEA were then used to evaluate the structural validity of the empirical model. Furthermore, the last step is structural equation analysis (Structure Equation Model) to create a predictive model of independent variables that influence entrepreneurship, leading to success.

3) Variable

The latent independent variables are:

Economic factor the observed variables were risk tolerance, Monetary returns and Cost of starting a new business.

Motivation factors with observational variables were Social acceptance, Highest achievement being own boss.

Commitment factor the observed variables were Acquiring the necessary knowledge and skills, Effort confidence in success.

Intermediate variables that are latent are entering into operators. The observational variables were the Intention factor, Psychological factors and Social factors.

The latent independent variables were an entrepreneurial success. The observed variables were access to Capital sources. Having an Entrepreneurial personality, management and Marketing skills, and Entrepreneurial Intent.

Research Results

In order to answer questions according to the purpose of this research, to study and analyze factors affecting students' entry into entrepreneurship in higher education institutions under the upper central region network of the Office of the Higher Education Commission in Thailand

Exploratory factor analysis (EFA) uses the Common Factor Analysis Principle Axis Factoring (PAF) method to study and analyze factors affecting students' entry into entrepreneurship in affiliated higher education institutions—the upper central region network of the Office of the Higher Education Commission in Thailand.

Table 1 *Kaiser-Meyer-Olkin (KMO) and Barlett's Test of Sphericity*

Kaiser-Meyer-Olkin(KMO)	0.989
Barlett’s Test of Sphericity	
Approx.Chi-Square	595.830
df	299
Significant	.000

Table 1 Kaiser-Meyer-Olkin (KMO) and Barlett's Test of Sphericity, where KMO is 0.989 and Sig = .000<0.05, where 0 ≤ KMO ≤ 1 is close to 1, meaning all variables are related. A lot can be well grouped as factors to be used for further factor analysis Co-factor can explain the relationship between variables at a good level (Wanichbuncha, 2013).

Table 2 *Statistical values for structural validity of the empirical model*

Index	value derived from the analysis
p-value	.060
χ^2 = 595.830 df. = 299 χ^2/df. = 1.993	1.993
CMIN/DF	1.993
GFI	.998
TLI	.996
AGFI	.997
CFI	.995
RMSEA	.049

From table 2. The statistical values for structural validity of the empirical model obtained $\chi 2$ = 595.830 df. = 299, $\chi 2$/df. = 1.993, p-value = .060 and CMIN/DF = 1.993, which is less than 2.0 with a good level of consistency (Schumacker & Lomax, 2010), which means Structural equation models are in harmony with empirical data. In addition, it was found that GFI = .998, TLI = .996, AGFI = .997 and CFI = .995 were greater than 0.95, all indicating a good level of concordance. (Kelloway, 2015) and found that RMSEA = .049 and PCLOSE or p-value = 0.060, so the hypothesis was accepted that RMSEA was less than 0.05 [28]. Complies with the standard and is at a good level of conformity.

Table 3 *Regression Weights*

			Estimate	S.E.	C.R.	P
ENTREP	<---	ECON	.083	.043	1.920	.055
ENTREP	<---	MOTIVE	.157	.036	4.378	***
ENTREP	<---	STRIVE	.656	.057	11.526	***
SUCCESS	<---	ENTREP	1.163	.089	13.026	***
ECO3	<---	ECON	1.000			
ECO2	<---	ECON	1.296	.095	13.710	***
ECO1	<---	ECON	1.211	.088	13.762	***
MOT3	<---	MOTIVE	1.000			
MOT2	<---	MOTIVE	.986	.055	18.074	***
MOT1	<---	MOTIVE	.883	.053	16.513	***
STR3	<---	STRIVE	1.000			
STR2	<---	STRIVE	1.065	.047	22.607	***
STR1	<---	STRIVE	1.088	.048	22.696	***
ENT1	<---	ENTREP	1.000			

			Estimate	S.E.	C.R.	P
ENT2	<---	ENTREP	.950	.089	10.630	***
ENT3	<---	ENTREP	1.059	.096	11.014	***
SUC1	<---	SUCCESS	1.000			
SUC2	<---	SUCCESS	.830	.043	19.269	***
SUC3	<---	SUCCESS	1.022	.041	25.133	***
SUC4	<---	SUCCESS	.764	.041	18.665	***

Table 4 *Standardized Regression Weights*

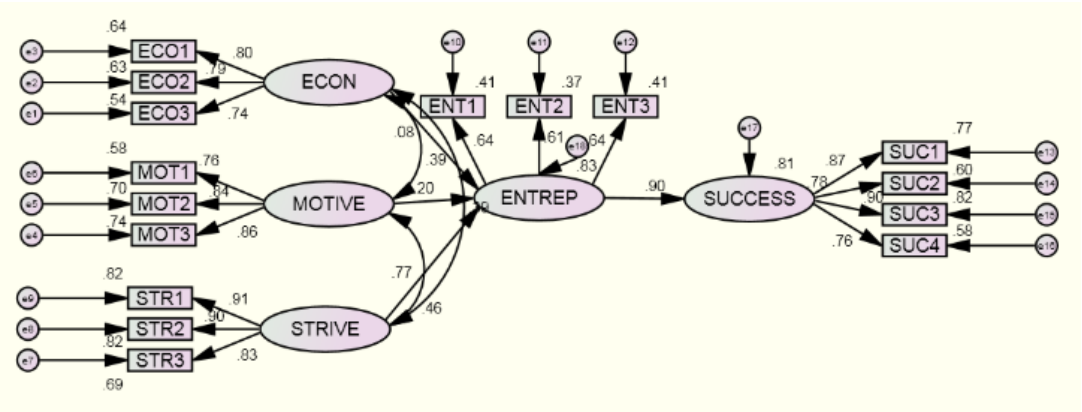
			Estimate
ENTREP	<---	ECON	.082
ENTREP	<---	MOTIVE	.196
ENTREP	<---	STRIVE	.769
SUCCESS	<---	ENTREP	.899
ECO3	<---	ECON	.736
ECO2	<---	ECON	.794
ECO1	<---	ECON	.802
MOT3	<---	MOTIVE	.858
MOT2	<---	MOTIVE	.836
MOT1	<---	MOTIVE	.762
STR3	<---	STRIVE	.828
STR2	<---	STRIVE	.905
STR1	<---	STRIVE	.907
ENT1	<---	ENTREP	.642
ENT2	<---	ENTREP	.612
ENT3	<---	ENTREP	.639
SUC1	<---	SUCCESS	.875
SUC2	<---	SUCCESS	.778
SUC3	<---	SUCCESS	.905
SUC4	<---	SUCCESS	.763

From Tables 3 and 4. Standardized Regression represents the regression coefficients. From the hypothesis test, the factor weight of every variable. It was found that from the water test, every factor was not zero, with every value of C.R. greater than 1.96 and checking the

statistics with the factor weight test. It can be concluded that the model has Harmony with empirical data at a significance level of 0.05

Regression Weights represent the regression coefficients. From the hypothesis test, the factor weight of every variable. It was found that from the water test, every factor was not zero, with every value of C.R. greater than 1.96 and checking the statistics from Table 4.2- 4.6 together with the factor weight test. It can be concluded that the model in Figure 2 has Harmony with empirical data at a significance level of 0.05 (as shown in Figure 2).

Figure 2 . The Structural equation model of factors affecting students' entry into entrepreneurship in higher education institutions affiliated with the upper central region network of the Office of the Higher Education Commission in Thailand.



χ2 = 595.830, df. = 299, χ2/df. = 1.993, p-value = .060, CMIN/DF = 1.993, GFI = .998, TLI = .996, AGFI= .997, CFI = .995. , RMSEA = .049 at the significance level .05

The results of the confirmatory component analysis of the measurement model based on the Regression Weights show that

1) The weight of the common factor in Figure 2 found that the weight of the economic factor, a latent variable, consists of observational variables such as risk tolerance. Monetary returns Cost of starting a new business, the weight factor in standard form was 0.80, 0.79 and 0.74, respectively.

2) The standard weight factor for the incentive factor, which is a latent variable. It consists of observational variables, including being your boss. For highest achievement and social acceptance, the weight factor in standard form was 0.86, 0.84 and 0.76, respectively.

3) The standard weight factor for the determining factor is a latent variable. It consists of observational variables, namely acquiring the necessary knowledge and skills. Perseverance and belief in success, the weight factor in standard form was 0.91, 0.90 and 0.83, respectively.

4) The standard weight factor for entrepreneurship is a latent variable. It consists of observational variables, including social aspects. Entrepreneurial intention factor and psychological factors, the weight factor in standard form was 0.64, 0.64 and 0.61, respectively. 5) The weight factor of success in entrepreneurship, a latent variable, consists of observational variables such as management and marketing skills. Ability to access funding sources, personality suitable for entrepreneurship, and the intention of being an entrepreneur; the weight factor in standard form was 0.90, 0.87, 0.78 and 0.76, respectively.

The study results of the causal relationship of factors affecting the entry into entrepreneurship of students in higher education institutions under the upper central region network of the Office of the Higher Education Commission in Thailand. And the results of checking the model's consistency with the empirical data developed by the research team are consistent with the observed data. And when testing the path coefficient and verifying the model's character with the observed data, the analysis results are shown in Table 5

Table 5 The path coefficient test results of the variables affecting the entry into entrepreneurship of students in higher education institutions affiliated with the upper central region network of the Office of the Higher

Independent variables	Dependent variables	Esti-mate	S.E.	Z-test	p	R^2
X_1 = Economics	X_4 = Entry to Entrepreneur	.083	.043	1.920	.050	.83
X_2= Motivations		.157	.036	4.378	.000	
X_3 = Commitments		.656	.057	11.526	.000	
X_4 = Entry to Entrepreneur	Y = Succession of Entrepreneur	1.163	.089	13.026	.000	.81

Table 5 Test results for covariance between each pair of latent variables. Ready to test every hypothesis one by one to see if the covariance is zero or not. The test results follow all assumptions. In conclusion, the covariance between latent variables (independent variable) is the commitment factor. Motivation and economic factors with factors entering into entrepreneurship are positive. Shows that there is a one-way relationship. Where the latent variable, the willpower factor, was the most correlated with entering into entrepreneurship. With a correlation coefficient = 656, followed by the relationship between latent variables Factors that motivate entrepreneurship with a correlation coefficient = .157 and the latent variable, the economic factor and the minor entry into entrepreneurship. The correlation

coefficient = .083. All three latent variables together predicted the relationship of latent variables. Factors entering into entrepreneurship, 83%

Latent variables Entering into entrepreneurship was associated with latent variables, entrepreneurial success. With a correlation coefficient of = 1.163 by latent variables. Entering into entrepreneurship can predict the relationship of latent variables. Entrepreneurial Entry Factors with Latent Variables Entrepreneurship success rate 81%

Therefore, the causal relationship model of the factors affecting students' entrepreneurship in higher education institutions under the upper central region network of the Office of the Higher Education Commission in Thailand is significant. Harmonize with empirical data.

Research Discussions

The study results found that economic factors, which are latent variables, consist of observational variables such as risk tolerance. Monetary returns Cost of starting a new business Motivation factors, which are latent variables, consists of observational variables, including being boss. It has the highest achievement and social acceptance Commitment factor, a latent variable. It consists of observational variables, namely acquiring the necessary knowledge and skills. Perseverance and belief in success influence entry into entrepreneurship, a latent variable. It consists of observational variables, including social factors. Entrepreneurial intention factors and psychological factors influence the success of entrepreneurship, which is a latent variable consisting of observational variables such as management and marketing skills. Ability to access funding sources personality suitable for entrepreneurship and the intention of being an entrepreneur

1. Economic factors contains variables risk tolerance, monetary returns, Cost of starting a new business, Influencing student entrepreneurship, and influencing student entrepreneurial success in higher education institutions. It is consistent with the research of Pangestu, Nicky, & Kumar (2014) found that entrepreneurship requires high returns by assessing one's abilities and having a risk-aware attitude. They are, furthermore, decided to accept those risks. In addition, the economics-based model study. Collins, Hanges, & Locke (2004) have considered the issue of entrepreneurship based on decision-making roles. Become an entrepreneur under risk assessment. Prospective entrepreneurs assessed a greater than threefold variation in returns in self-employment versus employed based on the notion that high returns are associated with higher risks.

2. Motivation factors which are latent variables, consist of observational variables, including being own boss. The highest achievement and social acceptance influence students to enter into entrepreneurship in higher education institutions and succeed in the future. A person will have self-esteem. There is a need for self-respect and self-acceptance, a desire to be own boss, in line with Locke and Latham (1990). Key motivations are self-empowerment and autonomy at work. Furthermore, maximal success in life and social acceptance of entrepreneurship are essential motivators for entering entrepreneurship, consistent with Maslow's concepts (Maslow, 1970) that individuals seek ultimate success and social acceptance in entering entrepreneur.

3. The latent variable's commitment factor consists of observational variables, namely acquiring the necessary knowledge and skills. Perseverance and belief in success influencing the entry into successful entrepreneurship. This aligns with Ajzen (1991), who explained that the determination to acquire essential knowledge and skills necessary for entrepreneurship is a critical factor for entrepreneurial success in the future. In addition, Linan (2004) and Krueger et al. (2000) research found that perseverance and belief in success are essential psychological factors in the personal attitude of entrepreneurs.

4. Entrepreneurship entry factor, a latent variable, consists of observational variables, including social factors. Entrepreneurial intention factors and psychological factors influence the success of entrepreneurship, which is a latent variable. It consists of observational variables such as management and marketing skills. Ability to access funding sources personality suitable for entrepreneurship and the intention of being an entrepreneur This is consistent with the research of Stewart and Roth (2007); Collins, Hanges and Locke (2004); Begley and Boyd (1987) ; Ahmed (1985) having good entrepreneurial skills entrepreneurial personality government support Ability to access funding sources management, marketing, accounting and production skills dedication to hard work Skills in interacting with people including customers, reputation, ability to make money. It is an essential factor that makes students, graduates, and the new generation decide to become entrepreneurs and be able to succeed in running a business.

Research Suggestions

The study results on factors affecting the entry into entrepreneurship of students in higher education institutions under the upper central region network of the Office of the Higher

Education Commission in Thailand. Leading to recommendations derived from research as follows:

1. How people become entrepreneur and thrive in the future, one must assess one's abilities and have an attitude of looking at the risks ahead and having decided to accept those risks. Prospective entrepreneurs must evaluate the variability of returns in self-employment versus employment based on the concept that high returns involve high risks. In addition, the factors that make the new generation focus on entrepreneurship include: "Making money" is the most critical factor in deciding to become an entrepreneur. Prospective entrepreneurs should have a comparative analysis of the monetary and non-monetary returns from self-employment versus being employed or paid by employees in a company. Will choose entrepreneurship or self-employment if it is found that the salary and benefits received as an employee are less than self-employment that receives financial benefits, independence, self-employment and the ability to generate income

Those who will become entrepreneurs need to accumulate the cost of starting a new business both in the knowledge of business management and entrepreneurial skills. Entrepreneurial experience Provides knowledge of new technologies and training in planning and marketing management skills. Putting into practice Including law and financial management, sometimes graduates entering a new business (Startup) should be creative in designing their business models. It is a factor that affects entering into entrepreneurship and starting a new business that will be successful in the future.

2. The factor that students in higher education institutions who will become entrepreneurs and be successful in the future is the desire to be their boss. The ultimate goal of future success and social acceptance is essential to entering successful entrepreneurship.

3. Students in tertiary institutions who will enter into entrepreneurship and become successful must start by acquiring the necessary knowledge and skills, perseverance, and believing in success; having the determination to acquire knowledge and essential skills necessary for entrepreneurship is the key factor that makes entrepreneurs successful in the future. In addition, the perseverance factor and belief in success is a psychological factor of the personal attitude of entrepreneurs that is important to enter into a successful entrepreneur in the future.

4. Entering a successful entrepreneur must have management and marketing skills. Ability to access funding sources Personality suitable for entrepreneurship and the intention of being an entrepreneur Entrepreneurial Intent having good entrepreneurial skills

Entrepreneurial personality government support Ability to access funding sources management, marketing, accounting and production skills dedication to hard work Skills in interacting with people including customers, reputation, ability to make money. It is an essential factor that makes students, graduates, and the new generation decide to become entrepreneurs and be able to succeed in running a business.

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