# FACTORS AFFECTING ENTREPRENEURIAL INTENTIONS OF STUDENTS AT THAI NGUYEN UNIVERSITY

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# ABSTRACT

Start-up is considered an important driving force for economic growth in many countries with a lot of newly established businesses, many jobs have been created contributing to the improvement of people's lives [5]. Researches show that the intention for the startup of students at Thai Nguyen University is influenced by several personal factors (attitude towards money, attitude towards business startup, subjective standards, ability to behavioral control, entrepreneurship experience) and other external environmental factors (education in entrepreneurship and local start-up ecosystem). Among them, the most powerful factor affecting the students' intention to startup is their attitude towards money and the local startup ecosystem.

**Keywords:** business startup, entrepreneurial intention, students, Thai Nguyen university

### INTRODUCTION

According to data collected from the National Enterprise Registration Database (Ministry of Planning and Investment), to December 31, 2019, the whole country had 758,610 active businesses increasing by 6.1% compared to the same period of 2018 [8]. In order to achieve the goal of increasing the number of businesses, business start-up activities need to be focused. Universities are important components of the entrepreneurial ecosystem. University students are qualified workforces and key persons in startup activities.

How do students decide to start their own businesses? The act of starting a business will take place if the individual has a positive attitude and strong intention for that action. Intentions of start-up may reflect the behavior of starting a business. The analysis and evaluation of factors affecting the start-up plan of Thai Nguyen University students are aimed at improving the local startup ecosystem.

# REVIEW OF RELATED LITERATURE

# **International Researches**

Business startup is increasingly important in many countries. A lot of researches on entrepreneurship at international levels have been carried out for the past few decades.

Many studies suggest that entrepreneurship is emphasized in many countries and is seen as a way to promote economic growth and job creation (Lee et al. 2006; Sobel & King 2008). Therefore, promoting entrepreneurship is the key to economic growth and given a top priority for policymakers. According to Rae & Woodier Harris (2013), in order for businesses to have a good knowledge base and successful entrepreneurship, students need to have a wide range of business start-up training programs which fosters them to be career-oriented.

Studies on entrepreneurial intentions, such as Davidson (1995) [2] suggest that individuals who want to be self-employed often think that startup is the career orientation that is right for them; or creating a business is a process that takes a lot of time to think and act (Wong and Choo) [16] to achieve financial goals.

Many authors have studied the factors which have influences on individuals' intention to start a business. Reynolds (2005) argues that educational attainment, demand for success, ability to accept risks and the trend of innovation are decisive factors to the start-up process of young people aged 25-40. [14].

Attitudes toward startup behaviors are influenced by internal factors (personal awareness of competence and tasks to be done) and external factors (availability of resources) (Dell, 2008) [3]. Previous studies all affirm that attitudes towards behaviors have a direct influence on an individual's intention to start a business.

Schwarz et al. (2009) stated that attitudes toward money and changing business environment are important factors affecting students' intention to start a business.

The subjective norm has conflicting studies concerning startup intentions. Some studies suggest that this has little or no effect on the intention to start a business (Reynolds et al., 2004; Linan and Chen, 2009) [14] [7]. Others argue that subjective norms have a significant influence on the intention to start-up (Kolvereid and Isaksen, 2006) [6].

Many studies suggest that cognitive-behavioral control has a positive effect on students' entrepreneurial intentions (Paco et al., 2011) [13].

Entrepreneurship experiences can directly affect business ideas (Krueger, 1993) and individuals with successful experiences are more confident and often more likely to replicate those behaviors.

Many authors come to an agreement that education has a direct influence on individual behavior and perceptions (Popescu and Pohoata, 2007) and education on entrepreneurship has an impact on young people's intention to startup (Johansen and Schalke, 2013). Startup education may increase your attitude towards start-up.

# **Domestic Researches**

Nguyen Thu Thuy (2015) suggested that personal experiences and emotional environment affect the potential startup of young people. Orientation activities initiated inside and outside the school have a positive impact on the confidence and desire to start a business of university students in Vietnam [11].

Phan Anh Tu and Giang Thi Cam Tien (2015) identified several factors affecting students' entrepreneurial intentions including attitudes and effectiveness; education background and entrepreneurship opportunities; capital; subjective standards; cognitive-behavioral control [12].

According to Doan Thi Thu Trang (2018) [4], the assessment of factors affecting the startup intentions of Vietnamese students: Case studies of engineering students using 6 personal awareness factors according to Ajzen's planned behavioral theory (1991) and an additional element (feeling of luck) following the Locus of Control theory.

The research by Nguyen Anh Tuan (2019) pointed out that entrepreneurial education has a strong impact on attitudes to business startup. Meanwhile, among the factors that directly influence the youth's intention to start a business, the attitude towards entrepreneurship and awareness of behavioral control have the most impact, the experience of startup showed the weakest impact [10].

## THEORETICAL FRAMEWORK

# 1. Model of Entrepreneurial Events (SEE - Shapero's Entrepreneurial Events)

The business start-up model of Shapero and Sokol (1982) was developed based on the view that if a person is doing something, he/she continues to do it and is only interrupted when being influenced by external factors. According to this model, an individual's entrepreneurial intention depends on the change in that person's life and his/her awareness, attitudes, and desires about business startup and the feasibility of the project.

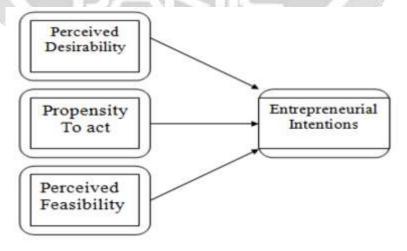


Figure 1. Shapero's Entrepreneurial Events [15] Source: Shapero and Sokol, 1982

According to Shapero and Sokol (1982), the intention to business startup is strongly influenced by the individual's desire, perception of the feasibility and the propensity to start a business. Desire will affect the attitude and emotion of the individual. The perception of feasibility involves individual awareness of resources as well as future plans. The tendency to react reflects the determination and will of future entrepreneurs.

# 2. Theory of Planned Behavior (TPB)

Ajzen's planned behavioral theory (1991) stated that the intention to perform a behavior is influenced by three factors: attitude toward behavior, subjective norms, and awareness of behavioral control. Creating a new business is intentional behavior and the intention to commit the behavior is the basis for practicing that behavior.

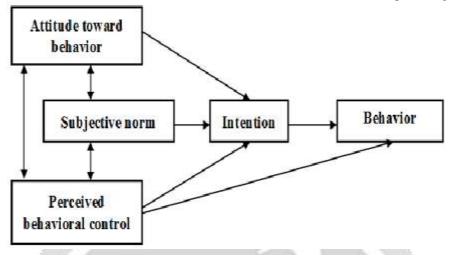


Figure 2. Theory of Planned Behavior (TPB) [1] Source: Ajzen, 1991

Cognitive-behavioral control refers to the perception of how easy or difficult the behavior is performed, or whether the individual has the capacity and resources to perform the behavior.

# 3. Research model

Combining the two theoretical models above, the authors propose a model of factors affecting business start-up plans of Thai Nguyen University students as follows:

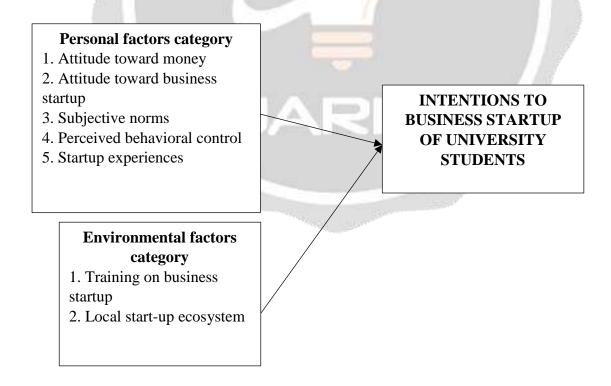
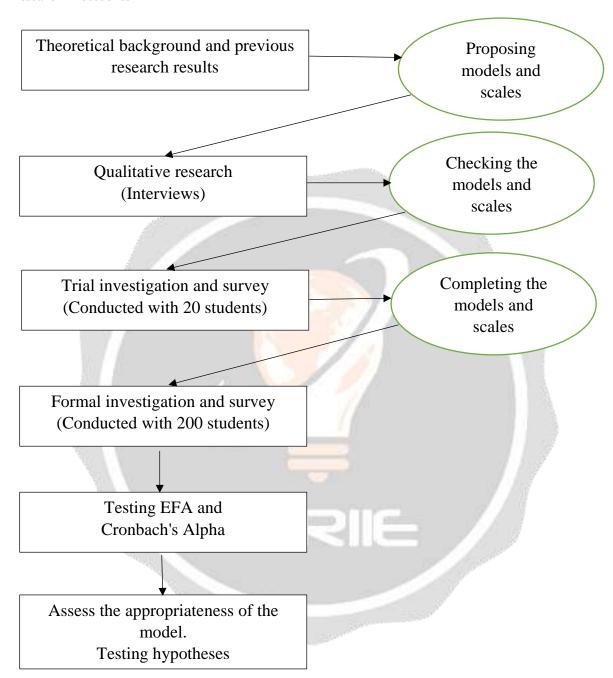


Figure 3. Research Model (Source: the authors)

### RESEARCH METHODOLOGY

## Research Procedures



# Sample description

In February 2020, the authors used a convenient method that directly interviewed and emailed Thai Nguyen University students. The survey process collected 189 [9] satisfactory questionnaires used as data for the content to be studied in this analysis.

**Table 1. Sample description statistics** 

Samp	le size (N = 189)	Number	Percentage (%)
Gender	Male	104	55
Gender	Female	85	45
Thai Nguyen	TUEBA	39	21
University students	TUMP	15	8

	TNUS	22	12
	ICTU	32	17
	TNUT	35	19
	TNUE	15	8
	TUAF	17	9
	Others	14	7
	Self-employed	15	8
	Being a business employee	12	6
Parent's occupation	Working as a manager in		
	enterprises	14	7
	Other	148	78
	None	85	45
	< 1 year	46	24
Work experience	1-3 years	39	21
	>3 years	19	10

Source: Summary of the authors

### RESEARCH RESULTS

# Assessing the reliability of the scale by Cronbach's Alpha coefficient

Cronbach's alpha coefficient is a statistical test of the degree of coherence and correlation among observed variables in scales, which relates to two aspects which are the correlation among the variables themselves and the correlation of the scores of each variable and the overall score of each respondent.

The reliability test results show that all variables are reliable.

Table 2. Summary of Cronbach's Alpha test analysis results

Factors	Number of	Cronbach's Alpha
	Observed	Coefficient
	Variables	A. 1. A.
Attitude towards money (AM)	2	0,834
Attitude towards business start-up (AB)	4	0,823
Subjective norm (SN)	3	0,746
Perceived behavioral control (PBC)	6	0,907
Business start-up experience (BSE)	3	0,918
Education and training on business start-up (EBS)	5	0,928
Local start-up ecosystem (LSE)	4	0,891

Source: Calculations of the authors

# Analysis of descriptive statistics of the scales in the model

Table 3. Summary of descriptive statistics of the scales in the model

	N	Minimum	Maximum	Mean	Std. Deviation		
AM1	189	1	5	3,92	,877		
AM2	189	1	5	4,05	,913		
AB1	189	1	5	3,92	,844		
AB2	189	1	5	3,82	1,057		
AB3	189	2	5	3,70	,873		
AB4	189	2	5	3,80	1,078		
SN1	189	2	5	3,69	,964		
SN2	189	1	5	3,67	1,037		
SN3	189	1	5	3,83	,915		
PBC1	189	1	5	3,85	,994		
PBC2	189	1	5	3,78	,980		
PBC3	189	1	5	3,83	1,043		
PBC4	189	1	5	3,87	,920		
PBC5	189	1	5	3,85	1,000		
PBC6	189	1	5	3,78	1,092		
BSE1	189	1	5	3,93	,970		
BSE2	189	1	5	3,78	1,059		
BSE3	189	1	5	3,85	,996		
EBS1	189	1	5	3,69	1,006		
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EBS2	189	2	5	3,84	,949
EBS3	189	2	5	3,66	,991
EBS4	189	1	5	3,77	1,070
EBS5	189	1	5	3,75	1,081
LSE1	189	1	5	3,79	1,040
LSE2	189	1	5	3,72	1,056
LSE3	189	2	5	3,98	,828
LSE4	189	1	5	3,79	,890
Valid N (listwise)	189				

Source: Calculations of the authors

According to the results of the descriptive statistics, all of the respondents agree with the factors. The highest is the AM2 scale - Money is a measure of personal capacity. Thus, the current students highly value those who have a lot of money and know how to make money. EBS3 Scale - Business start-up should be a compulsory course to encourage entrepreneurship is rated lowest.

Table 4. Descriptive statistics of student's start-up intention scale

	N	Minimum	Maximum Mean		Std. Deviation	
EI1	189	1	5	3,43	,766	
EI2	189	2	5	3,52	,689	
EI3	189	2	5	3,45	,655	
EI4	189	2	5	3,36	,777	
EI5	189	1	5	3,52	,789	
Valid N (listwise)	189					

Source: Calculations of the authors

The results of the descriptive statistics show that the trend of students' average agreement with start-up intention. Students are confused when it comes to issues related to business start-ups. The respondents agreed most in EI2 content - I decided to start a business in the future and EI5 - I believed in starting my own business. Many students may not have figured out what the business is like but their intention to start a business has begun to form.

The analysis of EFA factor

**Rotated Component Matrix** 

	Component							
	1	2	3	4	5			
PBC4	,786							
LSE4	,777							
BSE2	,698							
LSE2	,692							
PBC6	,684							
EBS3	,668							
EBS5	,636							
SN2	,580							
AB3		,827						
EBS2		,761						
SN1		,692						
EBS1		,682						
AB2		,677						
AB4		,672						
LSE1		,550						
EBS4		,525						
BSE1			,750					
PBC5			,734					
BSE3			,672					
LSE3			,582					
SN3				,845				

PBC2		,830	
PBC1		,704	
PBC3		,606	
AM2			,817
AM1			,781
AB1			,773

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Source: Calculations of the authors

The results of factor analysis show that all variables meet the requirements to conduct regression analysis.

# The hypothesis test results of the research model

### **SUMMARY OUTPUT**

Regression Statistics						
Multiple R	0,935478					
R Square Adjusted R	0,875119					
Square	0,870289					
Standard Error	0,299403					
Observations	189					

### **ANOVA**

		A		L X	1	Significance
	df	lt	SS	MS	F	F
Regression		7	113,7002	16,24289	181,1967	3,02E-78
Residual	A	181	16,22526	0,089642		
Total		188	129,9255	- 4		

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	<i>Upper</i> 95,0%
Intercept	-0,30811	0,130142	-2,36752	0,018963	-0,56491	-0,05132	-0,56491	-0,05132
AM	0,228259	0,042599	5,358314	2,53E-07	0,144204	0,312313	0,144204	0,312313
AB	0,186874	0,068087	2,744629	0,006668	0,052527	0,321221	0,052527	0,321221
SN	0,100336	0,058033	1,728958	0,085522	-0,01417	0,214844	-0,01417	0,214844
PBC	0,142082	0,067747	2,097252	0,03736	0,008407	0,275757	0,008407	0,275757
BSE	0,09462	0,052259	1,810608	0,07186	-0,00849	0,197734	-0,00849	0,197734
EBS	0,14169	0,070011	2,023825	0,044459	0,003547	0,279833	0,003547	0,279833
LSE	0,191894	0,058717	3,26809	0,001296	0,076035	0,307753	0,076035	0,307753

Source: Calculations of the authors

The multiple linear regression function showing the relationship between students' intention to start a business and the independent variables is as follows:

# EI = 0.228AM + 0.187AB + 0.1SN + 0.142PBC + 0.094BSE + 0.141EBS + 0.192LSE - 0.308

From the above equation, it can be seen that the start-up plans of Thai Nguyen University students are most influenced by the attitude towards money, followed by start-up ecosystem and entrepreneurship attitude, and education and training on starting a business.

From these factors, to enhance the intention of starting a business of Thai Nguyen University students, apart from personal factors, the starting environment is extremely important. Thereby, policymakers and university members of Thai Nguyen University can guide their students, and help them have a better start-up environment and well-trained start-up so that they are confident and improve their entrepreneurship.

### CONCLUSION

Attitude towards money has a positive and strong impact on Thai Nguyen University students' intention to start a business. This is consistent with studies published in the world on the relationship between attitude and behavior of an individual (Ajzen, 1991). Thereby, students who value money are more willing to start businesses than others. Students are often low-income, living mostly dependent on their families, so the need for money is a basic need. Therefore, they have a positive attitude towards money, and this attitude is the motivation that helps them turn their attitudes into entrepreneurship.

The start-up ecosystem has a positive effect on students' intention to start a business. The start-up ecosystem is the way a country or city is set up to promote local start-up activities. The OECD defines the start-up ecosystem as "a combination of formal and informal connections between startups (potential or current), start-up organizations (companies, venture capitalists, angel investors, banking system, etc.) and related agencies (universities, state agencies, public investment funds, etc.) and start-up process (business establishment rate, the number of businesses with good growth rates, the number of entrepreneurs, etc.) directly impact on the local startup environment. "Thereby, the startup ecosystem is a community that creates a favorable environment for startups. Students are those who are professionally trained in professional skills, so they are confident to start a business if the locality has a favorable start-up environment. Policy-makers should create a startup environment. Local governments or industry associations can assist startups in terms of administrative procedures, capital or technology, etc.

Attitude toward starting a business has a positive impact on the entrepreneurial intentions of the students at Thai Nguyen University. Attitude determines behavior. To achieve the goal of having more businesses, it is necessary to promote a positive attitude towards starting a business of students. To raise the attitude of starting a business, it is essential to enhance communication and training activities to improve the entrepreneurship spirit for students. Thai Nguyen University's annual Entrepreneurship Ideas contest for students needs to be more widely implemented, and investors need to be sought for winning ideas. The examples of successful entrepreneurs, especially entrepreneurs who are alumni should be formally honored.

Education and training on entrepreneurship have a positive impact on Thai Nguyen University students' intention to start a business. Currently, the start-up training program is only available in the curriculum for students who major in business administration. Students in other majors can only participate in entrepreneurship training in extracurricular activities. These programs are very well supported and involved by students. However, in order for the business start-up education to work, help students have enough confidence in the knowledge and skills to start a business and motivate students to turn their plans to start a business into practice, the course on entrepreneurship must be a training course in all subjects, especially economics and engineering students.

Awareness of behavior control is also a strong factor affecting the business start-up plans of the students at Thai Nguyen University. However, because of their young age and inexperience, most students are not confident with their ability to control their behavior. To raise this awareness, the education process to improve entrepreneurial knowledge and skills is indispensable.

In addition, subjective standards and start-up experience have a weak impact on Thai Nguyen University students' intention to start a business.

This research helps to guide the future career path of Thai Nguyen University students as well as providing policy-makers with a better insight into entrepreneurship education and building a startup ecosystem in the university.

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