

## **Current Status and Solutions for Promoting Innovative Startup in Vietnam**

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### **Abstract**

*The Industrial Revolution 4.0 has significantly improved labor productivity, upholding the role of people as the creator of core values and the focus of sustainable development. Vietnam is facing an important turning point when GDP growth has gradually slowed down in the context that natural resources are beginning to dry up. This requires Vietnamese businesses to innovate to promote economic growth and improve competitiveness. This paper focuses on clarifying the activity and policy Vietnam's innovation. Thereby to propose the solution for supporting and promoting of innovative startup enterprise in accordance with the conditions and circumstances of Vietnam in the context of Industry 4.0*

**Keywords:** *Startup, innovation, innovative enterprises, ecosystems.*

## **1. Introduction**

Nowadays, innovative startup has attracted the attention of many researchers in the world. In the last decade, the entrepreneur wave is highly active, as same as a dynamic environment. In just two short years, Vietnam jumped from the second last to third, behind only Singapore and Indonesia [1]. This is in relation to investment activity among the top 6 ASEAN markets. In a smaller economy like Vietnam, according to Vietnam Briefing, there were 123 Fintech startups in Vietnam in 2020 compared to just 44 in 2017 [2] in percentage, the number of Fintech startups in Vietnam 2020 increase 179,5% compared to 2017 showing the solid growing opportunity of startups in Vietnam. Beside, a number of research have focused on the success of innovative startup at the countries, such as Dan Senor and Saul Singer [3] that have studied innovative startup at Israel, a small country in the Middle East, has established for nearly 70 years in difficult geographical and political conditions, no natural resources and the population of only 8 million, but has achieved more than 50 times growth in 60 years.

In Vietnam, there are a number of research organizations related to innovative startup, such as National Agency for Technology Entrepreneurship and Commercialization Development (NATEC, 2017), National

Agency for Science and Technology Information (2018), National Economics University (2016) [4]. In addition, Nguyen *et al.* [5] proposed some solutions to more powerfully and effectively promote the growth of startups in the context of the Industry 4.0. Similarly, Nguyen [6] presented the solutions to promote Vietnamese creative startup. In the other hand, Dezan Shira and Associates Vietnam identified the major challenges facing the startup community in Vietnam are the lack of talented workforce, funding, lack of scale, and slow regulatory reforms [7].

The above studies have contributed positively to the startup activities in Vietnam, given the concept of innovative startup, the factors affected innovative. However, the above studies have not really clarified the solutions to support and promote the development of innovative startups in Vietnam's conditions. This paper will focus on analyzing the current status of status of innovative startups in Vietnam as same as being able to propose a number of solutions to promote the development of innovative startup in Vietnam in the context of the Industry 4.0.

## 2. Research Method

In order to get information for research purpose, the authors have collected data through research published about innovation, innovative startup enterprises and the annual report of Initiative for Startup Ecosystem in Vietnam (National Program 844) [8], Annual National Innovation Startup Day (Techfest) [9], Annual National Startup Contest [10]. In addition, the authors have inherited the results of the enterprise innovation survey, including 7.641 enterprises belonging to 44 provinces/cities of Vietnam that published 2018 by the National Agency for Science and Technology Information [11].

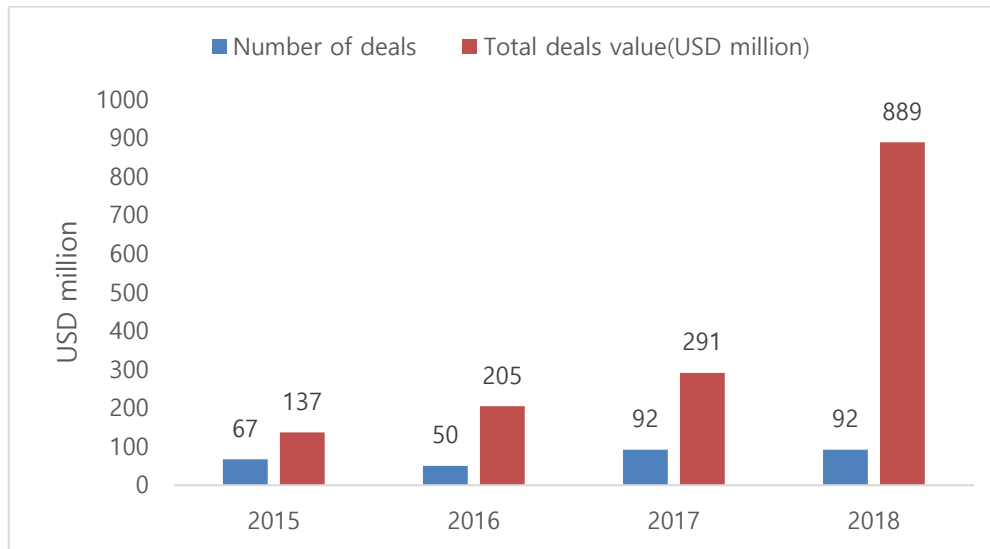
## 3. Results

### 3.1 The current status of innovative startups in Vietnam

#### 3.1.1. Firstly, the number of Vietnam's innovative startup

The creative entrepreneurship has been development in recent years, these activities cannot be without the initiatives and active support of the Government. In the United States, with seven startup ecosystems among the world's top 20 ecosystems, the US Government is not only important in establishing Silicon Valley but also continues to fund many of the basic research in the region. In China, nearly \$320 billion has been spent to provide venture capital for startup businesses. In 2015, the Government announced the launch of a \$6.5 billion investment fund to directly support the startup ecosystem.

In Vietnam, the number of startups is increasing while the investment funding for startups is also fast growing as well. The increase of startups was made possible with a good telecommunications system, the Internet, 4G, and the improvement of technology and education. Besides, the investors also expect startup's development to a certain level before they put additional capital so startup enterprises have to aggressively compete for capital. According to a report published by Topica Founder Institute (TFI) [12], the number of startup business deals has increased significantly over the years., in 2017, there were 92 deals received investment with total capital of 291 million USD (about 6,500 billion VND), up 42 per cent from 2016. Although the number of startup investment deals of both mergers and acquisitions and fundraising activities in 2018 is the same as 2017, the total transaction value tripled to USD 889 million. Among those 92 deals in 2018, 83 percent of the total transaction value was poured into the top 10 investment deals valued at USD 734 million as shown in Fig.1. Thus, this is quite concentrated in terms of value per deal. Local investors became an important source of funding in 2018, making up 55 percent of the total transaction value. Fintech and e-Commerce received the highest attention from investors.

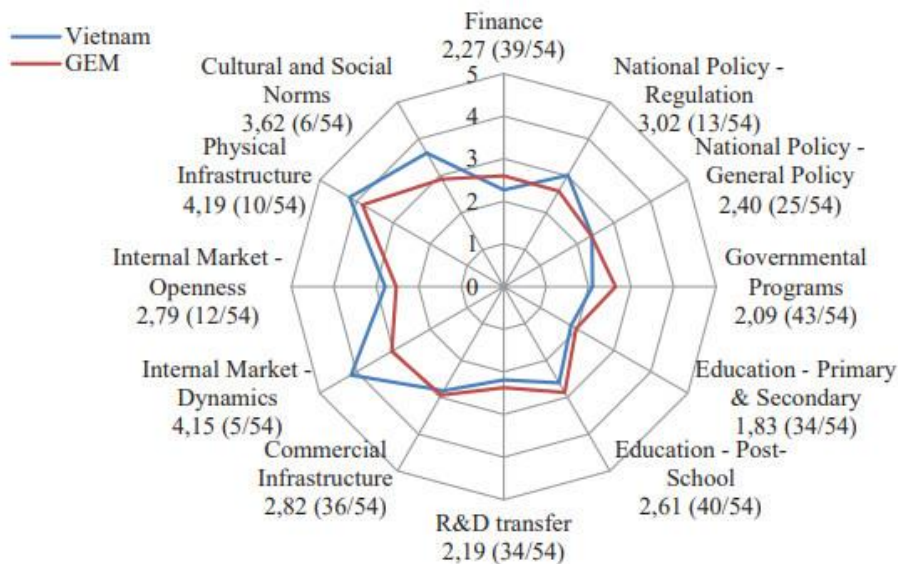


**Figure 1. Total value and number of startup investment deals in Vietnam**

Currently, Vietnam has 40 investment funds for startup innovation (by the end of 2017) with the participation of large corporations, organizations promoting business and individual investors, there have been nearly 50 common work area for the innovation, focusing mainly in 3 big cities, as Hanoi, Ho Chi Minh, Da Nang. Currently, there are about 30 business incubators and 10 organizations promoting business, increasing 10 technology incubations and 3 organizations promoting business (compared to 2016). Typical as: Business Incubators at Hoa Lac high technology; Ho Chi Minh City Hitech Business Incubator; Da Nang incubation; Youth Support Center; Hanoi Business Information Technology Innovation Incubator, etc.

**3.1.2. Secondly, Vietnam startup ecosystem**

According to GEM's report [13], the 2017 startup ecosystem in Vietnam continued to show a tendency to improve in scores in the leading indicators but decrease in some indexes as shown in Fig. 2.



**Figure 2. GEM's Global Startup Index of Vietnam**

The ranking order of the primary metrics is still maintained as infrastructure continues to be the most appreciated factor in Vietnam's startup ecosystem, reaching 4.19 points (on a scale from 1 to 5). The following two factors highly valued by experts are the domestic market dynamics (4.15 points) and culture and social norms (3.62 points). If in previous years there were usually only 3 of these indicators out of the 12 being above average (3 points), in 2017, there was an index on Government Regulations (3.02). The remaining eight indicators were rated below average by experts, in which the last three positions respectively: Technology Transfer (2.19 points), Government Support Program (2.09 points), and especially Business Education at the high school level (1.83 points). In general, if compare with other ASEAN countries, among the 12 indexes of the startup ecosystem, two indicators of Vietnam are better rated than the three countries: Indonesia, Thailand, and Malaysia, namely: Infrastructure and Culture and social norms. However, six indexes are not competitive than all three ASEAN countries: finance for business, Government regulations, Government support program, Education in business at a general level, Post-secondary business education, and technology transfer.

The period 2017-2020, Vietnam's innovation startup ecosystem has gradually been formed and developed, the actors in the ecosystem have participated relatively actively. The legal system to promote innovative startups is quite complete, supporting the activities of businesses in this field. According to experts, Vietnam's innovation startup ecosystem is thriving thanks to the expanding scale of the national economy. In 2020, the market in Vietnam is considered a safe destination, chosen by investors and investment funds. In 2021, the organizers of Techfest Vietnam recently announced the mapping of Vietnam's startup ecosystem with the central role of startups as shown in Fig.3 [9].



**VIETNAM STARTUP ECOSYSTEM 2021**

Figure 3. The first map of Vietnam's startup ecosystem

Components appearing in the mapping are selected based on several criteria:

- There are many contributions to the innovation startup community.
- Actively and collaboratively with Project 844 in building a national innovation startup ecosystem.
- Ensure diversity in industries and fields.

The center map is the startup area including 30 typical businesses that have made significant progress in recent years. Startup support organizations are divided into 5 groups: Capital, Startup Support, Service, Networking, and Talent.

### **3.1.3 Evaluation of Vietnam's innovative startup activities**

Vietnam's innovative startup activities have initially brought positive impacts on economic and social development through creating favorable legal corridors. Policies and measures to support innovative startup are all derived from the needs of businesses and society. On that basis, the Vietnam's Government planned programs, projects and projects to promote appropriate creative startup activities based on the approach of national innovation system. In order to support association and communication for creative innovation startups, events and startup activities in period 2017-2020 are regularly held, spread across the country, and are increasingly scaled up and enhanced in quality. Some typical activities are listed as follow: Startup competitions, Startup Festival (TechFest), Agriculture Startup Forum, Nurturing Vietnamese businesses, Vietnam Tourism Startup [14]...

In addition, in the innovative startup ecosystem, the communication system acts as a platform to support startups. The number of television programs and websites specializing in creative startups and creative startups has been increasing in the past year. For the press, there are a lot of websites about entrepreneurship or a different type of entrepreneurship highlight the efforts of state agencies in promoting the culture of entrepreneurship, local businesses the frequency of news about Entrepreneurship in the press increases providing a rich source of information for startups.

## **3.2 Advantages and Disadvantages of innovative startup in Vietnam**

One of the best advantage is that Vietnam's business investment environment is very favorable for technology startups to develop. The Vietnam's Government from central to local level have issued many policies to support and promote startup innovation activities. Some typical policies such as:

– Decision No. 844/2016 / QD-TTg on supporting the development of innovation ecosystems to 2025. Accordingly to 2025, Vietnam will support the development of 2,000 innovative startup projects; supporting the development of 600 innovative startup enterprises; 100 enterprises participated in the project called for investment capital from venture capitalists, mergers and acquisitions, with an estimated total value of VND2,000 billion.

– Decision No. 1665 / QD-TTg dated 30/10/2017 on approving the project “Supporting students to startup until 2025”. Accordingly to 2025: continue to promote propaganda and education to raise awareness students with knowledge and skills about innovative startup; strengthening facilities for centers to support startup students in universities, institutes, colleges and intermediate schools; 100% of universities, institutes, universities, 70% of colleges and intermediate schools have at least 05 ideas and startup projects of students who are supported with investment from the source fit or connect with businesses, venture capital funds

– Decision No. 939 / QD-TTg dated June 30, 2017 on approving the project “Supporting women to innovative startup in the period of 2017–2025”. The objective of the project is to raise the awareness of women on the policies of the Party and the State on innovative startup, promoting the realization of business ideas, contributing to the implementation of national goals on enterprise development and the National Strategy on gender equality.

Beside a lot of advantages, difficulties which startups are facing as follows:

- Lack of startup incubator: until now, the number of startup incubators in Vietnam is still not many, the level of incubators is still uneven, it is only a collection of startups to interact, thereby creating a channel for funds and investors in the future, incubation is not much...

- Difficulty is how to form a working group. In Vietnam, talented workers are attracted to work for big technology firms, so it is hard to find tech talent to found a startup group, which often needs 8-10 people taking charge of technology work. Especially, group leaders must work well enough to maintain the group, because in the beginning, there is hardly any income.

- Many innovative startups lack capable staff to do sales or marketing, and thus limit the chance for their products to access the market. In the other hand, the lack of human resources and market connections are major obstacles for startups in Vietnam.

- Lack in funding, attracting investment capital for creative startups.

#### **4. Solutions for promoting innovative startup in Vietnam**

To promote the innovative startup enterprise adapting with the objectives of the Vietnam's Economic and Social Development Strategy; at the same time, on the basis of flexibly applying the experiences of the number of countries around the world about startup businesses. Therefore, to promote the startup business in Vietnam in the coming period in response to the rapid and strong impact of the Industry 4.0, some key solutions could be offered as follows:

##### ***4.1 Completing the policy system and legal environment***

First of all, it is necessary to build a national innovation startup strategy: An effective national strategy, making the most of the country's resources, will be an important foundation for developing a startup ecosystem. Secondly, focus on improving and strengthen the business environments will create for innovative startups many opportunities to develop in the domestic market and integrate internationally. Hence, it is important to improving and archiving a better business environment, removing sublicenses: improving the business environment is one of the most important conditions to support innovative startups in the national startup strategy.

##### ***4.2 Promoting knowledge improvement activities for startups***

Implementing training programs, fostering advanced and specialized knowledge about creative innovation startups in specific fields (education, health, tourism, agriculture, and technology in the context of the Industry 4.0). Furthermore, improve the quality of innovative startup enterprises through training and fostering advanced knowledge about business models, fundraising methods, and other necessary knowledge, skills, and tools for innovative business in specific fields.

##### ***4.3 Promoting activities to support creative innovation***

Promote the provision of some types of consulting services (legal, investment, finance, tax, accounting, enterprise establishment and dissolution, intellectual property, standards- metrology-quality, marketing, technology transfer, scientific and technological information ...) to the innovation enterprise. To express more support to startups environment, it would be ideally to organize and build an advisors network domestically and internationally. Furthermore, it needs to be focus on forming new linking platforms, new creative startups support institutions, new resource connection spaces, new opportunities to get new achievements; quickly form and closely link the national network of innovative startups, strong links with the international community

##### ***4.4 Developing innovative startups in universities and research institutes***

Developing intensive training programs on entrepreneurship in training institutions, especially the university level; encourage entrepreneurship, innovation, scientific and technological research from high

school levels, universities, and research. It is ideally to deploying programs to support commercialization of research results, attracting not only startup students but also scientists and researchers at universities, research institutes set up eco-skills enterprises. Set up a team of support staff, advise startup students, set up innovation centers in universities to support students' startup projects, connect startup teams with enterprises, investment funds, and international incubators. Organizing to bring potential startup groups abroad to exchange, learn from experience and directly participate in international fundraising activities and step to step gaining government's special attention. Beside, it is necessary to motivate the formation of ideas through entrepreneurship and innovation competitions in universities. The idea of starting a business can be formed through training programs, through entrepreneurship competitions, through the passion of students, faculty, scientists in the school. This activity has had a strong and widespread development in recent years. The objective of organizing innovative startup competitions is not only to exploit the results of scientific research and intellectual property of students, lecturers and scientists in universities and colleges but also promotes the process of connecting startup teams across the country to call for attract investment.

#### ***4.5 Strengthen financial support***

Focusing on capital structure for innovation from the government support, from venture capital funds, credit institutions and other capital sources. Moreover, in order to effectively implement policies to support innovative startup enterprise, it is necessary to review the sources of support for startup enterprise, helping startup enterprise remove difficulties towels, stimulating the creation of creative ideas, supporting the process of conducting research and technology development with fitting market demand. In the other hand, mobilizing support from the private sector by coordinating ministries and agencies to organize seminars and regular exchanges with corporations, domestic and foreign companies to attract investment in startup ecosystem.

## **5. Conclusion**

In the current context of integration and development, entrepreneurship and business creation play an essential role in economic development, solving global difficulties and challenges as well as sustainable development of a nation in particular and the world in general. Promoting the development of innovative startups has become one of the important policy problems in the socio-economic development strategies of many countries today. In Vietnam, the startup of innovation has become an important content in the nation economic development strategy, is concerned and developed by the government, with the aim of creating a favorable environment for promoting and supporting the process of formation and development of the startup type. Vietnam is participating in the dynamic startup wave worldwide but the innovative startup activities in Vietnam are still young while there is great potential for development. In order to strongly promote startup enterprises, the Vietnamese government needs to focus on connecting the components of the startup ecosystem which are government policies, legal framework, human resources, and human resources. amount of labor, funding, nurseries and speeding systems.

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