SOLUTIONS TO PROMOTE ENTREPRENEURSHIP AND INNOVATION IN INFORMATION TECHNOLOGY IN VIETNAM

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ABSTRACT

Entrepreneurship has been enlightened by the natural law of economic development, stemming from Vietnamese people's creativity and entrepreneurial spirit. But it cannot be "locked" due to the lack of necessary nudges, which are financial and credit instruments. Some foreign investment funds have grasped this trend and implemented very successful premium investment services, creating big names in the Vietnamese market. In recent years, the State has gradually recognized several major roles of small and medium-sized private enterprises in general and entrepreneurship in particular for economic development. To promote strong and sustainable development, the State needs to develop appropriate policies and legal regulations quickly. At the same time, there are specific programs to help form and create new businesses, including, most importantly, establishing financial mechanisms to participate with private investment in startups, according to the model that many countries have done very well. Therefore, students propose to research the topic of "solutions to promote innovative entrepreneurship in the field of Information technology in Vietnam".

Keywords: Information technology, Science and Technology, Startups.
INTRODUCTION

Vietnam's economic development in the past years has seen the formation and dynamic development of the startup movement. Many factors lead to entrepreneurship as a new force in the economy. It may include the creativity and entrepreneurial spirit of Vietnamese people; the development of the market when Vietnam becomes a middle-income country; the explosion of technology and its use, especially information technology; the participation of investment funds and organizations supporting entrepreneurship in general and science and technology enterprises in the field of information technology in particular Private package.

For more than a decade, the State has had several funds to support the commercialization of research and implementation results by public and private organizations, such as the National Fund for Scientific and Technological Development (NAFOSTED), the National Fund for Technological Innovation (NATIF). These funds contribute greatly to new businesses by applying research results and technology implementation. However, none of the State's funds has the nature and mechanism to operate as an insurance investment fund - the essential factor for starting a technology business in today's economic conditions.

In this same period, successful startup activities of science and technology enterprises in Vietnam depend on the financial resources of foreign insurance investment funds. The State, as mentioned above, support organizations, with the principle of "safeguarding the world", plus complex mechanisms and procedures, have not been able to have an effective impact on Vietnam's startup movement, which is by nature a risky investment with a high-risk ratio, or very high as a trade-off for large profits.

The role of the State in the startup movement in Vietnam has not been clear so far. The State does not yet have laws governing the formation and development of enterprises in the new method, such as the Vietnam insurance investment fund, the recognition of the value in money of intangible assets in the establishment of enterprises, or the protection of intellectual property rights effective for enterprises. The role of the State is also not well seen in the financial sector, especially for a business startup in Vietnam and bank credit for startup activities of science and technology enterprises.

Status of Startup Activities of Science and Technology Enterprises in the Field of Information Technology in Vietnam

Currently, Vietnam is emerging as an attractive insurance investment market with the following advantages:

- Vietnam is much more convenient than many ASEAN countries because of the fast growth of the Internet and mobile phones, while the young population has a high propensity for consumption and easy access to new services. Vietnam is the only country in the world in the growing group of countries with more than half its population Internet access. With a population of 90 million, Vietnam has more than 128 million mobile subscribers, 47.3 million internet users, the internet usage rate is 50% of the total population, the total number of mobile phone Internet users is 39.7 million, and the percentage of mobile phone internet users is 42% of the total population (Bui Thien Son, 2009).

- Business and financial indicators of science and technology enterprises achieved good results. Some science and technology enterprises are recognized by international quality certification organizations and qualified to export goods to key markets such as the EU and the United States.
Many science and technology enterprises have been interested in establishing and protecting intellectual property rights for scientific and technological results and products created by themselves.

The number of students and young people starting up in the information technology industry (information technology) accounts for a large proportion due to meeting the needs of society based on technology. Moreover, compared to other industries, it is not very difficult to find startup opportunities in this sector because it is a potential sector which the Government has facilitated.

As of November 2021, the country has 204 enterprises with Certificate of Science and Technology Enterprise. These businesses operate primarily in priority technology areas under the Vietnam Science and Technology Development Strategy 2015 - 2025, including Information and communication technology, biotechnology, new materials technology, machine building technology - automation, and environmental technology.

In addition to 204 science and technology enterprises as announced today, there are over 400 high-tech enterprises operating in Vietnam's current high-tech parks (Quang Trung Software Park - Ho Chi Minh City, Ho Chi Minh City High-tech agricultural zone Ho Chi Minh City, Ho Chi Minh City Hi-Tech Park Ho Chi Minh City, Hoa Luc Hi-Tech Park,...) in accordance with the provisions of the High-tech Law, the Information Technology Law; 34 enterprises are certified high-tech enterprises by the Ministry of Science and Technology, newly established enterprise from the investment project of producing high-tech products - located outside the industrial zones in accordance with the provisions of Circular No. 32/2011/TT-BKK of Science and Technology dated November 15, 2011 regulating the determination of criteria for high-tech application projects, based on investment project in production of high-tech products and appraisal of dossiers for issuance of certificates of high-tech application activities, newly established enterprises from investment projects in production of high-tech products, high-tech enterprises; 1,400 enterprises in the field of information technology.

Table 1

<table>
<thead>
<tr>
<th>No</th>
<th>Type of Science and Technology Enterprises</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The enterprise is granted the Certificate of enterprise of science and technology (according to Decree 80 and Decree 96)</td>
<td>204</td>
</tr>
<tr>
<td>2</td>
<td>The enterprise is granted the Certificate of hi-tech enterprise, and the enterprise is outside the hi-tech zones by the regulations of CIRCULAR</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>Businesses in High-Tech Zones</td>
<td>400</td>
</tr>
<tr>
<td>4</td>
<td>Enterprises in the field of information technology</td>
<td>1400</td>
</tr>
<tr>
<td></td>
<td><strong>Total:</strong></td>
<td><strong>2038</strong></td>
</tr>
</tbody>
</table>

In addition, 818 enterprises meet the criteria of science and technology enterprises and need to be certified mainly in Hanoi and Ho Chi Minh City. Ho Chi Minh City (by Hanoi and Ho Chi Minh City Software Association) Branch).

In Vietnam, 2016 has been identified as a five startup country. From 2017 to 2020 is considered...
the golden period for startups; however, the number of successful Startups accounts for a very small proportion.

According to statistics, our country now has about 1,500 Startups. According to the density of startups per capita, Vietnam is more than other countries such as China, India, and Indonesia. There are about 2,100 startups in Indonesia, 2,300 in China, and 7,500 in India. It is worth noting that the number of technology Startups is significantly superior to other Startups in the field. Vietnam is also not out of that trend. Many startups in Vietnam also choose for themselves in the direction of technology (Tech Startup). The characteristic of technology Startups is that they do not require too much initial capital compared to other industries and can easily learn from previous models worldwide.

Recent statistics reflect a sad situation, which is that Startup Vietnam was born a lot, but it failed a lot. Specifically: only 3% of Startup Vietnam is a real success, i.e. satisfies one of the following criteria: valued at US $10 million or more; revenue of US $2 million or more; has 100 employees; has called within two years or has sold the company at a good price. The survey results show that the average age when they start a business is 28.8; 78% used to hire or start a business that failed in 2 previous companies; 45% studied or worked abroad before returning to the country to start a business; the average time spent on Startup to be successful is 5.7 years, and it will take longer to become a company worth hundreds of millions of USD, and 100% all learn and localize from similar models that have been successful abroad.

**Some Limitations of IT startups in Vietnam today**

A surprising number, up to 80% of Vietnamese Startups do not have the opportunity to celebrate their 2nd birthday; they either die or only exist as a "Walker" company. So what is the reason why the Vietnamese Startups failed?

**Mistakes in Steps**

Many young people often think of the two phrases "Startup" and "Entrepreneur" as both meaning "an entrepreneur." However, they are not one. "Entrepreneur" is an individual or group of people who initiate themselves and own a business because they do not like to work for it. Meanwhile, the individual or company must trade the product with the idea to be considered a Startup.

Many Vietnamese Startups hasten to start as soon as they come up with an idea but have not clearly defined a business goal. In many cases, when a Startup calls for capital, investors jump in, but the two sides disagree on the value of the pursuit, while these Startups often stand in the position of "asking for capital" rather than "calling for capital", which forces them to indulge investors.

"Failure to pursue common values and agree with goals between business owners and investors is one of the most common causes of failure," says Robert Tran, with years of experience advising large corporations. It is also the answer to the question of many Startups in Vietnam: "Why is the funding still failing?"

Finally, implementation is the most important step, but it is the "failure" of many Startups. There are many businesses that, after completing all the strategies, are unable to carry out and maintain the business.

**Lack of Legal Knowledge**

The fact that founders are not yet well aware of legal issues is also one of the causes of many Startup failures. Many young founders are only interested in the development of Startups...
without paying much attention to the risks associated with the wrong type of business. As a consequence, the Startup is suspended, missing good opportunities; at the same time, causing a rift in the relationship between the founders due to a conflict of interest in the capital, property ownership, or the Startup must compensate for the contracts signed with partners. In addition, the issue of copyright and intellectual property should also be brought to the attention of the founders. It is even more important in Vietnam when copyright infringement, counterfeit goods, and counterfeit goods are still causing pain in public opinion, and there is no effective remedy. It will be an important legal basis for the Startup to obtain protection from the law when necessary to protect brand interests, avoiding unfortunate consequences for startups.

When choosing an e-commerce type, Startups should pay attention to the terms of use for users when they visit Startup's website or social network. Because otherwise, Startups may have troubles like people may use Startup to propagate untruthful information and influence third parties.

Lack of terms of cooperation and business methods is a common shortcoming among young Startups. Because founders often connect with the passion in the early stages, they think: Members only need to contribute capital and energy to make the Startup grow. These agreements are often sketchy and can only be seen as civil agreements. But until the startup project is well developed and profitable, the founders will have conflicts regarding capital contribution, capital use, property ownership, and benefit sharing. At that time, the oral agreements did not have a sufficient legal basis to resolve the heightened internal conflicts, affecting the Startup's survival.

Many Startups are young because they do not have enough awareness of legal issues, thus creating unwarranted conflicts of interest when problems arise. Slightly, it will take effort, time, and expense to resolve the dispute. Startups lose good, loyal employees and may even face events affecting the business's reputation.

**Barriers to Administrative Procedures**

However, issues such as administrative procedures, business conditions, child licenses, and difficulty to divest after a period of investment in Vietnam always make foreign investors "sagging". The number of domestic startup projects receiving foreign investments stops at a fairly "modest" level.

According to statistics back in 2016, the total value of an investment in Startups in Southeast Asia was about $1.5 billion. But in Vietnam, it is just under $100 million; 80% of the money remaining goes to Indonesia and Singapore because their policy of supporting Startup is much better than in Vietnam. In Singapore, only one week to complete the procedures and disburse the investment capital. In Thailand, it is one month, but in Vietnam, it usually takes from 8 months to 1 year. Because to have a dossier approved to disburse capital, investors must provide sufficient information about investors, including passports of legal representatives, business registration papers, and company charter. All must be translated from a foreign language into Vietnamese and notarized. Completing the above documents takes a week, and then it takes a few more months to get the signatures of all parties involved. That's for one investor; if there are three investors in three different countries, maybe it will take a year.

For example, in the field of e-commerce, if a foreign investor participates, it is necessary to apply for a license, the opinion of the Ministry of Information & Communications, the Ministry
of Culture, Sports & Tourism, the Ministry of Industry and Trade. In the case of Grab and Uber, the two companies also have to ask for more advice from the Ministry of Transport. Even more, Startups are making pauses to get more licenses.

With such factors, it is clear that starting a business in Vietnam is not easy. In the coming time, building legal corridors and startup ecosystems is essential to support the new Startups coming into play. At the same time, the experience from the previous people will help young enterprises avoid "car crashes" and unwarranted failures.

**Some Solutions to Promote Startup Activities for Science and Technology Enterprises in the Field of Information Technology**

Currently, Vietnam is emerging as an attractive insurance investment market with the following advantages:

- Vietnam has many advantages, such as the Internet and mobile phones growing relatively quickly, while the population is young, has high consumption propensity, and has easy access to new services.

- Business and financial indicators of science and technology enterprises achieved good results. Some science and technology enterprises are recognized by international quality certification organizations and qualified to export goods to difficult markets such as Europe and the United States.

- Many science and technology enterprises have been interested in establishing and protecting intellectual property rights for scientific and technological results and products created by themselves.

In the study, the author would like to provide some policy solutions to promote entrepreneurship for R&D enterprises in the field of information technology as follows:

**Building Entrepreneurship of Vietnamese People in the Integration Period**

Currently, the Vietnamese startup environment is very young compared to the world. However, we still have much potential to rekindle entrepreneurship strongly: still in (the end of) the golden age population, the developing economy, more than half a million active enterprises, and hundreds of universities and research centres operating all over the country. However, the long-standing problem is that we lack basic solutions for innovation of education; lack mechanisms and policies to support entrepreneurship from authorities at all levels; especially lacking answers to create a culture of entrepreneurship, a culture of accepting "failure" for people, especially for young people.

First, it is necessary to form an entrepreneurial spirit for young people from the moment they sit on the school chair. Lessons from developed countries worldwide show that the will of human self-reliance must be forged in the education system and society from an early age. Therefore, the reform of the education system from high school to university in the direction of linking education – training with practical activities, enhancing the spirit of ownership, and promoting the startup culture is a prerequisite for each person to form their own will to establish a career. At the same time, it is necessary to develop specific programs and roadmaps to raise awareness and arouse entrepreneurship for people in general in all social institutions.

Secondly, there should be consistent and coherent policies from governments and levels of Government, creating the most favourable environment for startup activities. Currently, the policies and models to support entrepreneurship in Vietnam are still too lacking and weak. According to data published by the State, in recent years, the number of newly established
companies has averaged about 80,000 enterprises/year (in 2016 alone, it could increase to nearly 100,000 companies); but there has also been an average of about 50,000 companies shut down/year. It proves that the entrepreneurial spirit of Vietnamese youth has the potential to develop; the Vietnamese startup market is alive, but there is still a lack of mechanisms, policies, the right investment, and necessary support from the State and society, so new businesses operate, the entrepreneurs cannot stay with a large proportion.

Thirdly, in the current context, the Vietnamese economy is facing difficulties, showing signs of unsustainable development, the state economic sector has revealed serious weakness, and the contribution of FDI enterprises to the growth and development of the state economy still has many problems to deal. It is too slow to enact adequate policies to spur private sector growth in the country. The State must see the private economy as the driving force of social development. Along with that, it is necessary to quickly and resolutely reform the institutions in the direction of drastically reducing administrative procedures, eliminating the evils of corporate interference from public agencies, and creating all the most favourable conditions for the startup process, business production process of the business community to be smooth and effective.

The author firmly believes that once the spirit of entrepreneurship and startup culture flourishes in the population, especially in the young generation of Vietnam, it will truly become the strongest and most important driving force for the development of the economy, social development, bringing the country forward (Cao Thi Hoa, 2018).

Promote the Policy of Developing the Technology Incubator System

Nurseries have begun to build favourable conditions for technical infrastructure and service provision for science and technology enterprises to be formed and developed. The Nursery model has gradually created a synchronized, cohesive business service system that replaces single service support models. With the formation of the information sharing system, through the business incubators, the linkages between the incubators and other related subjects have been strengthened, contributing to increased operational capacity and competition for enterprises in the context of deep integration into the regional and global economy. Scientific and technological enterprise incubators are really necessary for the local economy. However, the factors affecting Vietnamese incubators through the research sample show that the model of incubators is operating under very challenging conditions, and the ability to meet the objectives of incubators will be difficult to achieve.

The outside environment plays an important role in the operation of the nursery. The Vietnamese economy is at the stage of the process with basic factors. Therefore, transforming and shortening the gap between the effective economy and the knowledge economy requires the necessary elements such as clear development strategies, investment, and allocation of appropriate resources. State policies specifically develop science and technology, creating a strong driving force for private sector activities in science and technology. The legal system provides fair and synchronized central to local support to encourage researchers to have creative ideas to build science and technology businesses.

The business incubator of science and technology depends heavily on knowledge of human resources. Therefore, education and training are associated with the economy from the university stage to research. Nurseries perform the social tasks of creating businesses and creating jobs in the long term, which is necessary for the participation of the State. But state sector intervention should be a flexible mechanism that promotes active support rather than
over-management. Encouraging private participation will contribute to reducing the burden on the State, and attracting investment in facilities for nurseries, so the State must have a priority policy for this type of enterprise. Entrepreneurship is a dangerous activity, especially for new scientific and technological products. Establishing and promoting creative support funds and insurance funds to support new enterprises is a favourable condition for incubators. Science and technology incubators are still new to the community, and propaganda is very important, especially in the spirit of entrepreneurship in the intellectual world. Experience in operating Vietnamese nurseries is weak, so there is a need for activities connecting international organizations to improve management capacity, capitalize on development finance and consultants, and join the world nursery association to share an experience.

**Establishment of Special State Support and Investment Funds for Start-Up Science and Technology Enterprises in the Field of Information Technology**

The State must quickly establish special support funds for startups, such as Impact Investment Fund, Industry-based Investment Initiative Fund, and risk investment funds. The Fund's invoicing activities also need to diversify in many forms, not stopping at traditional methods such as preferential credit but expanding to new techniques such as issuing corporate bonds and calling crowdfunding.

They are building an investment fund for startup enterprises in the public-private partnership model under the Government to call for investment capital and funding from social components for potential innovative startup projects. This investment fund will be registered to operate under the model of a financial investment company and investment trust. Profits generated from State and donor investment will be used to reinvest in technology incubators, startup incubators, and direct investments in potential entrepreneurship.

In terms of capital resources, the State contributes capital in the form of intellectual property, which is information about research results with high commercial potential, a network of technology experts and consultants for domestic and international startups; and, at the same time, the form of funds for technology creation from funds managed by the Government. Private funding comes from private fund managers and funds raised by other private investors.

Investment funds or the National Start-Up Program make choices and deal with the most effective incubators to serve the activities of incubators and invest in the early stages of startup enterprises, especially in priority areas such as high-tech agriculture, new materials, and training mechanisms.

**Develop Policies to Encourage Angel Investors and Venture Capital Funds**

The State needs to develop a policy to encourage angel investors and establish and operate insurance investment funds. It is a group of financial support measures for the State to promote private participation in investment activities in insurance for startup enterprises by science and technology such as:

- The State deals with the investments of investment funds as well as angel investors;
- The State may reduce income tax for investment funds that make investments for startup enterprises at an initial stage to share risks;
- Implement a pilot study on technology stocks, soon make this type of stocks become traded goods in the market, help form a new source of capital, motivate for development;
- Establishment of a High-Tech Investment Fund soon.

In addition, the State also needs to expand its contribution resources and participate in the
Investment Fund, including private equity and foreign investment.

CONCLUSION AND RECOMMENDATIONS

Conclusion
In the context of an inclusive economy with many opportunities but also few potential competitive risks, Startup technology is considered an effective way to handle social problems and, at the same time, create new values for the economy. Promoting Startup in Vietnam is an urgent issue, taking into account the long-term economic development potential of the country. However, in addition to some modest achievements, Startup technology in Vietnam has many limitations. Most typically, startup ideas and projects are lacking in grey matter, creativity, low application of technology in ideas and schemes, and lack of substantive products; most of the ideas and projects are merely business solutions. The reasons for the above limitation are the inability of Startups to use innovation as a tool to gain an advantage; lack of experience or appropriate innovation management methods, processes, and tools; lack of capital, technology, human resources, or incentives to implement innovation.

The study also analyzed the current development status of science and technology enterprises, including science and technology enterprises in the field of information technology, analyzing the current policies for the formation and development of this type of enterprise. Policy assessment is done in the same uniform cross-section: positive, negative, and cause for negative impacts. Peripheral effects such as lack of entrepreneurship and entrepreneurial spirit are the default. Based on policy analysis plus lessons learned from international experience, the study proposed many policy solutions to support entrepreneurship for science and technology enterprises in general and in the field of information technology in particular. The study has achieved its original research purpose. Issues of reform of entrepreneurship as the basis for innovation will be studied at a higher level.

Thus, to promote entrepreneurship, it is necessary to have close cooperation between the two public-private sectors, the concerned agencies of the State and enterprises. The concerned agencies need to have specific and basic ways of doing things, such as simplifying administrative procedures; widely publicizing and disseminating support programs for Startup; shortening the process of supporting innovative startups; regularly organizing communication activities to change thinking and awareness for employees; organizing training programs on basic knowledge about entrepreneurship, entrepreneurship, creative thinking in the labour process, working in enterprises

Some Recommendations to State Agencies
Based on the current State of Startup technology in Vietnam and future trends in Startup technology development, the author makes some suggestions and recommendations to improve the quality and efficiency of supporting Startup businesses as follows:

Firstly, it is necessary to review and synthesize proposals for amendments, replacements, or new legal documents to ensure uniformity and consistency in the system and effective support for Startup enterprises.

Secondly, Simplifying and publicizing administrative processes and procedures related to the organization and operation of enterprises in agencies and units as well as on the e-portal of ministries, departments, and localities, promote the application of information technology in receiving and settling dossiers for Startups.

Thirdly, Detect and replicate effective Startup business support models, and strengthen dialogue
between Startup businesses with representatives of State agencies. The two parties listen, exchange, and solve difficulties and problems.

Fourthly, it proposes to develop investment funds for innovative startups for the Government, Central Government, and all levels and sectors. These Funds may be the same as other venture capital funds or may be invested in tandem with venture capital funds and angel investors. Specifically, it is proposed to use the Small and Medium Enterprise Development Fund and the State Capital Investment Corporation (SCIC) for investment counterparties or private venture capital funds to borrow investment for innovative startups.

Fifth, Improve the role of business and industry associations and promote the part of a bridge between State management agencies and enterprises. We are performing well as an important channel for policy criticism about enterprises, allowing the business community to monitor and evaluate government agencies' activities to improve service quality. Promptly and proactively receive and process the information on the reflection of specific cases and "hot" issues in social life to propose solutions, and effective policy responses, meet the requirements of State management, and protect the legitimate interests of enterprises.

Sixth, protect intellectual property rights by developing intellectual property protection databases, simplifying procedures and shortening the time of intellectual property protection registration; establish a network of service providers, consultants, search and exploitation of technological information, patents, and intellectual property.

Seventhly, focus on investment, development of service centres dedicated to innovative startups, support startups working in these spaces with preferential prices, develop and associate, and coordinate with foreign organizations to organize regular meetings, exchanges, training, and training for innovative startups in these spaces.

Eighth, develop and support investment channels with preferential costs for innovative startups in-laws, mechanisms, policies, business development, startup investment, finance, accounting, and other necessary services.

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