Promoting the Innovative Startups in Vietnam through the Network Connecting Startup Ecosystem Actors

Nguyen Thi Thu Ha and Vu Thi Thu Huyen

ABSTRACT

Vietnam is currently affirming its position in the global startup ecosystem map with the 59th ranking in the world. The great achievements in recent years have shown the spirit of "start-up nation", which is the result of the efforts of the entire political – economic – social system of the country. However, Vietnam's innovative startup ecosystem still has many difficulties and is still loose in linkage and cooperation between components and actors of the startup ecosystem. This article focuses on analyzing the status of linkages and cooperation between actors in the startup ecosystem such as state managers, investors, researchers, and trainers, etc. at the same time learning experiences from successful countries in start-up, on that basis, proposes a number of solutions to develop Vietnam's innovative start-up connection network.

Keywords: Entrepreneurship, Innovative Startup, Startup Support Network, Startup Ecosystem, Vietnam.

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I. INTRODUCTION

International experiences and practices show that, in order to maintain sustainable and long-term economic growth and improve competitiveness in the context of globalization, it is necessary to move towards innovating the growth model based on exploiting brain resources, intellectual property, science and technology, building and developing new business models, products and services. One of the pillars of such activities is innovative start-ups.

In recent years, the wave of startups is growing stronger in Vietnam. The spirit of "start-up nation" is the driving force for the start-up and development of businesses. According to the Business Registration Management Department (under the Ministry of Planning and Investment), in the period 2016-2019, Vietnam has over 126,000 newly established enterprises each year, an increase of 1.6 times compared to the period 2011-2015. According to statistics of Echelon Magazine (Singapore), Vietnam currently has over 3,000 innovative start-ups; nearly 50 start-up incubators and business promotion organizations are operating across the country; and about 40 venture capital funds operating in Vietnam. According to the Australian Government's Trade and Investment Agency, Vietnam is ranked 3rd in Southeast Asia in terms of the number of start-ups, and in the top 20 economies with the leading spirit of entrepreneurship. However, Vietnam is among the 20 countries with the lowest ability to implement business plans, only about 3% of startup projects are successful [1]. This shows that the gap between aspiration and concrete action is huge. More institutional and political support is needed to close this gap.

Currently, Vietnam's innovative startup ecosystem still has

many difficulties, barriers and less competition compared to other countries in the region. The main reason comes from the loose connection and cooperation between elements and actors of the startup ecosystem. Therefore, in order to develop a startup ecosystem, including the close linkage of activities of the actors and elements, ensuring to provide businesses with the best conditions from human resources, investment capital, science and technology, institutions and policies to support successful and effective start-ups, the establishment and development of an innovative start-up support network in Vietnam is essential.

II. METHODOLOGY

This study used the method of collecting secondary documents from legal documents, decisions of the Government and agencies of Vietnam on the issue of Entrepreneurship. In addition, the study reviewed a number of related studies to present models of the national innovation start-up system, pointing out the experiences of a number of successful countries in developing the start-up support network as well as the data on these issues.

III. RESULTS AND DISCUSSION

A. Policies on Establishing Start-up Support Networks

Aims to build a network to support startups in general as well as innovative startup in particular, Vietnam Government, ministries and agencies and local governments have issued many policies which have content and goals to support startup activities, strengthen the connection between actors in the startup ecosystem.

TABLE I: POLICIES AND PROGRAMS ON THE SUPPORT
FOR INNOVATIVE STARTUPS

Policies and programs on the support for innovative startups	Policies on supporting market research, promotion, and cooperation in research and application of startup results between domestic and foreign entities
<ul style="list-style-type: none"> - Decision No. 844/QD-TTg dated May 18, 2016 of the Prime Minister approving the project "Supporting the national innovation startup ecosystem until 2025" [2]. - Decision No. 1286/QD-BNV of the Minister of Home Affairs on the establishment of Science and Technology Business Startup Fund dated 16/12/2014. - The program to support small and medium-size enterprises in innovation of the small and medium size Enterprises Development Fund - Program on Youth Entrepreneurship for the period 2016-2021 [3]. - TECHFEST program. 	<ul style="list-style-type: none"> - Decision No. 72/2010/QD-TTg dated November 15, 20 by the Prime Minister promulgating a new Regulation on the formulation, management and implementation of the National Trade Promotion Program. Support enterprises to innovate, export and expand markets in key markets, new and potential markets. - Law on Technology Transfer 2017 (Law No: 07/2017/QH14), effective from 1/7/2018, supplementing a mechanism to support and encourage enterprises to apply and innovate technology; amending regulations on promoting commercialization of scientific research and technological development results. - Connecting to investment funds to support startup projects such as IDG, Dragon Capital, Spring; participate in international cooperation activities through international innovation competitions. Especially effectively cooperating with the scheme on Commercialization of technologies according to the model of Silicon Valley (US) of the Ministry of Science and Technology (Vietnam Silicon Valley - VSV) to design the models "innovative startup support" according to international standards, training - consulting organization.

(Source: Author's synthesis, 2021).

Decision No. 844/QD-TTg dated May18, 2016 of the Prime Minister was amended and supplemented the Clause 4, Section III, Article 1 (activities of the Scheme). Specifically, forming and supporting the development of the National Innovation Startup Network with the contents of funding support for the following activities: Building and developing a network of innovative start-up organizations and individuals creatives, investors, experts, consulting, coaching, training and communication organizations; providing services for innovative start-ups locally, regionally and nationally; participate as a member in the operation of regional and international networks, attract international resources to support domestic innovative start-ups. Cooperating with international experts and organizations in training and coaching; the media; organizing scientific seminars, on innovative start-up; consulting on technology transfer, investment, market development; research, survey, report on assessment, consult on improving institutions and policies to innovative start-up support; inviting Vietnamese successful overseas experts, advisors to work, regularly consult, provide services to service zones focusing on supporting innovative start-ups at the scope of industry, region and locality [2].

Following programs and policies on innovative start-up supports, and at the same time strengthening the connection between actors in the startup ecosystem, Vietnam has built a network of consultants and advisors on innovative startup

consulting in many different specialties to advise and train to perfect business models, market orientation for products, provide personal investment capital (angel investors), etc. for potential projects; Supporting to directly and indirectly connect more than 6,000 startup projects to help develop business ideas. This shows the Government's commitment to support for start-ups; at the same time, it shows the need for more participation of angel investors, private venture capital funds, etc. to further raise this ratio. However, besides the above advantages, innovative businesses also face some difficulties such as: some necessary support contents for start-up businesses have not been regulated: According to Decision 844/QD-TTg, there is no regulation to hire consultants for individuals, groups of individuals, and start-up businesses, but only support to hire experts to deploy innovative startup training courses on innovative startup, training and coaching on startup at a number of educational institutions, incubators and business promotion organizations.

Some support contents are regulated under Decision 844/QD-TTg, but there is no basis for formulating the support funding norms, such as: Partial supporting for repair costs and application of preferential fees for infrastructure exploitation at convenient locations for providing innovative start-up support services; Partial funding supporting for upgrading physical and technical facilities of some incubators and promoting organizations businesses, organizations providing shared equipment for start-up groups. Partial funding support for innovative start-ups to pay for labor and use marketing services, advertise the products and services; payment, finance; legal consultant, investment, establishment of science and technology enterprises.

B. International Experiences in Developing Start-up Support Networks

To obtain great achievements in entrepreneurship, develop both of quantity and quality of entrepreneurship, many countries around the world have built up the ecosystem startups with conditions very favorable, with the close links between the elements that make up the start-up support network.

C. Startup support networks in Vietnam

1) The connection in the national innovation startup ecosystem

The national innovation system is a system consisting of organizations/agents, institutions and especially the interactions between actors in the system for the common purpose of developing and disseminating innovations. Besides the system at the national scale, there are also specialized innovation systems at different scales such as sectoral, regional, and local innovation systems (Fig. 2).

Basically, a national innovation system includes factors of supply and demand, their interactions, and factors affecting through the institutional system (Fig. 3). An innovation ecosystem simulates the economic dynamics of complex relationships formed between actors or entities with the functional goal of facilitating technological and innovation development. Here, the actors include physical resources (funds, equipment, facilities...) and human resources (students, lecturers, staff, industrial researchers, industry representatives) ...) form the entities that participate in the

ecosystem (e.g. universities, colleges, business schools, enterprises, venture capitalists, centers of excellence, support

organizations, business sponsors, funding agencies, policy makers, etc.).

Fig. 1. International experiences in developing start-up support networks (Source: Author's synthesis, 2021).

Fig. 2. Model of national innovation system [4].

Fig. 3. National Innovation Ecosystem [6].

In order to strengthen the close connection between the actors in the innovation system, the innovation start-up support networks nationwide and in localities. Specifically, over the years, the connection and support in Vietnam's innovative start-ups has achieved certain achievements. According to Topica Founder Institute (TFI)'s 2018 annual report on startup investment, in 2018 Vietnamese startups received \$889 million in investments in 92 deals with investment funds in Vietnam and abroad, 3 times higher than in 2017 (same number of deals) and 6 times higher than in 2016 (TFI, 2019). Vietnam's startup ecosystem is growing and creating many conditions for innovative businesses to have the opportunity to access resources [5].

TABLE II: STARTUP ECOSYSTEM IN VIETNAM [5]

Elements	Quantity
Number of venture capital funds (Including from support to stages: initiation, Series A, Series B)	40
Amount of investment capital	7 tỷ USD
Number of start-up incubators and business promotion organizations	40
Co-working areas	70

2) Linkages between government agencies, research institutes, universities, and the private sector

For many years, the number of research results of institutes/universities reaching enterprises to help enterprises innovate technology, improve product quality and competitiveness in the market is still very modest. Vietnam currently has less than 10% of research results, only about 2,000 results with potential practical applications. The report on the survey results of science and technology activities at 149 higher education institutions in the period 2011-2016 by an independent research group presented at the national conference showed that the university sector plays an important role in the development of science and technology which contribute 50.08% of the total number of science and

technology human resources of the country.

According to statistics, each year, the number of contracts to transfer ownership and use rights is only about 20-30 contracts. Even if the exploitation is under agreements between research groups and enterprises without transfer contracts, the number of successful exploitations of research results is only in hundreds. Compared with the potential number of about 20,000 research results, 13,000 technological innovation needs per year, it can be seen that the commercial exploitation of domestic research and invention results is too small compared to the potential.

Through technology transfer, partners (for example, between enterprises, between enterprises and research institutions, between developed and developing countries) can jointly benefit from accessing, transferring, or buying and selling technologies suitable to their needs and development strategies. In Vietnam, enterprises in general and private enterprises in particular have not really paid much attention to research and development (R&D) in the field of science and technology and technology development. This is reflected in the implementation of policies and regulations that either encourage private companies to spend 10% of their pre-tax revenue on enterprise R&D activities, or the enterprise's investment in innovation activities of new technologies, access to new technologies in production and business. According to the survey results, except for a few large enterprises, especially those operating in the field of information technology, the vast majority of enterprises do not pay much attention to investment in R&D. Therefore, the total social investment in science and technology is currently less than 1% of GDP, this figure in developed countries is 3-4%. Meanwhile, Resolution 20/NQ-TW on developing science and technology to serve the cause of industrialization and modernization in the context of a socialist-oriented market economy and international integration requires must invest in science and technology at least 1.5% of GDP in 2015 and 2% in 2020.

3) Limitations in the startup support networks

The connection between Training - Research - Enterprise to trade in knowledge is still very weak. Currently in Vietnam, there are a number of universities that develop their own incubators and reserve land for business incubation, which is a good sign. However, the do-it-yourself mindset leads to inefficiencies for potential start-up projects, due to the lack of participation of businesses, investment funds, professional units, etc.

The loose connection between the university and the market leads to lecturers - an important link between schools and businesses - lacking practical contact with the market and business. Therefore, lecturers are limited in inspiring students to start a business and support to connect resources so that business ideas in students can develop far. The situation is similar for research institutes.

IV. CONCLUSION AND RECOMMENDATION

The national startup ecosystem in Vietnam has increased in both quality and quantity; in which the amount of investment capital for startups has grown continuously, the number and quality of innovative start-ups is increasing. According to the statistics of Echelon magazine (Singapore), Vietnam currently has more than 3,000 innovative start-ups (most of them are in the field of information technology and have new technologies). However, the development of innovative start-ups in Vietnam still faces many difficulties and barriers such as: the quality of human resources is not high, lack of investment capital for the development of innovative start-up models, lack of close links between actors in the startup ecosystem. Therefore, in the coming time, Vietnam needs to have effective solutions to develop innovative start-up support networks locally as well as nationally. Some of the solutions proposed by the research include:

- Strengthening the connection of innovation networks in country and abroad, intellectual hubs play a core role in smart and sustainable cities. At the same time, Vietnamese scientists and technology experts are encouraged to return to their homeland to start a business, create, work, invest, do business, share, and enjoy the achievements and core values of Vietnam.

- The Government and the People's Committees of the provinces and cities should focus on encouraging and promoting innovation, creating favorable conditions for small and medium-sized enterprises to promote their initiative and creativity, improve management capacity, develop science and technology and human resources, expanding linkages with other types of enterprises, increasing business efficiency and competitiveness in the market; develop production and business, create jobs and improve the lives of workers.

- Promoting the role of universities and research institutes in strengthening the human capital foundation for innovation, especially linking applied research activities with business needs and the needs of the economy. Strengthening the cooperation between universities, research institutes and enterprises is carried out in various forms such as: (i)

Research support (including finance and scientific equipment); (ii) Research collaboration through the establishment of research centers associated with business support; (iii) Through communication activities (both formal and informal), engaging companies in university programs is the main mechanism for technology transfer; (iv) Technology transfer, activities based on research cooperation with businesses, in which universities and research institutes are the main information resources.

- Promoting the education and training activities. The goal is to create a spirit of entrepreneurship - innovation - creativity in schools, universities and colleges need to have many practical study and work programs, provide knowledge and inspire career mastery, work self-mastery for students. Developing entrepreneurship in the university, it is necessary to create a common forum for students of different disciplines, there must be a place for them to exchange, meet and exchange ideas. The school has conditions to create a favorable environment for students to participate in innovation, creativity, and scientific research activities, organize contests of startup ideas, create connections between groups to form new startup projects.

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