

## Starting A Business In Vietnam - Empirical Research In Start-Up Businesses

Ngo Thi Huyen Trang <sup>1</sup>, Le Ngoc Nuong <sup>1</sup>, Pham Thi Quynh Nga <sup>2</sup>

<sup>1</sup>TNU- University of sciences, Thai Nguyen Province, VietNam,

Email ID : [trangnht@tnus.edu.vn](mailto:trangnht@tnus.edu.vn)

<sup>2</sup>Thai Nguyen University of Economics and Business Administration, Thai Nguyen City, Viet Nam,

Email ID : [ngocnuong85@tueba.edu.vn](mailto:ngocnuong85@tueba.edu.vn)

<sup>3</sup>Pham Thi Quynh Nga, Faculty of Finance and Banking, University of Finance - Marketing - Ho Chi Minh City, Viet Nam,

Email ID : [phamnga@ufm.edu.vn](mailto:phamnga@ufm.edu.vn)

### Corresponding author.

<sup>2</sup>Le Ngoc Nuong,

Thai Nguyen University of Economics and Business Administration, Thai Nguyen City, Viet Nam,

Email ID : [ngocnuong85@tueba.edu.vn](mailto:ngocnuong85@tueba.edu.vn)

### ABSTRACT

The study conducted an analysis of the factors influencing entrepreneurial activities of businesses in Viet Nam with 400 questionnaires distributed and 386 collected. The results revealed 5 factors with 24 observed variables using Exploratory Factor Analysis (EFA) and multivariate regression methods. This demonstrated that all 5 factors have an impact on the entrepreneurial activities of businesses in Viet Nam. They are Human Capital; Local Culture and Business Culture; Access to Finance; Relationships between organizations in the startup ecosystem and Business Environment. Among these, the Business Environment, Access to Finance and Human Capital factors were found to have the strongest impact on entrepreneurial activities of businesses in Vietnam..

**Keywords:** Entrepreneurship; Startup ecosystem; Human Capital; Business Environment; Access to Finance.

### 1. INTRODUCTION:

Entrepreneurship and promoting business development have always been important driving forces and resources in the development of each country (Roman & Rusu, 2021), especially in the era of the Fourth Industrial Revolution. International practical experience has proven that, in the current trend of integration and development, entrepreneurship and business establishment are important drivers of national economies (Pinkovetskaia & Balyin, 2018), contributing to addressing global difficulties and challenges, as well as aiming for the sustainable development of each country individually and the world as a whole, including Vietnam.

Becoming an entrepreneur is a current trend among young people in Southeast Asian countries (Tanaya & Suyanto, 2024). In recent years, Vietnam's economy has witnessed a dynamic development of the startup movement. Vietnam is ranked 54th out of 100 in the global startup ecosystem, with 84 incubators, 116 granted patents, 35 business promotion organizations, and 68 venture capital funds. Currently, there are 857,551 operating businesses and 116,839 newly established businesses in 2021. The year 2016 was chosen as the "Startup Nation" year, along with a series of policies issued to support national startups, indicating that the issue of entrepreneurship is receiving special attention from the State and society. Encouraging the development of startup businesses helps to utilize labor, capital, technology, and markets, especially in creating a favorable environment to maximize the

potential of the current young generation in terms of knowledge, spirit, and aspirations to reach out to the world. Additionally, startup businesses reduce the risk of unemployment, contribute to economic restructuring, reduce the rich-poor gap, and promote the country's scientific and technological development (Nurumov et al., 2023).

Although Vietnam has achieved encouraging initial results, due to its starting point lagging, Vietnam's startup ecosystem and innovation still have a gap compared to some countries in the region and globally. The context of the past five years has shown that there are still many obstacles and difficulties in promoting entrepreneurship activities in Vietnam. Most Vietnamese startups are still small and medium firms like other countries, and their sustainable development depends on many factors (Morozko et al., 2022). Specifically, policies supporting beneficiaries such as startup businesses are not transparent, and the implementation and technology transfer connections between startup businesses, research institutes, and universities are lacking; technology application and transfer support have not been efficient. Furthermore, financial support policies, credit access, and infrastructure are all general regulations, lacking specific regional guidelines and detailed instructions, leading to inconsistent actions. Moreover, there is a lack of human resources due to the lack of connectivity between universities and research institutes in Vietnam with provincial authorities and central government departments.

In the future, to strongly and sustainably develop the startup movement, Vietnam needs to quickly establish appropriate policies and legal regulations, as well as specific programs to form and develop new startup businesses. The most important thing is to establish financial mechanisms to participate with private investment in startups,... thereby helping to narrow the gap and make Vietnam a strong startup nation.

## LITERATURE REVIEW

Entrepreneurship plays a particularly crucial role in the development of today's knowledge-based economy, so many international studies have focused early on finding the best ways to ignite entrepreneurial passion in individuals and their respective countries as a whole. One of the keys to achieving this is identifying the factors that influence entrepreneurship activities: finding specific characteristics for each region, each country, while also identifying important factors to implement key solutions in a context with limited resources.

Baptista, R.; Leitão, J. (eds.) (2015) used a cross-sectional data model with 5,247 observations, with independent variables including human capital, work environment, job characteristics, gender, and age to indicate how these factors influence entrepreneurial capability, especially for highly educated entrepreneurs. These individuals are more likely to have good access to new technologies and understand market trends, enabling them to offer products that meet customer preferences.

Khan, A.M. et al., (2019) investigated 3413 individuals' intentions to start a business, with factors including Intellectual Capital, Knowledge and Skills, Business Opportunities, Relationships with other entrepreneurs, Angel Investors, and Education Level. The results showed that all variables included in the model were significant. This study focused on highlighting the role of human capital, relationships within the startup ecosystem, and fundraising abilities, which greatly influence entrepreneurial intentions.

Lanero et al., (2011) studied the factors influencing the decision to start a business, specifically: (1) Entrepreneurial Education (level and awareness of entrepreneurship); (2) Feasibility (considering the feasibility of the business idea, business environment, business opportunities, and product prospects); (3) Entrepreneurial Desire; (4) Entrepreneurial Intentions. To analyze these factors, the study used a PLS SEM model through interviews with 1212 individuals. The results indicated that all variables included in the model were statistically significant, and making a good decision to start a business relied heavily on the business environment factor as well as human capital.

Startup businesses are often small, with limited access to capital, especially facing many risks. Therefore, Gudmundson et al., (2003) evaluated factors contributing to the success of startup businesses, the authors used independent variables in their model: business environment, access to capital, relationships with organizations and businesses, entrepreneurial business culture, progress in science and technology, entrepreneur's level of education, and risk perception. The study surveyed 365 startup businesses, and the results

showed that all variables had a positive impact on the success of the businesses.

## 2. RESEARCH METHODOLOGY

### 2.1. Sample size for survey

a, The survey targets:

- The managerial staff of startups in Vietnam from department heads and above.

- The state management officials, including officials from the Market Development Department and the Department of Science and Technology Enterprises under the Ministry of Science and Technology; the National Startup Support Center (NSSC); Representatives from the Departments of Science and Technology in the Northern, Central, and Southern regions nationwide.

b, Sample size

The process of sampling primarily involves identifying the research population, defining the sampling frame, selecting a sampling method, determining the sample size, and choosing the sample elements, according to Zikmund (2003). The specific steps for determining the sample size are as follows:

- The target group is state management officials. The author selected 05 officials from the Market Development Department and the Department of Science and Technology Enterprises under the Ministry of Science and Technology; 05 officials from the National Startup Support Center (NSSC); and each Department of Science and Technology in the regions selected 05 people for interviews. Therefore, the selected target group of state management officials consists of 25 individuals. The survey results obtained indirectly through telephone, mail, and email yielded 21 responses, achieving a response rate of 84.0%.

- The target is managers of startup businesses, and the minimum sample size is conducted as follows:

Based on the guidelines from Hair et al. (2014) regarding the minimum sample size for conducting exploratory factor analysis (EFA), we can calculate as follows:

According to the guidelines, the minimum sample size for using EFA should be 50, preferably from 100 and above. The ratio of observations to variables analyzed is usually 5:1 or 10:1. With 28 observations, we can calculate the corresponding sample size as follows: Ratio 5:1: 28 x 5 = 140 samples or Ratio 10:1: 28 x 10 = 280 samples

Therefore, according to the guidelines, the minimum sample size required for conducting exploratory factor analysis (EFA) in this case is 140 or 280 samples. This size is larger than the minimum size of 50 or 100, ensuring the reliability of the factor analysis results.

According to Green (1991), there are two cases. One is if the purpose of regression analysis is to evaluate the general fit of the model such as R-squared, F-test, etc., then the minimum sample size is  $50 + 8m$  (where  $m$  is the number of independent variables). Two is if the purpose is to evaluate the factors of each independent variable such as t-test, regression coefficients, etc., then the minimum sample size is  $104 + m$  (where  $m$  is the number of

independent variables). Therefore, the thesis is conducting regression coefficient analysis, so the minimum sample size is  $104 + m$ , where:  $m = 5$ . Therefore, the minimum sample size is  $104 + 5 = 109$  samples.

Combining both analyses mentioned above, the minimum sample size for this study is determined to be 280. Therefore, to ensure the required number of research samples, the author will use the quota sampling method with 400 questionnaires. This approach allows for a sufficient number of responses to ensure the reliability and validity of the research findings.

## 2.2. The regression model

The regression model used to analyze factors influencing entrepreneurship in Viet Nam is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon_i$$

Dependent variable (Y) is Entrepreneurial Activities

Independent variables (X) include:

X1: Human Capital (HM)

X2: Local Culture and Organizational Culture (CT)

X3: Access to Finance (FI)

X4: Relationships among Components in the Startup Ecosystem 1 ()

X5: Business Environment (GO)

## 3. RESEARCH RESULTS

### 3.1. Results of Scale Testing using Cronbach's Alpha Coefficient

The results of the scale testing using Cronbach's Alpha coefficient show that the majority of the observed variables have Cronbach's Alpha coefficients ranging from 0.6 to 0.9, indicating acceptable reliability. However, there are two observed variables with inter-item correlations  $< 0.3$ . These are observations FI3, FI6 and CO2. After removing these three variables, the results reached an acceptable level of reliability.

### 3.2. Results of Scale Validation using Exploratory Factor Analysis (EFA)

In this study, the Kaiser-Meyer-Olkin (KMO) measure is used to assess the adequacy of factor analysis, with values of KMO ranging from 0 to 1. The Principal Component method with Varimax rotation is employed, with stopping criteria for extracting factors with Eigenvalues  $\geq 1$ , and the measure is considered acceptable when the total variance explained is  $\geq 50\%$ .

The results of factor analysis for the factors influencing entrepreneurial activities in Vietnam show KMO values ranging from 0.766 to 0.863, with a significance level of 0.000, indicating that factor analysis is appropriate. Additionally, the stopping point at Eigenvalues from 2.775 to 3.317  $> 1$  and the cumulative variance explained from 66.335 to 80.978 (total variance explained)  $> 50\%$ .

Therefore, based on the preliminary assessment using Cronbach's Alpha reliability coefficient and Exploratory Factor Analysis (EFA), the measurement scales for the research concepts meet the requirements. The factors will

be further analyzed using correlation analysis and hypothesis testing through regression models.

With Entrepreneurial Activity as the dependent variable, Human Capital, Local Culture and Business Environment, Access to Finance and Relationships within the Entrepreneurial Ecosystem are the independent variables. Looking at the data table, we see that all sig values are 0.000, which is less than 5%. This indicates that the variables meet the conditions for further regression analysis. Upon examining the dependent and independent factors together, we obtain similar results with all sig values less than 5%. However, the author proceeds to run another regression analysis with all five variables to draw conclusions from the regression model.

### 3.3. Multivariate Regression Analysis on Factors Influencing Entrepreneurial Activities in Viet Nam

To perform a multivariate regression analysis to identify the factors influencing entrepreneurial activities in Vietnam, including variables such as Human Capital, Local Culture and Business Environment, Financial Accessibility, and Relationships within the Entrepreneurial Ecosystem, the model was run and the following results were obtained: The F coefficient is 135.962 and Sig is 0.000,  $R^2 = 0.641$ , indicating that the regression model is significant and the regression results are usable.

**Table 5. Regression analysis on factors influencing entrepreneurship activities in Viet Nam**

Model	Unstandar dized Coeffici ent		t	Sig.	Collinearit y Statistics	
	B	Std. Error			Tolera nce	VIF
1 (Const ant)	-0,53 6	0,217	-2,47 1	0,0 14		
GO	0,57 4	0,036	0,557 82	0,0 00	0,787	1,27 0
HM	0,13 7	0,036	0,120 3	0,0 00	0,933	1,07 2
CT	0,08 7	0,038	0,072 5	0,0 22	0,965	1,03 6
CO	0,08 7	0,036	0,079 2,40 0	0,0 17	0,875	1,14 3
FI	0,25 6	0,028	0,302 9,11 8	0,0 00	0,862	1,16 0

a. Dependent Variable: SU

(Source: Analysis of investigation results)

When examining the Variance Inflation Factor (VIF) of each factor, with values ranging from 1.036 to 1.270, which are less than 10, it indicates that the regression model does not suffer from multicollinearity issues where

the independent variables are closely correlated with each other. Thus, the model is meaningful for analysis.

According to the table of multiple regression results, all 05 factors included in the analysis have a linear relationship with entrepreneurship activities in Vietnam with a significance level of sig < 5% (P-value < 0.05). These factors are: Human capital; Local culture and business culture; Access to finance; Relationships among components in the entrepreneurial ecosystem; and Business environment factors. This implies that we have grounds to reject the null hypothesis H0 that there is no linear relationship between Human capital (hypothesis 1), Local culture and business culture (hypothesis 2), Access to finance (hypothesis 3), Relationships among components in the entrepreneurial ecosystem (hypothesis 4), Business environment (hypothesis 5) with entrepreneurship activities in Vietnam; and accept H1 (alternative hypothesis) - there is a positive relationship between these factors and entrepreneurship activities in Vietnam.

According to the results of the multivariate regression analysis, we determine the following multivariate regression equation:

$$SU = -0,536 + 0,574*GO + 0,137*HM + 0,087 * CT + 0,087 * CO + 0,256* FI$$

Therefore, we can derive the following regression equation: Startup Activity = -0.536 + 0.574Business Environment + 0.137Human Capital + 0.087Local Culture and Business Culture + 0.087Relationships among Components in the Startup Ecosystem + 0.256\*Access to Finance

This result reflects the assessment of managers on the factors influencing entrepreneurship in Vietnam. Firstly, creating a favorable and transparent business environment, where startup enterprises are supported and compete fairly, is crucial. Additionally, the mechanism for disbursing support funds is also a motivating factor and foundation for entrepreneurial activities. This is always a bottleneck and a point of concern where policymakers need cooperation among ministries, sectors, and local governments at the provincial level to create mechanisms and provide guidance to make it easier for startup enterprises to access financial resources. Human capital, as shown in many theoretical and practical studies, plays an irreplaceable role, especially for innovative business models pursued by startup enterprises. These insights will provide guidance for policymakers from both the government and businesses in developing strategies to promote support for startup enterprises in Vietnam.

#### 4. CONCLUSION AND POLICY IMPLICATIONS

Entrepreneurship activities in Vietnam have been steadily growing, in line with the global trend of entrepreneurship and the 4.0 technology revolution. The quantity and quality of startup businesses have significantly increased in recent years, as evidenced by the total investment capital attracted from domestic and foreign sources, as well as the rise in venture capital funds and startup support organizations. Vietnam's startup ecosystem is beginning

to gain a positive reputation internationally. To achieve these results, we cannot overlook the significant role of the Party and the State in encouraging entrepreneurship through key policies and directives. With the goal of identifying, analyzing, and evaluating the current situation of promoting entrepreneurship and the factors influencing it in Vietnam to propose appropriate and feasible solutions for the coming years, the study suggests several solutions and recommendations:

Firstly, in the upcoming period, Vietnam needs to quickly issue and implement new startup policies.

Secondly, support the development of startup ideas through intensified promotion and education to enhance understanding of the role and importance of entrepreneurship, innovation, creativity, job creation, and strengthen entrepreneurial education and training activities.

Thirdly, build and connect the components of the startup ecosystem by valuing and leveraging the functions of organizations within the startup ecosystem and enhancing the linkage among these organizations.

Fourthly, enhance access to financial resources to support entrepreneurship activities.

Fifthly, strengthen monitoring and supervision of entrepreneurship support activities.

Sixthly, develop a national entrepreneurial culture, intensify promotion efforts, and create motivation for entrepreneurship.

Seventhly, create a favorable, transparent, and open business environment for the entire economy, promoting deep economic integration internationally..

#### .. REFERENCES

1. Ajzen, I. (1991), "The theory of planned behavior. *Organizational Behavior and Human Decision Processes*", 50 (2), 179-211.
2. Hair. J. F. Jr. Anderson, R. E. Tatham, R. L., & Black. W. C. (1998). *Multivariate Data Analysis*, (5thEd.), Upper Saddle River, NJ: Prentice Hall.
3. 3. Nguyen Quoc Nghi, Le Thi Dieu Hien, Mai Vo Ngoc Thanh. (2016), "Fostering entrepreneurial intention among Vietnamese university students", *Journal of Business Research*, 69(11), 5319-5324.
4. 4. Nguyen Thi Phuong Ngoc (2019), Research on factors influencing the entrepreneurial intentions of students at universities in the Quang Ngai province area, PhD dissertation.
5. 5. Nguyen Phuc Nguyen et al (2020), "Studying the determinant factors of success for startups in Da Nang", *Journal of Science and Technology*, Da Nang University; Volume: 18(8), 83-88.
6. 6. Phan Anh Tu và Giang Thi Cam Tien (2015), "Entrepreneurial intentions of Vietnamese students", *Journal of Economics*, 89(3). 287-305..