

Bachelor's thesis

International Business

Business Administration

2015

Huong Nguyen

MAPPING TECHNOLOGY STARTUP ECOSYSTEM IN VIETNAM



TURUN AMMATTIKORKEAKOULU
TURKU UNIVERSITY OF APPLIED SCIENCES

BACHELOR'S THESIS | ABSTRACT
TURKU UNIVERSITY OF APPLIED SCIENCES

International Business | Business Administration

2015| 66+7

Emmanuel Querrec

Huong Nguyen

TURUN AMMATTIKORKEAKOULU THESIS

The Tech Startup Ecosystem in Vietnam is understudied. Structured information about the ecosystem is limited and the general picture of the whole ecosystem is remaining indistinct while Vietnam is in the middle of the biggest startup wave since the new century.

The purpose of the research is to critically sketch up the map to show the current situation of the tech startup ecosystem in Vietnam. It aims to identify the components of the ecosystem, analyze the interactions inside and point out the objectives of the ecosystem.

The data collection was carried out by using participant observation and qualitative interviews. The researcher had spent 5 months from January to May 2015 performing as a complete participant in the ecosystem, where he could take part in activities, programs, interact with different feeders of the ecosystem. Then interviews with high credible interviewees in the ecosystem were conducted to obtain primary data. Both primary and secondary data is adopted to explore the initiatives and understand the ecosystem.

By a way of conclusion, the map of the tech startup ecosystem is formed revealing what are insisting and happening in the ecosystem. The result can be used as a guide for startups to have a deep understanding about the tech startup ecosystem in Vietnam, knowing all about activities of investors, incubators, accelerators and so much more to explore.

KEYWORDS:

Startup, technology, ecosystem, Vietnam, economy, innovation, entrepreneurs, support organizations,

OPINNÄYTETYÖ (AMK) | TIIVISTELMÄ
TURUN AMMATTIKORKEAKOULU

Koulutusohjelman nimi | Suuntautumisvaihtoehdon nimi

Opinnäytetyön valmistumisajankohta | Sivumäärä

Ohjaaja(t)

[Click here to enter text.](#)

[CLICK HERE TO ENTER TEXT.](#)

ASIASANAT:

Kirjoita tekstiä napsauttamalla tätä.

CONTENT

List of Abbreviations (OR) Symbols	7
1 Introduction	1
1.1 <i>Research background</i>	1
1.2 <i>Research purpose</i>	2
1.3 <i>Research objectives</i>	3
1.4 <i>Research questions</i>	3
1.5 <i>Thesis Structure</i>	3
2 Liturature review	6
2.1 <i>Startup ecosystem.</i>	6
2.1.1 Biological ecosystem	6
2.1.2 Business ecosystem	7
2.1.3 Tech Startup Ecosystem	9
2.2 <i>Structure of an ecosystem</i>	9
2.2.1 Main components of a startup ecosystem	10
2.2.2 The ecosystem and the competency of startups	13
2.3 <i>The interactions within the startup ecosystem</i>	16
2.3.1 The interaction between entrepreneurs;	17
2.3.2 The interaction between formal support organizations;	18
2.3.3 Interactions between entrepreneurs and key support organizations	18
3 Research Methodology	20
3.1 <i>Selection of research method</i>	20
3.2 <i>Research strategy</i>	21
3.3 <i>Interviewees introduction</i>	21
3.4 <i>Interview design</i>	22
3.5 <i>Pilot test</i>	23
3.6 <i>Data collection</i>	24
3.7 <i>Reliability, validity and possibilities for generalization of the research</i>	24
4 Vietnam Tech Startup Ecosystem	26
4.1 <i>Introduction</i>	26
4.2 <i>Tech Startups</i>	29

4.3	<i>Investors and investment funds</i>	31
4.3.1	The overall situation	31
4.3.2	Investors and investment funds	31
4.4	<i>Business Incubators</i>	41
4.5	<i>Business Accelerators and training organizations:</i>	48
4.6	<i>Services and Support Organizations</i>	50
4.7	<i>Co-working Spaces</i>	51
4.8	<i>Business and Tech Medias</i>	55
4.9	<i>Influencers</i>	55
4.10	<i>The Interactions within the tech startup ecosystem.</i>	58
4.10.1	The interaction between entrepreneurs:	58
4.10.2	The interaction between formal support organizations:	59
4.10.3	The interaction between entrepreneurus and formal support organizations:	59
4.11	<i>The objectives of Tech Startup Ecosystem in Vietnam</i>	60
5	Conclusion	63
5.1	<i>Conclusion</i>	63
5.2	<i>Future researches</i>	65
	Source material	67

APPENDICES

Appendix 1. Interview topics and suggested questions
Appendix 2. Macro Statistics of Vietnam 2000-2014

FIGURES

Figure 1: Tech Startup ecosystem	11
Figure 2: Vietnam GDP Growth Rate 2000-2014	26
Figure 3: Section Flow	28
Figure 4: General map of the Tech Startup Ecosystem in Vietnam	64

TABLES

Table 1: Portfolio List of IDGVV	32
Table 2: Portfolio List of CyberAgent Ventures Vietnam	34

Table 3:Portfolio List of DFJ Vina Capital	36
Table 4:Portfolio List of Mekong Capital	37
Table 5: Mekong Capital's Divestment History	37
Table 6:Portfolio of Kutsto Vietnam	40
Table 7: Portfolio of PVNI	40
Table 8: Services and Support Organization	51
Table 9: List of Co-working Spaces	52
Table 10: List of Business and Tech Medias	55
Table 11: List of active influencers	56
Table 13: Macro statistics of Vietnam 2000-2014	73

LIST OF ABBREVIATIONS (OR) SYMBOLS

1 INTRODUCTION

1.1 Research background

In the last decade, the entrepreneur spirit has been actively resurging, resulting in more startup activities than ever before. A research from national enterprise campaign StartUp Britain recorded that there were 581,173 new companies registered with the Companies House in 2014; which means more than one startup was born in 1 minute counted in the UK only (Burn-Calander, 2015). In a much smaller economy like Vietnam, there are 45,406 new companies registered in 6 months from January to June 2015 (Dang, 2015). And the number is expected to continue accelerating in 2015 (Anderson, 2015). The new network model of business system is rapidly replacing the traditional hierarchical system (Feld, 2013); To be more specific, In contrast of the traditional hierarchical system in which entrepreneurs have to ask permission, gain access or perform specifically assigned task; entrepreneurs are functioning more freely in a giant network - the new network model of business system. And according to Brad Feld- Managing Director of Foundry Group, “Start-ups, entrepreneurs, and start-up communities are already living and working within this model” (Feld, 2013). The valuation of successful startup hit the peak of all-time high, according to NY Times, an unprecedented number of high technology start-ups, easily 25 and possibly exceeding 40, are valued at \$1 billion or more (NY times, 2013). Furthermore, technology is deeply altering how entrepreneurs do business, entrepreneurs nowadays are not only able to bring their ideas into reality but also to spread them all over the world. More importantly, the startup establishment and product building costs in certain fields have been significantly lowered. And the network of social media platforms together with elements including mobile and location-based services is the huge advantage for entrepreneurs, which brings a direct impact to all stages of the startup lifecycle from product launching, brand building, business growing etc, at a much lower cost and higher interactivity. Moreover, this is the era of global-born enterprises,

indeed the world becomes much smaller, as one single market which is both homogeneous and heterogeneous(Forbes, 2013).

Despite all the advantages, joining the startup race is always a rough path. The fact is, nine out of ten startups fail (Griffith, 2014). According to Griffith, two of the biggest reasons are failing to identify the market need (42%) and running out of cash (29%) (Griffith, 2014). As there will be a price for everything unknown, and the startup path is full of uncertainty with the lack of business know-how or resources; moreover, doing a startup doesn't mean going all alone and build up everything from bare hands; getting experiences and business intelligence from networks are essential to allocate difficulties and figure out solutions. Therefore, high-growth startups seem to increase the chance of being successful when they perform actively in a start-up ecosystem that encourages the business development.

About start-up ecosystem, Silicon Valley is commonly believed to be the only existing startup ecosystem. Silicon Valley is currently the strongest or ranked 1 in the Global Startup Ecosystem Ranking ecosystem based on performance, capital invested and "talent"(Compass 2015); fortunately, however, it is not the only one available. The idea and development of startup ecosystems are spreading from cities to cities across the world. In that case, start-ups can interact, flourish and get the support from the startup community that is existing in the country or in the city.

The problem is whether startups know about the existence of the startup ecosystem in the area? The lack of deep understanding about the ecosystem avoids startups to interact and take advantages from the communities.

1.2 Research purpose

In order to spread the idea about the startup ecosystem as a critical supporting community to new startups, the research is aimed at creating a deep understanding and bring insights about the ecosystem to startups. The research will focus to investigate the Tech Startup Ecosystem in Vietnam which have

been step by step developing in the last decade and accelerating in scale and impact in the previous years.

1.3 Research objectives

Mainly locating in two biggest cities which are Hanoi and Ho Chi minh City, the Tech Startup Ecosystem in Vietnam is instinctively developing with the global common trend and the ecosystem here is understudied, the general picture of the whole ecosystem still remain indistinct, the objective of the research is to sketch up a general map to show the current situation of the Tech Startup Ecosystem in Vietnam.

1.4 Research questions

In order to achieve that purpose, the answers for the following questions have to be proposed. The main research question for the study will be:

What is the situation of the Tech Startup Ecosystem in Vietnam?

To have the full insight for the research question above, three sub-questions are required to answer

Sub-question 1: What are the main components of the Tech Startup Ecosystem in Vietnam?

Sub-question 2: What are the interactions within the Tech Startup Ecosystem in Vietnam?

Sub-question 3: If there is an objective of the Tech Startup Ecosystem, what would it be?

1.5 Thesis Structure

The study will be divided into 4 main chapters, Literature Review, Research Method, Tech Startup Ecosystem in Vietnam (Finding) and Conclusion.

The first chapter raises issues regarding entrepreneurial communities, startup

ecosystems. All relevant theories related to the main topic will be reviewed in the Literature Review. This chapter will focus to explain the main concept of a startup ecosystem, find out the main components, how they are structured in one common ecosystem as well as the connections between its components.

The Second chapter is the Research Methodology, in which the research strategy and data collection techniques will be discussed and justified to implement to research. Details on the techniques, targets and documentations about the research that was applied in the analysis will be provided in order to validate the result.

The Third Chapter will contain findings about the situation of the Tech Startup Ecosystem in Vietnam based on the case study. The general image of the ecosystem will be sketched up based on the available components of the ecosystems. The interaction within the ecosystem will be analyzed. Furthermore, this part will explain, discuss and analyze the development objective of the Tech Startup Ecosystem in Vietnam.

Finally, the conclusion part reviews the aim and specific objectives of the research study. The discussion will be about the comparison between the results of the research and the objectives of the research. Therefore, the conclusion will be drawn, limitations will be listed out in order to find out the recommendation for implementation as well as future research.

2 LITURATURE REVIEW

2.1 Startup ecosystem.

In cities and countries around the world, fostering entrepreneurship is gaining its role as a primary component of economic development. "The predominant metaphor for fostering entrepreneurship as an economic development strategy is the entrepreneurship ecosystem" (Isenberg, 2014). The term ecosystem is becoming more and more commonly used, conceptualizing business networks in comparison to the original concept of biological ecosystems (Iansiti and Levien, 2004a). Obviously, however, the idea of using the "ecosystem" term based on biological ecosystem is reasonable due to the similarity in characteristics of the two contexts.

2.1.1 Biological ecosystem

In order to have a general concept about an ecosystem, definitions of the term are reviewed. Roy Clapham first formed the term "ecosystem" in 1930; however, not until 1935 that the first definition was fully defined by Arthur Tansley "The whole system,... including not only the organism-complex but also the whole complex of physical factors forming what we call the environment". (Ellis 2014). This is the base for research and studies afterward; the definition, however, is still general at this point it. Oxford advanced learner's dictionary (2005) defines an ecosystem as all the plants and living creatures in a particular area considered in relation to their physical environment. According to Longman Dictionary of contemporary English (2009), a biological ecosystem is "all the animals and plants in a particular area and the way in which they are related to each other and to their environment". Besides the components of the ecosystem, two definitions above point out the relationship of creatures in a physical of the environment in a certain area. The dynamic interaction within an ecosystem is outlined in a different definition "An ecosystem is a community of organisms interacting with each other and with their environment such that

energy is exchanged and system-level processes, such as the cycling of elements, emerge” (Ellis, 2014).

A biological ecosystem is defined as “a community of living organisms with air, water and other resources” (The Merriam-Webster Third New International Dictionary of the English Language (1986). The term “community” is used here in this definition which goes further than the physical interaction and highlighting the particular characteristics of creatures in the environment. Moreover, biological ecosystems do not remain the same, changing conditions either internal or external drive changes in ecosystems both directly and indirectly, according to the World Resources (2000-2001), “ecosystems are not just assemblages of species, they are systems combined of organic and inorganic matter and natural forces that interact and change.”

2.1.2 Business ecosystem

Obviously, it is not unreasonable to have an economic term called after a nature term. Economy and biology, in this case, share a large amount of similarities including its components, the inside activities or the trend of evolution. In the book “Bionomics: Economy as Ecosystem”, Rothschild (1990) makes a precise comparison between two phenomena as:

“Every organism is defined by the information in its genes, but a living thing also is defined by its relationships to its prey, competitors, and predators. In the same way, an organization is defined by its technology and by its associations with its suppliers, competitors, and customers. From a bionomic perspective, organisms and organizations are nodes in networks of relationships. As time passes and evolution proceeds, some nodes are wiped out and new ones crop up, triggering adjustments that ripple across each network. Constrained by its key relationships, each organism, and each organization is held in its niche, pursuing the same goal – the genetic or technological information it carries.”

Or in a more general comparison, Rothschild (1990) stated that a vast living ecosystem is formed by the spontaneous co-evolvement of the world's firms and industries just like the global ecosystem is made up by organisms and species (Rothschild 1990, 337).

According to Moore (1998), Business ecosystem is an "extended system of mutually supportive organizations; communities of customers, suppliers, lead producers, and other stakeholders, financing, trade associations, standard bodies, labor unions, governmental and quasi-governmental institutions, and other interested parties. These communities come together in a partially intentional, highly self-organizing, and even somewhat accidental manner." (Moore 1998, 168). A company can be viewed not as a relationship between customers and suppliers or with stakeholders only, not limited in the business network or the industry, but can be viewed in an interaction crossing a variety of industries as a part of a business ecosystem. Therefore, businesses are significantly affected not only by their own capabilities or relationships but also by their interaction ties with other parties within the ecosystem even though many parties may not directly involve in the business operations. (Håkansson and Ford, 2002). An ecosystem can be small but still much larger than the concept of business network in the variety of actors. To be more specific, business networks can be formed as groups of firms co-operating in business operating activities. In turn, a business ecosystem can be including partners, subcontractor and also competitors, customers, potential collaborator companies as well as public bodies, local incubators, investors and even institutes and universities (Moore, 1998).

Finally, just like biological ecosystems, business ecosystems presents in unlimited shapes, sizes and ways to define, in which each ecosystem typically contains areas duplicated with other ecosystems and the boundaries are flexible varying from case to case. According to Powell, business ecosystem is expected to have a heterogeneous structure and actors adopting different roles that influence different aspects of the stability and productivity of the whole (Powell et al., 1996).

2.1.3 Tech Startup Ecosystem

New firms emerge and grow not only because of entrepreneurs who use talent and vision to create and develop them. New ventures emerge also because they are located in an environment or “startup ecosystem” which make the action of entrepreneurs easier by nurturing and sustaining new business activities (Financial Times, n/a). In general Tech Startup Ecosystem is a business ecosystem formed by communities of companies, startups in various stages regarding in technology fields and an aura of other actors/organizations interacting as a system to support the creation and development of startups companies. Or a small-scale system that enables startups to raise (Spruijt, 2015). Each community can function independently; however, all communities in the ecosystem are linked to each other through relationships, interactions and through the same development goal of the ecosystem. As startup ecosystems are defined by the interactions of networks and communities of people, startups and organizations, they can come in either practical or virtual types which are commonly known as startup ecosystems of countries, cities or online communities. (growadvisor, 2015).

Moreover, the main actors and purpose in a tech startup ecosystem are Tech startups and the development of them, and as technology is expanding its influence to every directions, tech startups can be pure tech firms focusing in Software and hardware as their main service or product; tech startups can also be not-so-tech who aim straight at the heart of every industry and interest including food crawls, fashion, sport etc.. Angel investor Mark Birch from New York city defines them as the “non-tech” tech startups. According to him, in tech startup ecosystems, “technology is required but it is certainly not the differentiator”. Technology is used behind the scenes to support, prepare and spread out the surface show of products and services. (Birch, 2012).

2.2 Structure of an ecosystem

In the one hand, ecosystems show in multiple sizes and shape with different level of complexity and in the other hand ecosystems are always ready for

influences from either inside or outside which mean they keep changing. Therefore researching for the one model structure of all ecosystems seems to be uncontrollable. Or finding a complete startup ecosystem having the presentation of all economic actors locally is highly exceptional (Eliasson 2003). In this research, instead, the structure components that most commonly insist in a startup ecosystem on different perspectives will be collected.

2.2.1 Main components of a startup ecosystem

As there are multiple perspectives to look at the ecosystem which bring a different illustration about the concept. Looking from the outside to the big picture of the startup ecosystem, the structural components of a startup ecosystem are commonly seen to consist of ideas, inventions and researches, start-ups at various stages, entrepreneurs, start-up team members, Angel investors, start-up mentors, start-up advisors, other entrepreneurial minded people (Startup commons, 2015). In a different definition, It involves aspects such as ideas, inventions, research, education, startups, entrepreneurs, angel investors, seed investors, mentors, advisors and events and is supported by universities, incubators, accelerators, facilitators, investors, coworking spaces and venture capitalists (Spruijt, 2015). Or on the more general view, the compositions above can be grouped as entrepreneurial startups, regional and national policy agencies, incubators/accelerators, business angels and venture capitalists (VC). (Sipola, 2014)

From a different perspective, when startups are chosen to be in the center of the picture and the communities surrounding startups create the ecosystem. According to Moore (1993) (1993), there are layers of interactions surrounding the core business, in which each layer corresponds to a different level of commitment to the business. The first layer is formed by parties related to the core business which can be a company, a supply chain, or a network of several companies together taking care of the core business. The second layer contains extended enterprises, the wider view of the supply chain, complementors and second-layer suppliers. Moreover, in the particular field of business, there will

be standard setting bodies in this layer. Finally, the outermost layer includes associations, unions, researching institutes and universities as well as investors and stakeholder (Moore, 1993).

And if we keep the core as tech startups, flatten and simplify all layers around them, we will have simple structural components as in figure 1.

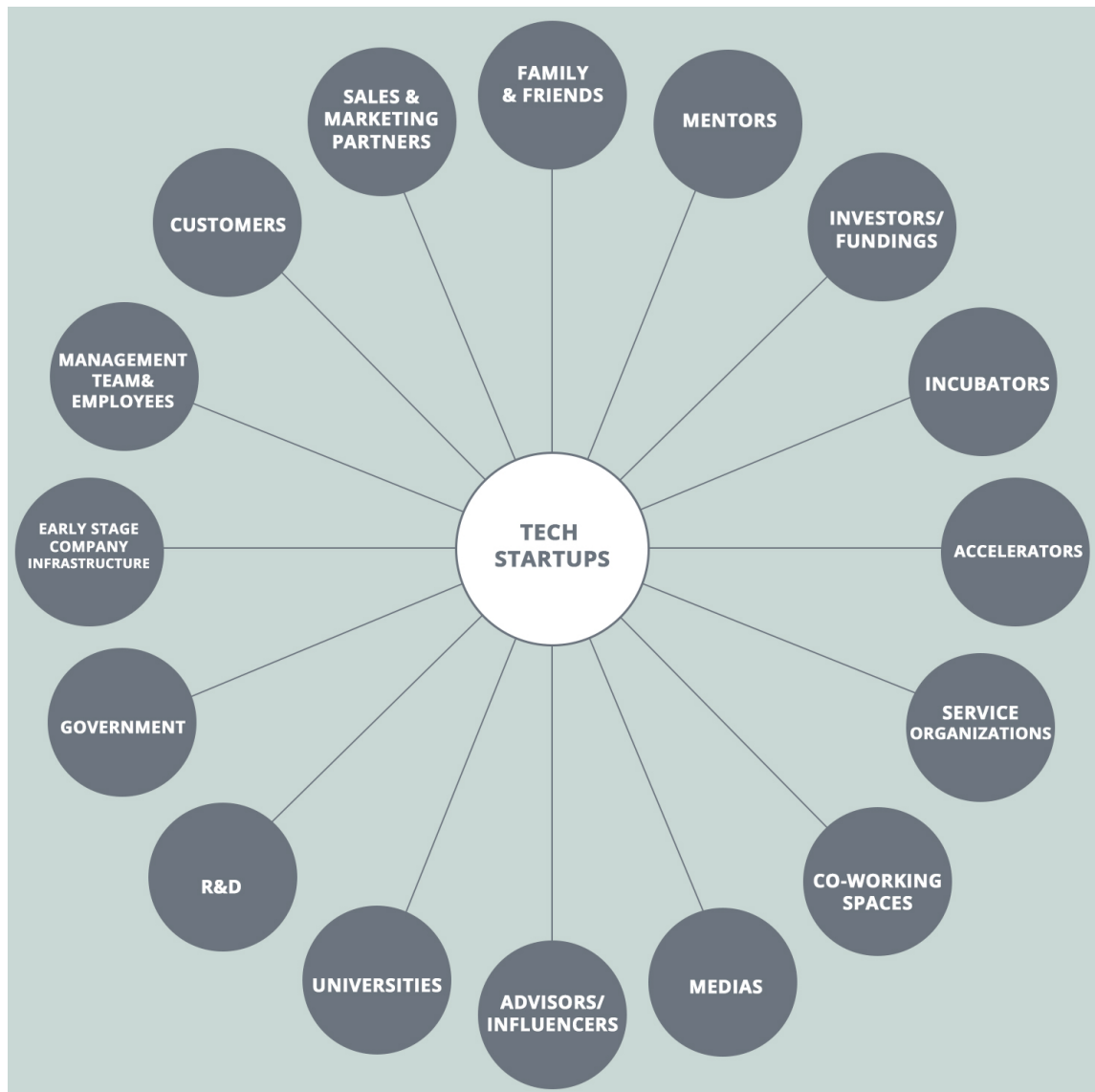


Figure 1: Tech Startup ecosystem

Furthermore, a wide range of supporters surrounding entrepreneurs and their startups are so-called “feeders” (Feld, 2012). In general, a typical entrepreneurship ecosystem consists of hundreds of elements / feeders. The following organizations and activities are the most active ones: Universities,

advisory & mentoring organizations, startup incubators, startup accelerators, coworking spaces, service providers (consulting, accounting, legal, etc.), event organizers, start-up competitions, investor networks, venture capital companies, crowdfunding portals, other funding providers (loans, grants etc.), start-up blogs & other business media and other facilitators.

However, in order to create a convenient tool for analyzing and assessment, Isenberg (2011) generalize them into six main domains:

I. A conducive culture: This group includes cultural elements like societal norms and success stories of the area (e.g. tolerance of risk and mistakes, positive social status of entrepreneur, wealth generation for founders or international reputation)

II. Facilitating policies and leadership: elements related to government and Leadership of the ecosystem are listed in this list (e.g., regulatory framework incentives, existence of public research institutes, research institutes or unequivocal support and social legitimacy, etc.)

III. Availability of dedicated finance: Elements regarding the financial capital for startups in the ecosystem (e.g. business angels, venture capital, microloans, public capital markets, etc.)

IV. Relevant human capital: This group includes element related to both sides of the Human resource which is labor and educational institutions (e.g. skilled and unskilled labor, serial entrepreneurs, entrepreneurship training programs or professional and academic degrees, etc.)

V. Venture-friendly markets for products: all elements regarding early customers and networks in the ecosystem (e.g. early adopters for prototypes, reference customers, diaspora network, distribution channels and entrepreneur's networks, etc.)

VI. A wide set of institutional and infrastructural supports: All supporting professions and non-government institutions are listed in this group (e.g., legal and accounting advisers, telecommunications, and transportation infrastructure,

entrepreneurship promoting associations, business plan contests, etc.). (Insenberg, 2011)

This way of grouping is beneficial because it reflects the ecosystem impinging on the startup from the entrepreneur's perspective, which directly impact the decision-making process. Moreover, because the perspective is from startup entrepreneurs, the ecosystem here also covers essential factors that might be omitted as early adopters, who are an important part of the Built-Measure-Learn loop of the Lean startup method (Ries, 2011). Startups need early adopters because they strongly support in defining products and level of service or reviewing and offering critical feedback in the early stage of the product development. Moreover, the profit from early adopters in the early stage is appreciable for startup's financial source, as again running out of cash is one of two biggest reasons for falling startups.

2.2.2 The ecosystem and the competency of startups

Structure components of the ecosystem are all around startups for one purpose of making startups more competent. Competence is an essential element in making a company different and these differences impact the company growth, which means more than an asset in strict accounting terms (Hamel and Prahalad, 1990; Hamel and Heene, 1994). To know how the startup ecosystem can have an influence to the competency of startups, Sipola (2014) from University of Oulu Business School used the competence bloc theory (Eliasson and Eliasson, 1996) to apply in the context of an ecosystem.

Lean on that approach, the competence bloc theory will be applied, however, the whole competence bloc theory will not be explored in detail, only actors of the competence bloc in startups firms are framed in the structure components of a startup ecosystem.

The competence bloc theory points out a set of economics actors necessary to maximize the exposure of a firm. A competence bloc is defined as "the total infrastructure needed to create (innovation), select (entrepreneurship),

recognize (venture capital provision), diffuse (spillovers) and commercially exploit (receiver competence) new ideas in clusters of firms” (Sipola, 2014). Eliasson and Eliasson (1996) also mentioned that a firm could team up all actors of a competence bloc. In details, actors within the competence bloc are listed as:

1. Competent and active customers
2. Inventors integrating technologies in new ways
3. Entrepreneurs identifying profitable innovations
4. Competent venture capitalists being able to recognize and finance ventures.
5. Actors in secondhand markets facilitating ownership change
6. Industrialists taking innovations to industrial production

(Eliasson and Eliasson, 1996)

The list starts with competent and active customers, according to Eliasson (2003) these actors mean to identify the sophistication level of products that suits the need and acceptance of the most advanced customers. As advanced technologies applied in products cannot assure the acceptance and satisfaction of customers, the participation of competent customers plays a crucial role in product development and product commercialization by offering feedbacks and providing firms materials about market and customer demand (Johansson, 2010). In the context of startup ecosystems, these actors are early adopters or active customers, which is actively supported by the lean startup methodology (Ries, 2011) or customer development (Blank, 2005). Via ecosystems, startups can define multiple types of competent customers, categorize and put reference value on their feedback to support the business development and decision-making process. (Sipola, 2014)

The second actor in the bloc is innovators. Innovators create new composite technologies by combining new and old technologies, who are recognized by entrepreneurs in the ecosystem based on the potentials of the technologies in the economy (Eliasson, 2003). In general, innovators are individuals or firms

introducing new methods solutions that are cheaper or better in performance than the remaining ones. Commonly innovators are assumed to be in technology fields, Innovators in startup ecosystem are not only about technology and shouldn't be limited to technology. Startups can take advantages of relationship and networks with innovators from various field and expertise brings their business value to all business related processes like design thinking, business design, accounting solutions or HR, etc. (Sipola, 2014)

The third actor is entrepreneurs, entrepreneurs can be innovators that have their innovation individually viable commercially, or they can define market potential innovations and apply it support their business model. Entrepreneurs mean to be the bridge connecting and bringing innovation to markets and economy as they can understand, select and initiate the commercialization of innovations (Eliasson and Eliasson, 1996 and Johansson 2010). In the startup ecosystem, entrepreneurial startups are considered to be a competent team which actively moving forward as business experiments in connection to markets. (Sipola, 2014)

Behind any successful projects, there is the fourth actor of central mechanism of the competence bloc, which is the competence in the business and industrial residing tacitly in the venture capital industry (Content adopted from Eliasson & Eliasson 1996; Eliasson & Eliasson, 2005; Eliasson, 2003). It is critical that competent venture capitalists use technological and team-based investment opportunities as a huge advantage to commercialize startup projects, and entrepreneur as well as innovation can still receive a significant part from he business (Eliasson & Eliasson,1996). Therefor in this case,on the point of view of startups, the value adding competence is what differentiates venture capitalists from risk diversifier (Eliasson 2003). In the case of startup ecosystem, the meaning for startups in this actor is the opportunity to reach other sources of risky capitals namely business angels or corporate venture capitalists (CVC) in the ecosystems. Business angels are High Net Worth Individual willing to invest in startups at the early stage and Venture Capital

firms normally care more about the potentiality of the project and can invest more even in later stages of the business (Freear & Wetzel, 1990; Harrison & Mason, 2000; Mason & Harrison, 2004)

Coming next on the list, exits are essential for startups to quickly industrialize and scale up the business (Eliasson & Eliasson, 1996). However, they are often a complicated issue of the entrepreneurship (Lerner, 2010). IPO or M&A mechanisms are 2 valuable exits strategies, especially for the increasing number of related actors including innovators, entrepreneurs, company's employees and also investors. Through those exits, the purpose for venture capitalist is to obtain competency and also get the profit toto repeat the investment loop again to new startups or funds. Furthermore exits can be considered as a market for strategic acquisitions (Eliasson and Eliasson, 2005) It is getting more reasonable when strategic acquisitions are getting more and more common at earlier stages of startups with early exits or small acquisitions. (Sipola, 2014)

Finally, the foundation roles of the final actor-the industrialists are to bring potential products to industrial production and distribution (Eliasson & Eliasson,1996, 2005). From the startup ecosystem's perspective, the industrialists are the model target that their firms need to reach. For instance in high-tech industries, companies in industrial scale, can scale up startups by developing a partnership with startups through their platforms. Industrialists can be seen as agencies or scaling platform in the perspective of startups in the ecosystem context.

2.3 The interactions within the startup ecosystem

A more general look about the ecosystem, the connections supporting the development of a startup ecosystem. Moreover, understanding the connections within the ecosystem will help entrepreneurs to maximize the advantages taken from the ecosystem. Four connections are focused in the framework:

2.3.1 The interaction between entrepreneurs;

As entrepreneurs are critical elements of a startup ecosystem, the connection between them are extremely valuable and weighty. For novice entrepreneurs, they can enhance their competence from interaction with other entrepreneurs, experienced entrepreneurs and mentors who had entrepreneurial experience. These interactions created an environment in which they not only could learn from their peers but also support each other emotionally through the rough and uncertain journey they, as entrepreneurs, were facing. (Motoyama, Y. Watkins K, 2014)

About two-thirds of recipients in a research of startup entrepreneurs in St.Louis have reported periodic interactions with other recipients. In sixteen entrepreneurs interviewed, twelve mentioned that have active relationships, only four out of sixteen did not mention any specific ties to other entrepreneurs (Motoyama, Y. Watkins K, 2014).

The high density of interaction between entrepreneurs strengthens the structure of the current ecosystem and furthermore expand the system by inspiring the “entrepreneur-to-be” generation. In an interview with Nicolás Shea - Founder of Startup Chile about entrepreneurship in small economies, he pointed out that Steve Jobs and Bill Gates are showed as role models in entrepreneurship classes and courses; however, how can a Chilean relate themselves to Steve Jobs? Jobs is a cool story, but he is too big a story to inspire people to do what he did (Chipman, 2015). About that problem, Start-up Chile builds a program offering capital seed, working visa and office to startup entrepreneurs around the world to move to and work in Chile in one year, the purpose is to boost up the interaction between entrepreneurs and Chilean entrepreneurs, employees, and residences. Young Chilean now can “touch and smell them (foreigner startup entrepreneurs), talk to them and realize that they are as good as them too”.“We don't want financial equity — we want to build social equity” said Nicolás Shea. Till 2015, Start-up Chile has drawn 1,200 companies from 72 countries to the South American country and created the interaction with more than 200.000 local Chileans within the program (Chipman,2015).

2.3.2 The interaction between formal support organizations;

Although serving different purposes, support organizations collaborate and coordinate with each other in multiple levels. To be more specific, interactions can be in both tight and loose connections.

The interaction can be between the structural level of organizations in the region, in which connections created by sharing board members or strategic system base. The interaction between supporting organization shows best in the collaboration in programs and activities in the ecosystem in which each organization is responsible for a particular field of the activity.

Moreover, the interactions also happen in loose connections, including participating in activities organized by other organizations, serving on panels or having informal meetings. Back-stage discussions in events help organizations understand more about startups and companies within the ecosystem. Furthermore, this action help information flows go through the entire ecosystem and avoid unnecessary/unintentional overlaps of support for specific company or events (Motoyama, Y. Watkins K, 2014))

Finally, the interactions between organizations vary from case to case depending on the establishment of organization and the practical situation of the ecosystem, which is currently not possible to point out particular interaction in general.

2.3.3 Interactions between entrepreneurs and key support organizations

The interactions between entrepreneurs and key support organization are highly active in any startup ecosystem. On the one hand, startup entrepreneurs are the one receiving advantages with these interactions; on the other hand, they also have contributions to support organizations and the whole ecosystem in general. There are two types of interactions that startup entrepreneurs can get from support organizations:

Firstly, broad types are activities like mentoring and connecting, which have a solid impact to the success of startups. Mentoring often takes place on an informal basis; however, more organizations have developed more formal

mentoring relationships in the ecosystem including mentoring programs, activities and mentoring hubs. Mentors offers guidance base on mentees' situation, needs and passion while encouraging startups to choose their own direction (MentorDoctor, 2002). Startups entrepreneurs gain know-how regarding technical skill, career development, and psychosocial functions etc, by walking along and learn from their mentors (Wild J et al, 1999). Furthermore, connections or networks are extremely important for entrepreneurs. And that is what entrepreneurs can get if actively involve in activities and events, which is the most common interaction between startups and organizations. Entrepreneurs will have opportunities to expand connections with other entrepreneurs, mentors, advisors etc, and may have exceptional opportunities can occur if they impress potential investors or business partners (Pavlova, 2014)

Secondly, financial and functional types are activities including incubation, business model assistance, pitch practice. These organizations design activities and programs to help startups not only polish their ideas and entrepreneurship from multiple angles but also provide necessary resources including financial and technical to kickstart them in the early stage. Those organizations aim to boost startups to make the right decisions to manage growth, become more competitive and furthermore to create jobs and increase benefits to the residents they serve.

Finally, activities in the other direction are considerable for the strong interaction between entrepreneurs and support organizations. Entrepreneurs can involve more than just participating events and activities, indeed they can help organizing, backstage support or more importantly they are the one who spread info about the events/organization and bring more audiences by introducing peers and acquaintances to events. In a higher level, experienced entrepreneurs can be speakers, guest speakers which are the main inspiration hooking participants to events.

3 RESEARCH METHODOLOGY

This chapter will focus on the methodology used in this research. In detail, the following parts will be discussed: Selection of research methods, Research strategy, Research Design, Validity and reliability of the research. The objective of the research is to support the answer of research questions for-mentioned in section 1.4, which are:

-Research question: What is the situation of the Tech Startup Ecosystem in Vietnam?

Sub-question 1: What are the main components of the Tech Startup Ecosystem in Vietnam?

Sub-question 2: What are the interactions within the Tech Startup Ecosystem in Vietnam?

Sub-question 3: If there is an objective of the Tech Startup Ecosystem, what would it be?

3.1 Selection of research method

The main purpose of the research is to have a deep understand on the tech startup ecosystem in Vietnam; therefore, the study requires understanding, perspectives as well as experience interacting in the ecosystem. Thus, qualitative methodology is most suitable for the study, which bases on the opportunities to explore a subject in as real a manner as is possible (Robson 2002). Through different techniques of qualitative research, non-standardized data will be summarized and classified and reconstructed to support the most general picture of the Tech Startup Ecosystem here. Furthermore, secondary data will be used to clarify and support the research in detail showing statistic and information about components of the Tech startup ecosystem here. Besides primary data secondary data can provide a useful source from which to answer, or partially to answer research questions. (Saunders et al., 2009, p.256)

3.2 Research strategy

In order to have a better understanding of the ecosystem as well as to have opportunities to interact with targets for qualitative interviews, participant observation, semi-structured and in-depth interview (or referred to as 'qualitative research interviews' (King 2004)) were used as data collection methods. Participant observation is defined as a process enabling researchers to have a deeper understanding about activities of objects in the study in the natural setting by participating in the environment and observing those activities (DeWALT & DeWALT, 2002). The researcher has spent 5 months from January 2015 to May 2015 participating events, joining activities and interacting with organizations as well as feeders in the ecosystem. For this research, researcher performed as a complete participant in which he attempted to become a member of the group and joined activities without using the research as the purpose (Saunders et al., 2009, p.293). Base on that, the researcher could study more about organizations and aspects regarding the ecosystem then conduct analysis on secondary data. Finally, connections built during the involvement with the startup ecosystem here expanded the network with active participants and feeders, who were chosen to have semi-structured or in-depth interviews. For exploratory studies like this research, semi-structured or in-depth interviews are helpful to 'find out what is happening and to seek new insights' (Robson, 2002). The list of interviewees is listed in section 3.3

3.3 Interviewees introduction

As the number of in-depth interviews and short talks are numerous and not convenient to list out in this research, only semi-structured interviewees are introduced in this section with their permissions. Interviewees and company names are confidential.

-Mr. C.S - Senior Business Consultant

C.S has been many years working experience across Southeast Asia and recently working mainly in Vietnam for 2 years.

-Mr. P.D - CEO of SV JSC

P.D is the CEO of a 4-year-old growing tech startup. P.D is involved in many organizations of the tech startup ecosystem in Vietnam.

-Mr. N.N - President of Digital Marketing of P Pte. Ltd,

N.N is an expert in digital marketing. The company is he working for now is an international tech startup that has branches in 7 countries in the Southeast Asia area.

-Ms. D.P - Lawyer, Senior Legal Consultant

D.P has years of experience in legal and tax consultancy. She is the destination of startups in problems regarding legal and regulations in Vietnam.

-Ms. N.L - Startup entrepreneur

N.L is currently in the management board of a co-working space in Ho Chi Minh city, she works closely with many support organizations for co-organizing events and training courses.

Mr. H.H - CEO of E JSC

H.H is the CEO of a tech startup in Ho Chi Minh city, H.H has been performing actively in the ecosystem after years of studying and working in France.

3.4 Interview design

Interviews were conducted in Vietnamese or English depending on the nationality of interviewees. Moreover, as interviews resulted from the connection basic, no formal structured interview formats were chosen. Base on the specific case with specific interviewee in a specific occasion, semi-structured interview or unstructured interview was chosen to have the most natural response regarding the general theme of the study. With semi-structured interview, a list of themes were prepared beforehand including the tech ecosystem in Vietnam, activities that he/she knows/participates, the role in specific activities, the relationship and connection with other entrepreneurs/organizations or the purpose of participating those events, etc., And as they are not formal meetings, the length of each interview varies from case to case from 10 to 30 minutes. Moreover, there is no specific order of

questions or themes to be taken and additional questions can be required to explore the objectives questions (Saunders et al., 2009, p.320). About unstructured interviews this research, they were all informal, some interviews were not planned beforehand as they were conducted in a backstage basic or in the first time the interviewer and interviewee met each other. The topics were free and researcher tried to direct interviewees to reveal their thought about the research questions or lead to an introduction with a different potential interviewee. Finally, base on the characteristics of the environment, sometimes the format of the interview was changed from semi-structured to unstructured interviews and in the other way around based on the internal and external aspects of the conversation. In addition to the use of multiple methods, within one interview, one section of an interview may use factual questions, while in another section a semi-structured qualitative approach can be used to explore (Healey and Rawlinson 1994, p.130)

3.5 Pilot test

Before the first interview, there was a pilot test carried out for this research. Although the interviews are all semi-structured and unstructured, the pilot test is essential too. The main purpose of a pilot test is to refine the way to start questions so that interviewees could understand thoroughly and answer them smoothly. Moreover, the pilot test can provide ideas or clue that a researcher might not have foreseen before conducting it (Saunders et al., 2009). For semi-structured and unstructured interviews, it is the way researcher lead interviewee into the research topic without creating unnatural atmosphere.

In this research, the interview was informally pre-tested with 4 people who have different expertise and also performing actively in the startup ecosystem. To be more specific, the interviews were conducted to capture the expression and response of them about the research topic; the purpose of the interview was revealed later once the flow of the conversation was unstable or issues regarding understanding and responding to the questions found or interviewees got concerned about the purpose of the conversation. After revealing the

purpose of the interview and the research, discussions was conducted to improve the approach of the interview as well as questions. After repeating the process for several times, the topic stayed the same but the approach was considered to be more flexible and natural. The most important issue is to create a natural atmosphere, in which interviewees will feel relax to expose their perspectives without caring about what to say or how to say it best like a formal interview.

3.6 Data collection

To map the current situation of the Tech Startup ecosystem in Vietnam, both primary and secondary data are used to utilize this research. To be more specific, the primary data is collected by participant observation and qualitative interviews as fore-mentioned in section 3.2.

Secondary data are based on a large amount of trustworthy database including books, documents, company reports, organizations websites and also newspaper etc.,

3.7 Reliability, validity and possibilities for generalization of the research

Reliability and Validity are terms used to measure the quality and credibility of data. The consistency of the data collection and research result define the reliability of the research. However, according to Stenbacka, (2001) “the concept of reliability is even misleading in qualitative research if a qualitative study is discussed with reliability as a criterion; the consequence is rather that the study is no good”. In the term regarding credibility in qualitative research, Lincoln and Guba (1985) used “dependability”. Furthermore, Clont (1992) and Seale (1999) also endorse the term “dependability” with the concept of the consistency or reliability in qualitative research.

Validity is a term defined how well research methods measure what they are intended to measure. In another word, Validity determines how well the research reflects the reality of the research target. There are five general threats to define the validity of a research; testing, history, mortality,

instrumentation and maturation and ambiguity about causal direction.(Saunders et al., 2009, p.157) Moreover, like the reliability, validity is a concept drawn from the positivist scientific tradition, which is not fully suitable for the context of qualitative research. Therefore, the specific interpretation is needed while using in the context of qualitative research. According to Creswell & Miller (2000), validity is impacted by the researcher's perception on the validity in the study. There are relative terms adopted and be considered to be appropriate as quality, rigor and trustworthiness to express this concept (Davies & Dodd, 2002; Lincoln & Guba, 1985; Seale, 1999; Stenbacka, 2001). In this research, the research result is considered valid in the case of the current reality of the ecosystem. The validity in this case cannot and will not last in a long term as the real situation will definitely change together with the continuous development of the ecosystem.

From theoretical framework, the dependability of the research is considered dependable as the study is based on qualified academic literature only. Furthermore, the primary data are collected in the long term with researcher's own personal interaction and observation as well as interviewees are chosen with expertise and strong credibility in the ecosystem. The research is meant to reflect the current picture of the tech ecosystem.

However, the research cannot have the exact reflection with all detail as the reality, as 5 months collecting data for the growth path of the ecosystem in the last decade cannot be enough. Moreover, the startup ecosystem in Vietnam is in an active period which is always changing and developing, the validity of the research is good to have a general look and good understanding on the ecosystem but still not enough to reflect detailly with all data updated.

4 VIETNAM TECH STARTUP ECOSYSTEM

4.1 Introduction

Before going deeper into the tech startup ecosystem, Vietnam as a country is generally introduced. With the population of nearly 78 millions in 2000 and pumped up to 92 millions in 2014, Vietnam is the world's 13th-most-populous country. Although Vietnam is still categorized as a developing country, the country has one of south-east Asia's fastest-growing economies and also set its sights on becoming a developed nation by 2020. Statistically, from 2000 to 2014 Vietnam considerably increase the GDP from less than 29 Billion US Dollar to 188 Billions US dollar. The average GDP Annual Growth Rate (%) reaches 6.38 percents peryear in the period of 2000-2014. In the fourth quarter of 2007, the GDP growth rate peaked at 8.56 percent and in the influence of the world economic crisis, the GDP growth rate reache the lowest point of 3.14 percent in quarter 1 2009.



Figure 2: Vietnam GDP Growth Rate 2000-2014

Furthermore till 2014, there are more than 70 million mobile users nationwide with the estimation of 25 million smartphone users. The table in Appendix 2

statistically shows the macro introduction of Vietnam in the period of 2000 to 2014

In the limitation of the research, this section will go deeper in critical components that are performing and contributing actively to the development of the tech startup ecosystem in Vietnam. Although being important to the tech startup ecosystem, general components like local universities, startup competitions, events like seminars and conferences, angel investors or other private funding providers are not included in the research because their scopes are too large cover in this research.

Components being researched in detail in the following sections includes Tech Startups, Investors and investment funds, Business Incubators, Business accelerators and training organizations, Services and support organizations, Co-working Spaces, Business and Tech Medias, and finally are key influencers in the ecosystem.



Figure 3: Section Flow

4.2 Tech Startups



As mentioned in section 2.2, the main actors and purpose in a tech startup ecosystem are Tech Startups (Birch,2012). Tech startups are chosen to be in the core of the picture and also the first component to focus in this study.

Unlike some other countries in the area, Vietnam received the first wave of startup from the start of the new century. This is the establishment phase of a large tech companies starting with “V” like VNG, CVCorp or Vat Gia. Moreover, the role of IDG Venture Vietnam in this wave is remarkable; the venture funded a big number of startups between 2004 and 2006 with the estimated total funding of US\$ 100 million. In the late 2000’s, a new generation of startups rose as the second startup wave. During this time, startups like Tiki.vn, Nhac Cua Tui, Tiki.vn started to rise. This is also the time of CyberAgent Ventures entering Vietnam backing startups in both small and large scales. Finally around 2012 till now, started with the rise and fall of Nhommua what is so-called Groupon of Vietnam, the third startup wave is exciting with a huge amount of new startups in the ecosystem.

According to Tech In Asia, Vietnam currently has less than 2000 tech startups. After the huge influence of Flappy Bird from the start of 2014, which is well-known as “the Flappy Bird effect” the number of tech startups accelerated from this point.

Flappy Bird is the name of a mobile game developed in 2013 by Nguyen Ha Dong and this “bird” made a boom in the technology world due to its addictiveness. In January 2014 Flappy bird dominated as the most downloaded free game in the iOS App Store and after that it was also ranked 1 on Google Play. Flappy bird was claimed to earn US\$ 50.000 per day from in-app advertisements, which a normal person in Vietnam takes about 30 years to earn. Although being removed from on Apple’s App Store and Google Play by

its creator on 10th of February 2015, Flappy Bird still created a huge influence not only to the game developing community but also to the whole tech startup ecosystem. “No moment in Vietnam’s startup history for the last ten years could be so monumental and magical”, commented by Tech In Asia (2015). The whole ecosystem kept discussing the success of Flappy bird, they either admired the creator or criticized the “bird” for being so simple and “anyone can do it”; however, no matter what sides they were on, the inspiration from the game to startups entrepreneurs was undeniable.

However, in a more overall look the Success Rate of tech startups in both domestic and international market is not considerable. According to Cong Manh, CEO of Topica Founder Institute - one of the biggest startup Incubator in Vietnam, there are only about 28 tech startups considered to be successful in the whole ecosystem, which reach either one of the following criterias:

- Being valued of more than US\$10m
- Annual revenue of US\$2m
- Having more than 100 employee
- Successfully get series B funding
- Selling the company with a good price

(Doanhnhonline, 2015)

4.3 Investors and investment funds



4.3.1 The overall situation

Investors and investment funds, in general, are an active component of the startup ecosystem. In reports and literature bases in section 2.2, Sipola (2014) mentioned business angels and venture capitalist as one of the most general group in the ecosystem; Isenberg (2011) grouped them in the third domain as the “Availability of dedicated finance”. Moreover, one of six actors in the competence bloc theory of Eliasson and Eliasson (1996) is competent venture capitalists.

In the tech startup ecosystem here, it is possible to map up the investor network here as the number of investors is not high. And the most active ones that will be listed in the following section are counted to be less than ten. In addition to those, there are still other; however, performing in a quiet status such as Lotus Impact some others from Japan and Russia. Although the number of investors is not high, the acceleration of new startups here attracts the attentions of new investors as well as new investment funds. According to Nguyen Hoa Cuong, Deputy Director of the Ministry of Planning and Investment, there are more South Korean investors coming to Vietnam from 2014 (Do, 2014).

4.3.2 Investors and investment funds

- **IDG Ventures**

IDG Ventures is a network of venture capital funds actively performing all over the world and being locally managed in China, Vietnam, India, Korea, and the

United States. The Limited Partner investor behind IDG venture is the International Data Group (IDG)-known as the world's largest IT media company. In general IDG has about US\$3.6 billion under management and across Asia there are more than 350 startups being invested by IDG Ventures in the last 17 years (IDGVV, 2015).

In Vietnam, IDG came here in 1992 launching PC World Vietnam, which is the first computer publication in this country. More than a decade later, IDG ventures Vietnam was established in 2004 and went into operation in 2005, which was also the first technology venture capital fund in Vietnam.

The investment categories of IDG Ventures Vietnam varies from e-commerce infrastructure, information and communication, business technology to media and entertainment. IDG Ventures Vietnam focuses on high-quality companies from inception startups to growth stage. Besides that, IDG Ventures Vietnam also offers supports, strategic guidance, business development, marketing and also support to facilitate recruitment for companies to secure the company growth.

IDG Ventures Vietnam currently has US\$ 100 million under management, with more than 40 companies in the portfolio in sectors including technology, telecommunications, media or other consumer sectors. Many big internet companies of Vietnam like VCCorp, VNG, Vatgia, PeaceSoft, etc., were all invested by IDG Ventures Vietnam. (Some of them are featuring in the outstanding startup list in section 5.2.2.

Portfolio List

Table 1: Portfolio List of IDGVV

Moore	Apollo Vn	Yeuthethao	YanTV
Webtretho	VSMC	Vietnamworks	VinaPay
VNG	VinaBook	VietStock	VCCorp

VegaTech	Vatgia	TvPlus	Tinhvan Media
Tamtay	Sanphamviet SPV	Socbay	OTC Vietnam
Rubicon	Pyramid	Punch	PeaceSoft
MX	Muaban SJC	DMS Group	MSS
MobiVox	Minh Dat Viet MDV	Magnet	Isphere Soft
Hocmai.vn	Goldsun Focus Media	GES	FBNC
EPI	DreamViet	Dia Oc Online	Cyvee
Cyworld	diadiem.com		

(IDGVV, 2015)

To have an overall view on all investments from IDG Ventures Vietnam, each category has about 1 - 2 successful investments. In detail, in the category of information and communication, business technology, VCCorp and PeaceSoft are 2 deals that have high internal profitability rate, estimated to be more than 30%. On the other side, in the categories of e-commerce infrastructure, media and entertainment, VNG and Diadiem JSC are 2 outstanding cases (Vietnamnet, 2013). Furthermore about the exit paths of IDG Ventures Vietnam, few months after the investment to VietnamWorks, IDGVV had a full exit in 2006. In September 2008, IDGVV had a partial exit from VNG. About the business with PeaceSoft, IDGVV had 2 times partial exits in 2008 and 2011 when SoftBank and eBay invested in PeaceSoft. In the same year 2011, IDGVV had a full exit in the occasion of DeNa co., Ltd (Japan) acquiring Punch Entertainment (DeNa, 2011). Moreover, one significant business in 2011 is when IDGVV had a partial exit from MJ Group, together with Rebate Networks and Ru-net Global made a US\$ 60 million investment to MJ Group. After that, IDGVV partially exited from VCCorp when Intel Capital had a strategic investment in this startup.

- **CyberAgent Ventures**

CyberAgent Ventures is one of the most active investors in Vietnam. Belonging to CyberAgent, Inc of Japan, CyberAgent Ventures was established in 2006 and currently have offices in 11 cities of 8 countries, which are mainly in emerging countries in Asia. In December 2008, CyberAgent Ventures officially operated in Vietnam focusing in startups in the internet-related fields. (CyberAgent Venture, 2015)

CAV actively finances venture companies at various stages under the theme of being a partner for entrepreneurs and venture companies. CAV has financial support with support in business startup preparation from the seed stage and to the early stages where the businesses start to gain momentum.

CyberAgent Venture has raised 6 funds with 3 in Japan, 2 in China and 1 in the Southeast Asia area with the total US\$ 136.7 Million under management. Furthermore, the CA Asia Internet Fund I established in 2011 with the total fund of US\$ 20.1 million is the fund that invested in many startup companies in Vietnam.

To name the few outstanding companies got invested from CyberAgent Ventures, VinaGame, Vatgia, VGame, Baokim, CleverAds, Di Dong Xanh... However, not the investments for companies in Vietnam are from the CA Asia Internet Fund I, the CyberAgent Ventures do have direct investments working parallel with that fund. (CyberAgent Venture,2015)

Together with the international strategy, most of the investments in Vietnam are in the form of Seed-funding or early stage investment. However, there are 2 exceptional cases targeting to growth-staged companies which are the cases of VNG Corporation and VMG Media JSC.

Portfolio List:

Table 2: Portfolio List of CyberAgent Ventures Vietnam

Company Name	Investment Time	Company Name	Investment Time

Vatgia	Q2-2009	ColorBox	Q1-2012
Baokim	Q4-2010	Vexere	2014
Didongxanh	Q3-2010	DKT	2014
VMG	Q1-2010	Foody	-
Viet Nam Game	Q1-2010	Topica English	-
CleverAd	Q3-2011	Batdongsan.com	-
Tiki.vn	Q1-2012	Teamobi	-
Nhaccuatui	Q1-2012	VNG	-

(CyberAgent Venture, 2015)

- **DFJ Vinacapital**

DFJ VinaCapital is one of the first domestic venture capital funds in Vietnam. DFJ Vinacapital belongs to the VinaCapital funding family, and also a member of the Draper Fisher Jurvetson (DFJ) network. To be more specific, VinaCapital is a Vietnam's leading asset manager with over 200 companies under management. Currently, Vina Capital has 4 investment funds in Vietnam, the Infrastructure Investment Fund (2007), Vietnam Opportunity Fund (VOF), VinaLand (2006) and DFJ Vina Capital LP (2006), with a total of over US\$ 1 billion capital under management. Base on that Vina Capital sets US\$ 30 Million for Ventures Capital. Furthermore on the other side, DFJ is the world's premier venture capital network with over 600 portfolio companies funded globally. (DFJ Vina Capital, 2015)

DFJ VinaCapital focuses on technology related fields like the internet and communications. Moreover, this investor pays more attentions on projects/companies related to Vietnam including tech companies that cater to Vietnamese consumer, utilize the Vietnamese workforce as a supplier of good and services or founded by oversea Vietnamese. For example, it invested US\$

2 million into TS24 for a project of updating the government's tax system. (Do, 2014)

With the form of partnership, in each investment, DFJ VinaCapital plays an integral role in the portfolio company and work closely with the entrepreneur and the management board.

Portfolio Companies:

Table 3: Portfolio List of DFJ Vina Capital

Chicilon Media	DirectWithHotels	GapIT	Greenvity
TaxOnline	Vietnam Online Network	Yeah1	

(DFJ Vina Capital, 2015)

Some information about the exit path, in 2012 DFJ VinCapital took a full exit by MJ Group's acquisitions of Yume.vn. In 2013 Kiemviac.com and HrVietnam.com was taken over by CareerBuilder with a non-disclosed 8-digit acquisition. (Careerbuilder, 2013)

- **Mekong Capital**

Founded in 2001, Mekong capital a big portfolio of investments in Vietnam. Mekong Capital manages 4 investment funds as the following. Mekong Enterprise Fund I was established in 2002, MEF II was established in 2006, Vietnam Azalea Fund was established in 2007 and most recently Mekong Enterprise III was established in May 2015. Total investment of the three funds was US\$ 255.9 million, the expected operating time of each fund is from 5-8 years or longer depending on the case. (Mekong Capital, 2015)

From 2002, all funds have 26 startups in the portfolio in total. In that record, 3 investments had partial exits and 16 others successfully had full exits.

Funds from Mekong Capital focuses in fast-growing and market-leading companies in Vietnam's consumer-driven sectors such as retail, restaurants, consumer products and distribution. Funds from Mekong Capital don't focus on

early stages startups but in top growing businesses in sectors like retails, F&B, distribution or other consumer products Investments here are looking for ambitious expansion plans as well as the strong commitment of the management team that will apply best practices and execute those plans.

Portfolio of current investments:

Table 4:Portfolio List of Mekong Capital

Phu Nhuan Jewelry	Mobile World	FPT Corp	Nam Long
Asia Chemical Corp	Intresco	VAIS	Loc Troi Group
Traphaco	Minh Hoang Garment		

(Mekong Capital, 2015)

Finally, the table below shows the exit paths of Mekong Capital in older investments.

Table 5: Mekong Capital's Divestment History

Exit Route	Trade sale of controlling interest of company to a strategic investor	Sale of 100% of Fund's shares in a directly negotiated transaction	Sale of Fund's shares via securities markets
2008	Saigon Gas		
2009		Duc Thanh	Tan Dai Hung
2010		Mai Son	Masan Food
2011	ICP	Minh Phuc; AA Corporation	
2012		Goldsun; Lac Viet; Nam Hoa	

2013		Digiworld; MK Smart; MobileWorld	Ngo Han
2014	Venture International	Golden Gate	MobileWorld

(MekongCapital, 2015)

- **DWS**

Launched in December 2006, DWS Vietnam Fund is a part of Deutsche Asset Management. In Vietnam, Duxton Asset Management Pte Ltd (Duxton) is responsible for managing the fund.

The main objective of DWS Vietnam Fund is to seek long-term capital appreciation of its assets by investing directly or indirectly in a diversified portfolio of securities such as equity and debt instruments of entities that do business in Vietnam.

The DWS Vietnam Fund invests 48.7% of the portfolio to listed stocks, 31.9% to unlisted stocks and the rest are for other categories.

In July 2012, VTC Online secured US\$ 10 million investment from DWS Vietnam Fund. The investment was made through the fund manager in Vietnam - Duxton Asset Management Pte Ltd (Duxton). Furthermore, VTC Online was the first tech company with unlisted stocks that could secure an investment from DWS.

- **Intel Capital**

Established in 1991, Intel Capital has invested in over 1.447 companies in 57 different countries with the total investment of US\$ 11.6 billion.

Although not particularly operate in Vietnam, Intel Capital is still a potential investor for tech startups to impress.

As mentioned in section 5.2.2, in June 2012, Intel Capital has an investment of US\$ 17 million to 2 tech companies in Southeast Asia, one of which was

VCCorp of Vietnam. With the investment, Intel plays the role of supervising but not executing in VCCorp.

Kutsto Tiger Fund Vietnam

The Kutsto Group is a Singapore private holding company with investments in a long list of categories including Venture in IT, gas productions, energy , etc.

Kutsto Tiger Fund Vietnam performed actively in 2011-2012 with most of the investments were series A fundings and later stages.

Portfolio:

Table 6:Portfolio of Kutsto Vietnam

Truongxua.vn	Everyday.vn	Paylink & MobiVi	Wada.vn
--------------	-------------	------------------	---------

(idt, 2015)

- **PVNI**

Prosperous Vietnam Investment Corporation (PVNI) is a venture capital network investing in highly potential startups in Vietnam. PVNI mainly focus in categories including consumer goods and services, green food, high-tech, social media and education.

PVNI offers early stages funding for potential startups like US\$ 2000 - US\$ 7000 during ideation stage, US\$ 20.000 to US\$ 45.000 at seed stage and unto US\$ 250.000 for Series A funding.

Portfolio list:

Table 7: Portfolio of PVNI

Company name	Investment Time	Company name	Investment time
Cloudware	2011	Blueway	2012
MyproClub	2012	Tokyo Crepes	2013
Banh Mi Viet	2015		

(PVNI, 2015)

- **OneCapitalWay**

This is a new name in the tech startup ecosystem in Vietnam. There is not much information about this angel investment firm, what is available now is that this firm includes several Googlers and is actively looking for young potential startups for pre-series A funding.

In 2014, OneCapitalWay partnered with 5Desure to fund a furniture / home decoration e-commerce called Ahometo (DO, 2014).

4.4 Business Incubators



Together with investors, business incubator is one of the most active component of the ecosystem that mentioned in section 2.2.1. Startup incubators are the one to realize potentialness support the development of startups from the very early stages.

In the current accelerating startup wave, startup incubators around Vietnam have been working actively for the coming entrepreneur generation. Incubators here support startups in solving common problems regarding running a startup through offering workspace, funding mentoring or training programs, etc. The following analysis is a brief introduction of incubators in the tech startup scene in Vietnam.

- **Saigon Hi-Tech Park - Incubation Center (SHTP-IC)**

Targeting Fields:

- Information technology, telecommunications
- Mechatronics, Automation, Microelectronics
- Nanotechnology, New materials, and energy
- Biotechnology, Environmental Technology

SHTP-IC includes the following departments:

Business Service Center: supporting resources needed for infrastructure consultancy, business management training, marketing-PR, search for funding, creating affiliate networks

Technology Transfer Center: supporting technology firms in intellectual property, patent registration; survey and assess the market potential of technology; connecting startups and potential customer firms;

Incubation Management: Base on specific cases, the incubation program will be customized with services provided by 2 centers above.

Advisory Board: leading experts with experiences in business administration and technology transfer will assist in the operation of the business incubator and startups.

Contact Information:

Website: <http://shtpic.org/>

Address: K1-G3, D1, Hi-Tech Zone, Tan Phu Ward, District 9, Ho Chi Minh City.

- **Topica Founder Institute (TFI)**

Targeting Fields: Technology

Topica Founder Institute provides knowledge, experience, and skills of entrepreneurship in the technology sector. Most of the problems regarding the startup path will be supported including cost management, product development, business orientation, co-founders seek to depth issues such as SEO, Marketing, Head Hunt.

Outstanding startups from TFI: Noi.vn, Baomoi.vn, appota.com, biaki.com, giaytot.com, Yton

Contacting Information:

Website: <http://tba.topica.edu.vn/>

Address: A17, 17 Ta Quang Buu Street, HaNoi City

58/10 Thanh Thai Street, 10 District, Ho Chi Minh City

- **Business Startup Support Center - (BSSC)**

Targeting Field: Startups in general

BSSC includes a complex of Training Programs, Incubator, Services and startup fund, supporting in various area of startups including the following:

Advisory:

The Advisory Board of BSSC includes professionals entrepreneurs, intellectuals currently working and in various business fields. The advisory board doesn't only comments and evaluate the possibility of projects, but also helps young entrepreneurs to find partners and customers.

Financing:

BSSC is now the only unit receiving funding from Ho Chi Minh City People's Committee to support activities at Youth Entrepreneurship in HCMc with a capital of 30 billion VND (US\$ 1.32 million).

Working conditions:

BSSC provides all essential services for a newly established startup include working station, phone, fax, photocopying, accounting services, meeting rooms, office location for businesses dealing.

Training:

BSSC offers programs for extensive knowledge in various fields: finance, sales, human resources, management, and support, etc. Moreover, BSSC also analyzes risk management in the specific field of new startups.

Promotion:

Finally, with the spreading network, BSSC support startups in seeking customers, partners matching fields of business (BSSC, 2015)

Contact Information:

Website: www.BSSC.vn

Address: 02-04 Alexandre de Rhodes Street, Ben Nghe Ward, District 1, HCMC

- **High-Tech Business Incubator Center (HBI)**

Targeting Fields:

Information & Communications Technology (ICT), Biotechnology for agriculture, fisheries and health, Technology Microelectronics, Precision Engineering, Mechatronics, Optoelectronics and Automation, New Materials Technology, Nanotechnology, Biotechnology.

Center for Business Incubation tech (HBI) is a component of the training cycle: Study - Implement - Manufacturing - Commercialization. With a wide range of services and a strong infrastructure base, HBI helps startups reduce costs, minimize risks during start-up. The supporting services can be listed as Transportation, Telecommunication, Consultancy, Product Commercialization, Networking and Cooperation and also Financial Approach. (HBI, 2015)

Contact Information:

Website: <http://hbi.org.vn/>

Address: Km 29, Thang Long Highway, Thach That District, Hanoi

- **Quang Trung Software City**

Targeting Fields: E-commerce, Construction, Automotive Business, Electronic Brands, Cloud Computing.

Being chosen to join the incubation, Startups will get supported in all possible ways including infrastructure, services, a professional advisory from Quang Trung Software City. Moreover, all companies here receives preferential policies and incentives directly from the State.

Contact Information:

Website: <http://www.qtsc.com.vn/>

Address: Head office: 97 - 101 Nguyen Cong Tru Street, Nguyen Thai Binh Ward, District 1, HCMc

Office: Hall 3, Quang Trung Software City, Tan Chanh Hiep Ward, District 12, HCMc

- **Ho Chi Minh City University of Technology - Technology Business Incubator (HCMUT-TBI)**

Targeting Field: Science and Technology

HCMUT-TBI incubates startups from the ideation stage with ideas potential for commercialization. Moreover, HCMUT-TBI also supports startups to overcome difficult periods or insisting companies that don't have enough capacity in the market. Finally, HCMUT-TBI has programs accelerating the managing ability of startup founders and entrepreneurs.

Contact Information:

Website: <http://hcmut-tbi.com/>

Address: 268 Ly Thuong Kiet Street, District 10, HCM City

- **Becamex Technology & Innovation Center (BTIC)**

Targeting Field:

Intellectual Products, E-commerce, Mobile Solution, Core technology

BTIC was established by Became IDC group, BTIC supports startups free of charge from working place, IT infrastructure, seed capital to business advisory or legal, accounting and methods of commercialization.

Advisory boards includes Ed Fries, former vice president Microsoft — the father of Xbox and Microsoft excel, Anne-Marie Roussel, director of partnerships and merger of Sharp; Do Hoai Nam, the co-founder and managing director of Emotiv Systems , etc. BTIC promises to serve as a bridge for quick start-up group access to information technology market of the world.

Contact Information:

Website: <http://www.becamextic.com/>

Address: Hoa Loi, Nam Ky Khoi nghia, Dinh Hoa, Thu Dau Mot, Binh Duong City

- **mLab East Asia**

Targeting Feld: Mobile applications

mLab East Asia is an open space, where technology entrepreneurs, application developers can interact, work and access to specialized tools to find out solutions to start and develop the business. mLab also acts as a bridge between investors and businesses to commercialize products from lab to the market. Moreover, the development of mobile apps aims to create the connection between citizens, businesses, and governmental services.

mLab is actively performing in the ecosystem creating jobs and improving competitiveness by providing the open space where the developers will receive training, consulting, technical support and help reach the capital, connections, and market investors. Furthermore, mLab is the name behind technology competitions like Mobile Innovation Challenge 2013, Smart TV application creation competition, The East Asian's First Innovation Challenge 2013 or be the sponsor for Mobile Hackathon, Mobile Day and Start Me Up.

Contact Information:

Address: mLab office, Saigon Hi-Tech Park, District 9, Ho chi Minh City

- **Vietnam Silicon Valley**

Targeting Fields: The internet, online games, mobile applications, e-commerce, e-learning.

Vietnam Silicon Valley is a startup incubator, accelerator backed by the Ministry of Science and Technology and the Vietnamese Government, aiming to stimulate the growth of technology Startups in Vietnam.

VSV provides 5-week constructive program incubation for startups. And after that is the 4-month intensive startup accelerating program. The organization typically finances at least US\$ 10,000 per startup and provides full facilities, equipment and also business/law consultancy. The objectives and the end of the program, startups can have the opportunity to attract investment from angel investors or funds.

Contact Information:

Website: <http://www.siliconvalley.com.vn/>

Address: 35 Dien Bien Phu St., Hoan Kiem, Hanoi, VNM

- **Vatgia Incubator**

Targeting Fields Internet, E-Commerce

This is a project invested by Vatgia, one of the biggest e-commerce throughout the country. Vatgia Incubator will provide facilities, working space, training and also have access to services as well as e-commerce platforms and sources from the company. Chosen projects will receive advisory and get investments of up to US\$ 1 million. This program has been implemented since 2011 and until now has supported 5 startups.

Contact Information:

Website: <http://vividigital.vn/>

Address: Floor 9, 51 Le Dai Hanh Street, Hai Ba Trung District, Hanoi

70 Lu Gia Street, 15 Ward, District 11, Ho Chi Minh City

- **Hatch.vn**

Targeting Fields: undefined

Hatch.vn is working actively in the tech startup ecosystem and startup ecosystem in general. Hatch.vn encourages the development of new startups

by providing programs, training courses, incubation, co-working space and also a network of angel investor (HATCH!ANGEL).

Contact Information:

Website: <http://www.hatch.vn/>

Address: To 14, 195B, Doi Can, Ba Dinh, Hanoi

- **X-Incubator:**

Targeting Fields: Technology

Founded by Pandora.vn, X-Incubator is a small incubator program model working differently from other incubators. Each startup will only receive 15 US dollars, but they will be working directly with Pandora team with "a promise to support all resources and capabilities that they can launch their products". The program normally lasts for 3 months and X-Incubator has 8 companies in its portfolio.

Contact Information:

Website: <http://x-incubator.org/>

4.5 Business Accelerators and training organizations:



Besides Incubators, Accelerator and training organizations provides a wide variety programs boosting the competency of startups shaping their startup path from beginning stages. The analysis below will show accelerators performing actively in Vietnam till 2015, organizations that perform mainly in the incubating stage that were listed in Section 5.4 will not be analysed in this section.

- **Founders Accelerator Program (FAP)**

FAP is pioneer in Startup Seed Accelerator/Incubator in Vietnam following Techstars model like Y Combinator in Silicon Valley. FAP focuses in the early stages of startup in the period of 120 days.

To be eligible for the program, startups has to have business idea or a complete product already. Startups will receive FAP package with the value of US\$ 35000 including US\$ 10000 cash spending on infrastructure, technical assistance by experts, office, mentoring, operating expense and cost of product development. The rest of the package will be used for the next funding round.

FAP requires start-up in the program to live in HCMc and work in the office.

Contact Info:

Website: <http://wwwFOUNDERS.asia/>

Address: 2nd floor, Lu Gia Plaza, 70 Lu Gia Street, District 11, HCM City

- **The JFDI Accelerate Program**

Operated by JFDi.Asia from Singapore, JFDI Accelerate Program is considered as one of the most successful startup business accelerator programs in South East Asia.

Startups will go through a 100 day intensive mentoring program with the introduction to more than 100 active early stage investors. Moreover, the program will offer US\$ 50.000 cash investment and US\$ 100.000 in facilities and offices in return for equity. Till 2015, JFDI Accelerate Program has 69 companies in the program portfolio.

Website: <http://www.jfdi.asia/>

- **Microsoft Bizspark**

Started in 2009 in Vietnam, Microsoft Bizspark is an accelerating program for tech startups focusing in software development.

Joining the program, startups will be able to use licensed softwares and platforms for free of charge. Moreover, they will receive technical support, training as well as an opportunity to promote the company in the ecosystem.

Microsoft is spreading the partnership with Institute of Information Technology,

Vietnam Software Association, venture capital funds and the universities in Vietnam to support the program. Finally the fee startups have to pay for the 3-year program is very low (US\$ 100)

Website: <https://www.microsoft.com/vietnam/>

- **Egg Accelerator**

Established in 2007, Egg Accelerator is a program belonging to Egg Group Singapore

The program aims to push startups pass the chasm, and into orbit by connecting startups with channel partners, mentors and networks in the segmentation as well as outsourcing partners.

Contact Info:

Website: <http://egg.sg/>

Address: The Manor 2, 91 Nguyen Huu Canh Street, District 1, Ho Chi Minh City

4.6 Services and Support Organizations



Besides organizations above, there are other support organizations contributing to the Tech Startup Ecosystem in Vietnam with activities, events, competitions or supporting services from technical, business training courses to startup supporting services in various stages regarding investment, HR, accounting, intellectual property, PR, etc. Active organizations will be analyzed in the table below

Table 8: Services and Support Organization

Organization Name	Activities/ Services
Viet Youth Entrepreneurs	Organizing and co-organizing events and competitions for tech entrepreneurs
Aiti Aptech	Organizing training courses in Information Technology
Seedfund.vn	Offering investment support services and Startup support services
Cyconize	Organizing events introducing successful startup ideas in the world to the startup community in Vietnam and promoting startup ideas or inventions that bring practical values to Vietnam Consulting business planning
Open Consultant	Sharing experiences and knowledge about business in Information Technology field in a non-profit basic.
SMI-Strategy Management and Marketing Institute	Offering consultancy in marketing, HR, strategic management, business strategies, distribution system, branding Organizing encouraging events

4.7 Co-working Spaces



Mapping up the tech startup ecosystem, we cannot forget co-working spaces. Being mentioned as an dynamic component in section 2.2.1, co-working spaces are a solution for startups in all aspects including facility, team working, networking and idea shaping. Co-working spaces are not

only for individual contractors or entrepreneurs in another city looking for a place to work. Together with the startup wave 3, there are more and more co-working spaces established both in the North (Hanoi) and the South (Ho Chi Minh City). It is apparently not only about working space, they are the hub of people with the same minded, they are where teams can get facilities to support the productivity without caring too much about the fees. Moreover, co-working spaces also organize events connecting teams, startups and other parts of the ecosystems. As a matter of fact that there are a number of co-working spaces under construction now in HCM city and Hanoi, only Co-working spaces having registered and being active till August 2015 are collected in this research.

Table 9: List of Co-working Spaces

Name	Basic Information
Work Saigon www.worksaigon.com	Include Co-working space, cafeteria and creativity School Scale: suitable for small events or workshops from 30-250 people. Suitable for people working in designing field and technology, writers, artists, freelancers, entrepreneurs and small business owners. Address: 267/2 Dien Bien Phu Street, District 3, HCM
Saigon Coworking www.saigoncoworking.com	One of the best choice in Ho Chi Minh City, this is a spacious 24/7 co-working space with additional business services available. Legal, Financial and IT consulting service is available. Address: 101 Cu Lao Street, Ward 2, HCMc

<p>Aspire Office www.aspireoffice.vn</p>	<p>Spacious area of 1010 m2 on 5 floors, conference rooms with needed equipment, the facility is fully equipped in modern design.</p> <p>Suitable for small companies and startup teams</p> <p>Address: 466/4 Le Quang Dinh, Ward 11, Binh Thanh District, HCMc</p>
<p>Regus www.regus.com.vn</p>	<p>Regus offers a wide range of office and office-related service.</p> <p>Regus has 2 co-working spaces in the center of Ho Chi Minh City and Hanoi with additional services available.</p> <p>Address: Floor 16, Saigon Tower, 29 Le Duan Street, District 1, HCMc Floor 6,7, Me Linh Point Tower 2, Ngo Duc Ke Street, District 1, HCMc Floor 5, 41A Ly Thai To, Hoan Kiem District, Hanoi Floor 4-6, 59A Ly Thai To, Hoan Kiem District, Hanoi</p>
<p>Start-Saigon www.start-saigon.com/</p>	<p>Co-working Space and community dedicated to startups in technology and design. Start also has social events for members.</p> <p>Address: 18bis/14 Nguyen Thi Minh Khai, District 1, HCMc</p>
<p>Gekko Space</p>	<p>A small co-working space in Ho Chi Minh City Suitable for startups, individual specialist or super small scaled companies.</p> <p>Address: 164C Dien Bien Phu St District 3, Ward 6, HCMc</p>

<p>Hub IT www.hubitasia.com/</p>	<p>Hub IT is a Co-working Space with a community of tech startups.</p> <p>A group of advisors is active here and advisor meeting is organized every month.</p> <p>Suitable for startups in the field of software development and mobile application</p> <p>Address: 2 Ngo Quyen Street, 203 Tung Shing Square, Hoan Kiem District, Hanoi</p>
<p>5Desire http://5desire.com/</p>	<p>5Desire is an incubator an accelerator, it provides a Co-working Space for developers and international entrepreneurs with a wide range of activities. 2 events including Investment House and Global Expert Sharing are organized every month to support the ICT community in Vietnam.</p> <p>Address: R0603, Thanh Cong Building, 57 Lang Ha, Hanoi</p>
<p>ClickSpace www.clickspace.vn</p>	<p>ClickSpace is a quiet co-working space tin a quiet area of Hanoi. Ideal to focus on work. In the same system is a Spacebar co-working cafe for a more relax atmosphere. Clickspace also organize networking events here.</p> <p>CLickspace is suitable for startups, startup teams, individuals.</p> <p>Address:Alley 76, House 15, To Ngoc Van Street, Tay Ho District, Hanoi</p>

(Content adopted from: Work Saigon, 2015; Saigon Coworking, 2015; aspireoffice, 2015; Regus,2015; Start Saigon, 2015; Gekko, 2015; HubIT, 2015; 5Desire, 2015; Clickspace,2015)

4.8 Business and Tech Medias



Playing an important role in the information flow of any ecosystem, media firms help to spread news and information around the startup ecosystem and bring startups closer to customers as well as other parts of the community. Media firms introduced in this research are either tech related or startup related covering the area of Vietnam.

Table 10: List of Business and Tech Medias

www.twenty.vn	www.Action.vn	www.TechinAsia.com	www.Pandora.vn
www.Techdaily.vn	www.tinhhte.vn	www.Gik.vn	www.lctnews.vn
www.vcamp.vn	www.e27.co	www.vozforum.com	www.linkhay.com
www.FBNC.vn	VNMG		

4.9 Influencers



Finally, key influencers are the right destinations for startups to contact in order to have a deeper understanding in the tech startup ecosystem in general or in their areas of expertise. In short, they are top experts in fields related to technology business, they know deeply about the tech startup ecosystem in

Vietnam with experience working and performing here, finally they are active in the ecosystem and open to share experience or give advices.

Table 11: List of active influencers

INFLUENCER AND LINKEDIN PROFILE	COMPANY	EXPERRTISE
<u>Chris Zobrist</u> vn.linkedin.com/in/czobrist	TheStartNetwork, SaVVi	Education, Coworking, Investment
<u>Sieng Tran</u> uk.linkedin.com/in/sieng/	Egg Agency	Growth, International, Investment
<u>Roy Nguyen</u> vn.linkedin.com/in/roynguyen/	Startup.vn, Startup Weekend	Connecting, Entrepreneurship, Training
<u>Minh Do</u> vn.linkedin.com/in/caligarn	TechInAsia	Startup Media
<u>Tomo Huynh</u> vn.linkedin.com/pub/tomo-huynh/14/212/5b5/	Alehap.vn	IT & Tech
<u>Hung Dinh</u> vn.linkedin.com/in/hungdv	Joomlart.com	International, IT, Tech
<u>Ngan Le</u> vn.linkedin.com/pub/ngan-le-huynh-kim/4a/3b6/5ab	<u>Action.vn</u>	Connection, Startup Media
<u>Dan Shupp</u> vn.linkedin.com/in/dshupp/	Tech Propulsion Labs	Agile, IT, Tech

<u>Tien Pham</u> vn.linkedin.com/pub/tien-pham/21/791/394	StartupWeekend Hanoi	Connecting, Marketing
<u>Dat Le</u> vn.linkedin.com/pub/dat-le-viet/22/546/42b	<u>Hatch</u>	Connecting, CoWorking, Events
<u>Cong Tran</u> vn.linkedin.com/in/congtrm	Topica Fouders Institute	Connecting, Training
<u>Thuy Truong</u> www.linkedin.com/in/thuytruong	GreenGar	International, Pitching, Women
<u>Mike Tran</u> vn.linkedin.com/pub/mike-tran/20/69/692	Keewi.me	Advice, Pitching, Connecting
<u>Hai Ho</u> vn.linkedin.com/in/hoviethai	Triip.me	Technology
<u>Anh Nguyen</u> vn.linkedin.com/in/tuananh/	Geeky.vn	Technology
<u>Chris Harvey</u> vn.linkedin.com/pub/chris-harvey/0/150/aa0	ITviec.com	Leadership, Pitching
<u>Aaron Everhart</u> vn.linkedin.com/in/aaroneverhart	Alpine Creative, Hatch	Consulting, Connecting

(Mai, 2015)

4.10 The Interactions within the tech startup ecosystem.

4.10.1 The interaction between entrepreneurs:

About the interaction between entrepreneurs in the ecosystem, as mentioned in section 2.3.1 that the interactions created an environment that entrepreneurs can learn from their peers and support each other; the case of the Tech Startup Ecosystem in Vietnam does create an environment for entrepreneurs to learn and support each other. The difference in this case is; however, the interaction here is not strong enough to connect entrepreneurs in a wide scale. In a comparison of the ecosystem of St.Louis that mentioned in section 2.3.1, two-thirds of recipients have interactions with each others; the case of Vietnam is different, entrepreneurs and startup entrepreneurs only interact with each others via specific channels (own observation 2015). In other words, although being connected with each others through the ecosystem, the structure of interaction between entrepreneurs here are uneven, they converge into small clusters. According to H.H and N.L, they mostly interact with entrepreneurs through events that their organization host, when researcher mentioned about other outstanding entrepreneurs in different channel in in-depth interviews, the positive response rate was quite low.

There are some assumptions to answer this result. Firstly, the interaction flows throughout the ecosystem might not be not strong enough yet to connect all entrepreneurs individually, they are in groups and small communities, and those communities connect and interact with each other. Of course there are larger events attracting more people or there are active people joining more activities in different channels, however, those cases seem not quite common. Secondly, connections and names can be considered as a personal issue, in which interviewees in Vietnam are not quite open to discuss or mention. Thirdly, with the limitation of interview conducted (about 30), the study might not be able to collect enough quantitative data to analyze the interaction rate in a wide scale.

In a nutshell, finding shows that the interaction between entrepreneurs is strong and entrepreneurs here gather into small groups or channels. In order to have a wider conclusion about the interaction between entrepreneurs in the whole ecosystem, a quantitative research should be conducted in a larger pool in the future.

4.10.2 The interaction between formal support organizations:

As mentioned in section 2.3.2, support organizations interact with each other through both tight and loose connection. As there are not so many support organizations in the ecosystem, the interaction is considered active. Base on researcher's observation, most of the representatives of support organizations know clearly about other organizations. Furthermore, they know about future events and programs, which is necessary to avoid duplicating supports in certain fields. Besides supporting each others, organizations do join or spread news or information about events or programs of their organizations.

One of the biggest tech startup event of 2014 was the Hackaton Vietnam 2014. The event was co-organized by support organizations from components across the ecosystem including Formation 8 (venture capital firm), 5DESIRE (incubator, accelerator), John Von Neumann institute (institution), TechInAsia (Tech media) and Viet Youth Entrepreneurus (startup support organization). (Review, 2014) This is one good example for the interaction of support organizations in the ecosystem when 5 active organizations in different components worked together, joined hands to co-organize a big event seeking for new startups in the ecosystem.

4.10.3 The interaction between entrepreneurus and formal support organizations:

The interaction between entrepreneurs and key support organizations are the most basic interaction within the ecosystem. Section 2.3.3 mentioned about 2 types of interactions that startups can get from support organizations including broad types like mentoring and connecting or financial & functional types like incubation, acceleration or investments. Findings show that those two types are

valid in the case of Vietnam. They are two-sided interactions, support organizations provide support to startups; startups receive support and contribute back. the interactions between them and key support organizations around them are the most foundation. (Own observation 2015)

For example, receiving the first investment of US\$ 500.000 and support from IDG Ventures Vietnam after 1 year of operation, VNG got a firm push on the way to develop into one of the largest tech corporation in Vietnam. For IDG Ventures Vietnam, VNG is a bright point in the startup portfolio contributing in building the credibility of this investment firm in Vietnam. IDG Venture Vietnam and its fundings were promoted and became one of the first destinations of startups seeking for investments.

4.11 The objectives of Tech Startup Ecosystem in Vietnam

The biggest objective of the ecosystem is to develop the startup generation as a contribution to the national economy. The development aims to be comprehensive in all possible components of the ecosystem. About this objective, according to the interview with Mr. C.S-senior business advisory, all startups and support organizations are trying hard to make positive influence to the economy through their own development; and this year we achieved a milestone proving the influence they are building to the government. According to Hung Dinh – angel investor, founder of Joomla!Art, “The startup economy will play an important role in our economy. Leaders now know a growing force called “startup” (Do, 2015). On 12th of August 2015, a meeting between Vietnam’s deputy prime minister and many leaders in the startup ecosystem was held regarding in supporting the startup ecosystem. This is considered as the highest level discussion about startups so far in Vietnam(Do, 2015). For the first time, the government has a practical act to be serious about startups. In the event proposals about regulations and incentives for both domestic and international firms were proposed to build a better and smoother startup ecosystem here.

About the regulation system, It is an obstacle for businesses in general and startups in specific; moreover, it can even be a barrier resisting foreign entrepreneurs and foreign startups to do business in Vietnam. The objective of support organizations is to make the startup path as smooth as possible by offering knowledge and a wide variety services while waiting for the government to update the system. Mentioned in the interview with D.P - Lawyer, Senior Legal Consultant— businesses have to spend a huge amount of time and efforts to go through all the steps of registration, tax application, and other regulatory processes. Normally businesses will go through third party services; however, with a complexity of processes the fee startups need to spend for those services is significant. The fee for foreigner or foreigner firms is even higher. Furthermore, when being asked what the transparency of the regulation system means to businesses, D.P says that the boundary between legal and illegal is so thin that companies in a very stable status can violate unexpected terms and laws that lead to the dissolution of the business. An example to call is the case of Haivl.com, a humor website achieving 4 million visits per day after 2 years of operation, the last good news to the company was the investment of US\$ 1.5 million in October 2014. One week after that, the website got invested by the authority and turned violating regulations; the license was revoked. The business stopped immediately in 1 month and became a story for startups to take care of every step related to regulations. In a nutshell with this problem, the short-term objective is to enable startups to do business in an as smooth condition as possible. The long-term objective is to have the influence to the government to reform the regulation system to make it more transparent and simpler.

In a narrower scale, organizations in critical components across ecosystem are developing events, competitions, courses to spread the idea and stimulate the business mind in startup founder's mind. In the interview with P.D - CEO of SV JSC, the core value of firm bases on the business model behind the product of the company; In order to sustainably develop or to attract investments, startups have to build for themselves a neat business model. In a different interview with N.N - President of digital marketing of P Pte. Ltd., many startups focus too

much on the product and forget the role of the business aspects. According to him, startup firms need to prove the potentiality not only of the product but also of the business idea behind it. In short how to make the company profitable from the product? After the giant success of Flappy Bird from Gears Studio, many startups or tech startups focus only on product development; lots of games and applications were on the producing process. However, when being asked the above question, many startups get confused and answer that they wait for income from in-app advertisement after launching. For investors, in-app advertisement as the main income is not stable and not promising enough to conduct an investment. In general, the objective of the ecosystem is to boost up the quality of startups by raising the business mind and spreading concepts about business models in the ecosystem.

On a different aspect, the feeders and components in the ecosystem are aiming to build experience and knowledge about finance and investment issues for startup founders. In interviews with Mr. C.S or Mr. P.D, they both mentions about investments that hold back the development of startups. Besides the knowledge about startup financing like types and sources of funding, the understanding about types of investors defined by their motive of investment. According to P.D, if categorize investors base on their motives of investment, there would be three types of investors. First of all, investors with no interest in the business of startup, the motive for investment is because the startup is considered to be “potential” and they are in the situation of acquiring the equity in a cheap starting price. They are so-called speculators and they don't stay long with startups; instead they will exit in short-term when the price is getting better. Secondly, there are investors that help polish the cover of startups without supporting building the system inside. These investors are dangerous as they use their ability and credibility to make the startup look far more potential than it is actually is. The motive is to mark up the price of the business for their exit strategy. Startups under these cases become bubbles and “bubbles are made to pop” said C.S. The disadvantages finally are for startup founders who fail in their own business. The last type of investors is what startups need to find, who invest for the potentiality of startups and support

building the business model till the mature phase that is ready for substantial exits. According to C.S and P.D, it is difficult for startups to define what type of investors are coming for them; they believe, however, having knowledge and understanding about the issues as well as finance will lower the risk of getting disadvantages from risky investments.

5 CONCLUSION

5.1 Conclusion

Tech Startup Ecosystem in Vietnam is growing and day by day gaining its impact to the society and the economy. The research generally draws out the map of the ecosystem. The study can only reflect the current situation of the ecosystem in this specific point of time. Therefore, in future research or study the results will change based on the development of the ecosystem in the time coming.

For the research question of the study, “What is the situation of the Tech Startup Ecosystem in Vietnam?”, the research could show generally the situation of the ecosystem by answering in detail 3 sub-questions as the following.

The first sub-question of the research “What are the main components of the Tech Startup Ecosystem in Vietnam?” By spending 5-months researching in the ecosystem with participant observation and qualitative interviews, the result is considered satisfying. An analysis with detailed information about the most active components in the ecosystem is conducted. From 2000 to 2015, the country has 3 startup waves in total, the whole country has about 2000 tech startups and the number is growing in the recent time. However, the successful rate is not quite considerable with the figure of less than 30 highly successful startups in the whole ecosystem. Moreover, findings showed that the ecosystem has 8 active investment funds, 12 active business incubators, 4 business

accelerators, 6 active support organizations mainly focus in startups, 9 co-working spaces, 14 business and tech media firms and a long list of influencers. Information like expertises, targeting fields, programs, activities or contact information are all collected in the research. At this point, the research is successful in analyzing components being active in the ecosystem. The result can be used as a guide for new startups and entrepreneurs from both domestic and international market to have a smoother approach to the ecosystem.

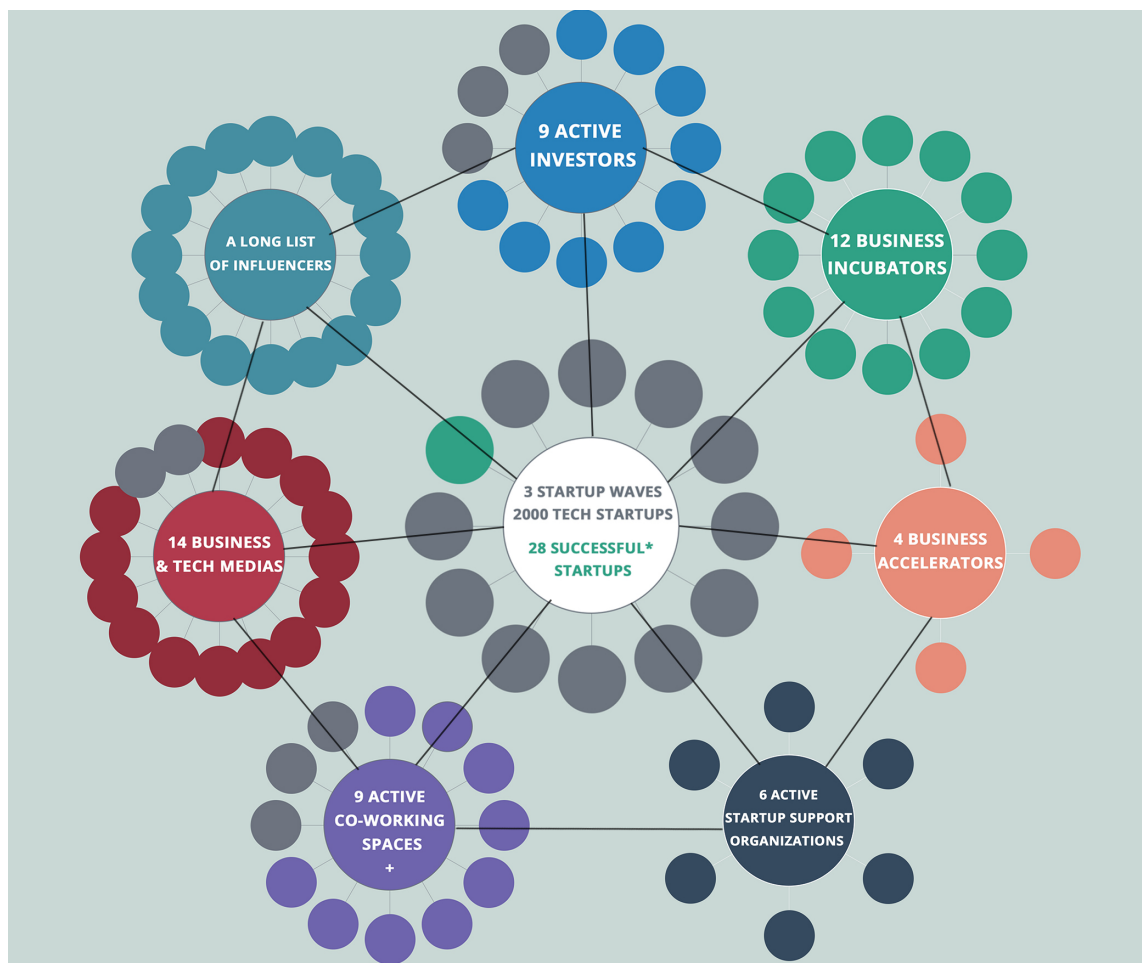


Figure 4: General map of the Tech Startup Ecosystem in Vietnam

The second sub-question of the research, what are the interactions within the Tech Startup Ecosystem in Vietnam? About this question, findings reveal that support organizations interact with each other, they know about the activities and are willing to support each others in multiple ways from co-organizing, participating, to promoting etc. Moreover, finding finds out that interactions

between entrepreneurs and support organization are the most basic interactions of the ecosystem, they interact with each other via events and programs; and from both side, they support, receive and contribute for better events and programs in the ecosystem. Finally about the interaction between entrepreneurs, the finding can confirm that the interactions happen in small communities via specific channels. The interactions between entrepreneurs in a different channel or in different small communities seem to be disconnecting. However, the situation is unconfirmed by researcher due to the limitation of the research. To confirm this situation, a quantitative research in a larger pool of the ecosystem should be conducted in the future.

About the final sub-question of the research, What is the objective of Tech Startup Ecosystem in Vietnam? the study finds out that the development of the startup economy to be a force to support the national economy is the main objective of the ecosystem. To achieve that objective, the development need to be comprehensive for all components inside. Issues like regulation system or incentives for foreigner entrepreneurs need to be solved. Furthermore, objectives are to boost the knowledge base in business and finance in startup founders in order to have a more stable startup generation in the years coming.

By answering all questions above, the research could show an insight about the tech startup ecosystem in Vietnam providing readers a deep understanding about what is insisting and happening in this young growing ecosystem and also where it is heading to in the future.

5.2 Future researches

The startup ecosystem in Vietnam is very understudied; in order to have a substantial understanding about the startup ecosystem in Vietnam, the following future researchs are proposed.

Firstly, the research about the interactions between entrepreneurs in the ecosystem should be conducted to cover the unclear parts of this research.

Secondly, the ecosystem is always moving and developing, the image that this research sketches up will not be reliable in the years coming, Components of the ecosystem and the database regarding those components should be continuously researched and updated.

Thirdly, the tech startup is a part of the startup ecosystem in Vietnam, this research can be used as a base for a wider research of the Startup Ecosystem in Vietnam.

Last but not least is a study that researcher is always curious about, after having understandings about the ecosystem and what are all around startups, the journey of doing tech startup in Vietnam is the next topic that the researcher will focus to study.

SOURCE MATERIAL

Anderson, E. (2015) *Britain hits record number of startups as more aspiring entrepreneurs take the plunge*. [Online] Available from:

<http://www.telegraph.co.uk/finance/businessclub/11692123/Britain-hits-record-number-of-startups-as-more-aspiring-entrepreneurs-take-the-plunge.html>. [Accessed: 20th October 2015]

Birch, M. (2012) *The Non-Tech Tech Startup*. [Online] Available from:

<http://birch.co/post/22367071851/the-non-tech-tech-startup>. [Accessed: 20th October 2015]

Burn-Callander, R. (2015) *A company born every minute in 2014*. [Online] Available from:

<http://www.telegraph.co.uk/finance/yourbusiness/11327630/A-company-born-every-minute-in-2014.html> [Accessed: 20th October 2015]

CareerBuilder. (2013) *CareerBuilder Acquires VON (KiemViec.com & HR Vietnam) in Vietnam*. [Online] available from:

<http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?sd=5%2F6%2F2013&id=pr756&ed=12%2F31%2F2013>. [Accessed: 20th November 2015].

Chipman, I. (2015) *Building a Startup Ecosystem: One Entrepreneur's Playbook*. [Online]

Available from: <https://www.gsb.stanford.edu/insights/building-startup-ecosystem-one-entrepreneurs-playbook>. [Accessed: 01st November 2015]

Clont, J. G. (1992) *The concept of reliability as it pertains to data from qualitative studies. Paper Presented at the annual meeting of the South West Educational Research Association*. Houston, TX.

CyberAgent Ventures. (2015) *Investment Policy*. [Online] available from:

<https://www.cyberagentventures.com/en/about/investment/>. [Accessed: 20th November 2015].

CyberAgent Ventures. (2015) *Our Edge*. [Online] available from:

<https://www.cyberagentventures.com/en/about/strength/>. [Accessed: 20th November 2015].

CyberAgent Ventures. (2015) *Our Funds*. [Online] available from:

<https://www.cyberagentventures.com/en/about/fund/>. [Accessed: 20th November 2015].

Dang, D. (2015) *Tinh hình chung về đăng ký doanh nghiệp tháng 6 và 6 tháng năm 2015*. . [Online] available from:

<https://dangkykinhdoanh.gov.vn/NewsandUpdates/tabid/105/ArticleID/2017/language/en-GB/Default.aspx>. [Accessed: 15th December 2015].

Davies, D., & Dodd, J. (2002) *Qualitative research and the question of rigor. Qualitative Health research*, 12(2), 279-289.

DeNA. (2011) *DeNA to Acquire Punch Entertainment's Vietnam Studio*. [Online] available from:

<http://dena.com/intl/press/2011/09/dena-to-acquire-punch-entertainments-vietnam-studio.html>. [Accessed: 20th November 2015].

DeWalt, K., Dewalt, B. (2002) *Participant observation: a guide for fieldworkers*. Walnut Creek, CA: AltaMira Press.

DFJ VinaCapital. (2015) *Investment Focus*. [Online] available from: <http://www.dfj-vinacapital.com/index.php/84/investment-focus>. [Accessed: 20th November 2015].

DFJ VinaCapital. (2015) *Overview*. [Online] available from: <http://www.dfj-vinacapital.com/index.php/83/overview>. [Accessed: 20th November 2015].

DFJ VinaCapital. (2015) *Portfolio*. [Online] available from: <http://www.dfj-vinacapital.com/index.php/77/portfolio> [Accessed: 20th November 2015].

- Do, M. (2013) *MOL Gets 50% Stake in NganLuong to Take On Online Payments in Vietnam*. [Online] available from: <https://www.techinasia.com/mol-50-stake-nganluong-online-payments-vietnam/>. [Accessed: 20th November 2015]
- Do, M. (2013) *Tiki, Vietnam's Amazon, secures series B funding*. [Online] available from: <https://www.techinasia.com/tiki-vietnams-amazon-secures-series-funding/>. [Accessed: 20th November 2015]
- Do, M. (2014) *A comprehensive look at Vietnam's startup ecosystem in 2014: 6 investors, 10 incubators, and lots more*. [Online] available from: <https://www.techinasia.com/comprehensive-on-vietnam-incubator-ecosystem/>. [Accessed: 20th November 2015].
- Do, M. (2014) *Vietnamese furniture site Ahometo receives seed funding from new Silicon Valley-backed VC*. [Online] available from: <https://www.techinasia.com/ahometo-gets-funding-onecapitalway-5desire/> [Accessed: 20th November 2015].
- Do, M. (2015) *Foody.vn raises series B to build the Yelp, OpenTable, and Foodpanda of Vietnam*. [Online] available from: <https://www.techinasia.com/foodyvn-raises-series-build-yelp-opentable-foodpanda-vietnam/> [Accessed: 20th November 2015].
- Do, M. (2015) *Vietnam in 2015: a light at the end of the tunnel*. [Online] available from: <https://www.techinasia.com/vietnam-2015-light-at-the-end-of-the-tunnel/>. [Accessed: 20th November 2015]
- Do, M. (2015) *Vietnam's chat app Zalo challenges Facebook with 30 million registered users*. [Online] available from: <https://www.techinasia.com/zalo-30-million-registered-users-vietnam/>. [Accessed: 20th November 2015]
- Do, M. (2015) *Vietnam's deputy prime minister just got serious about startups*. [Online] available from: <https://www.techinasia.com/vietnams-deputy-prime-minister-startups/>. [Accessed: 20th November 2015].
- DoanhnhonOnline. (2014) *Ấn số Appota*. [Online] available from: <http://doanhnhononline.com.vn/an-so-appota/>. [Accessed: 20th November 2015]
- EC Award (2015) *Ngân lượng - Thanh toán trực tuyến, Bảo vệ người mua*. [Online] available from: <http://eca.trade.hochiminhcity.gov.vn/chi-tiet-bai-viet/75/100/Tin-Doanh-nghiep/Ngan-luong--Thanh-toan-truc-tuyen-Bao-ve-nguoi-mua>. [Accessed: 20th November 2015]
- Ellis, E. (2014) *Ecosystem*. [Online] Available from: <http://www.eoearth.org/view/article/152248/>. [Accessed: 20th October 2015]
- Entrepreneur, n.d. *Advisory Boards*. [Online] Available from: <http://www.entrepreneur.com/encyclopedia/advisory-boards>. [Accessed: 20th October 2015]
- Feld, B. (2012) *Startup Communities: Building an Entrepreneurial Ecosystem in Your City*. Wiley.
- Forestage. (2014) *MOBILE USERS 2013*. [Online] available from: <http://www.forestniaga.com/mobile-users-2013/> [Accessed: 10th November 2015]
- Forrest Interactive. (2014) *Mobile User 2013*. [Online] available from: <http://www.forest-interactive.com/mobile-users-2013/>. [Accessed: 10th November 2015].
- Griffith, E. (2014) *Why startups fail, according to their founders*. [Online] available from: <http://fortune.com/2014/09/25/why-startups-fail-according-to-their-founders/>. [Accessed: 10th November 2015].
- Håkansson, H., Ford, D. (2002) *Journal of Business Research How should companies interact in business networks?* [Online] Available from:

<http://www.sciencedirect.com/science/article/pii/S014829630000148X> [Accessed: 20th October 2015]

Healey, M., Rawlinson, M. (1994) 'Interviewing techniques in business and management research', in V.J. Wass and P.E. Wells (eds) *Principles and Practice in Business and Management Research*. Aldershot: Dartmouth

Iansiti, M., Levien, R. (2004) *The Keystone Advantage: What the New Dynamics of Business Ecosystems Mean for Strategy, Innovation, and Sustainability*. Harvard Business Review Press.

IDG Ventures Vietnam. (2015) *About us*. [Online] available from: <http://idgvv.com.vn/en/about-us/idgvv>. [Accessed: 20th November 2015].

IDG Ventures Vietnam. (2015) *Portfolios*. [Online] available from: <http://idgvv.com.vn/en/portfolios>. [Accessed: 20th November 2015].

IDT Vietnam. (2015) *ĐỐI TÁC CHIẾN LƯỢC*. [Online] available from: <http://idt.vn/doi-tac-chien-luoc/> [Accessed: 20th November 2015].

Indexmundi. (2015) *Historical Data Graphs Per Year*. [Online] available from: <http://www.indexmundi.com/g/g.aspx?c=vm&v=21>. [Accessed: 10th November 2015]

Indexmundi. (2015) *Vietnam Population*. [Online] available from: <http://www.indexmundi.com/vietnam/population.html> [Accessed: 10th November 2015].

Intel. (2012) *Intel Capital Invests in VC Corporation*. [Online] available from: <http://www.intel.com/pressroom/capital/pdfs/portcovccenglish1206.pdf>. [Accessed: 20th November 2015]

Internet Live Stats. (2015) *Vietnam Internet Users*. [Online] available from: <http://www.internetlivestats.com/internet-users/vietnam/>. [Accessed: 10th November 2015]

Isenberg, D. (2014) *What an Entrepreneurship Ecosystem Actually Is*. [Online] Available from: <https://hbr.org/2014/05/what-an-entrepreneurial-ecosystem-actually-is> [Accessed: 10th October 2015]

Jeffries, A. (2012) *When Is a Tech Startup Not a Tech Startup?*. [Online] Available from: <http://observer.com/2012/05/when-is-a-tech-startup-not-a-tech-startup/> [Accessed: 20th October 2015]

Lexicon. n.d. *Definition of entrepreneurial ecosystem*. [Online] Available from: <http://lexicon.ft.com/Term?term=entrepreneurial%20ecosystem>. [Accessed: 20th October 2015]

Lincoln, Y. S., & Guba, E. G. (1985) *Naturalistic inquiry*. Beverly Hills. CA: Sage.

Mai, A. (2015) *Influencers*. [Online] available from: <http://www.startupof.me/vnstartup/vietnam-startup-influencers/>. [Accessed: 20th November 2015].

Mekong Capital. (2015) *Corporate Profile*. [Online] available from: <http://www.mekongcapital.com/en/content/corporate-profile>. [Accessed: 20th November 2015].

Mekong Capital. (2015) *Exited*. [Online] available from: <http://www.mekongcapital.com/en/investments/exited>. [Accessed: 20th November 2015].

Mekong Capital. (2015) *Our Funds*. [Online] available from: <http://www.mekongcapital.com/en/content/our-funds>. [Accessed: 20th November 2015].

Mekong Capital. (2015) *Retail*. [Online] available from: <http://www.mekongcapital.com/en/investments/retail>. [Accessed: 20th November 2015].

- Moore, J. (1993) *Predators and Prey: A New Ecology of Competition*. [Online] Available from: <https://hbr.org/1993/05/predators-and-prey-a-new-ecology-of-competition/ar/1> [Accessed: 20th October 2015]
- Morris, R. (2015) *Mentors Are The Secret Weapons Of Successful Startups*. [Online] Available from: <http://techcrunch.com/2015/03/22/mentors-are-the-secret-weapons-of-successful-startups/>. [Accessed: 20th October 2015]
- OnStartups, (2006) *Startups and Advisory Board Members*. [Online] Available from: <http://onstartups.com/tabid/3339/bid/92/Startups-and-Advisory-Board-Members.aspx> [Accessed: 20th October 2015]
- Pavliwa, S. (2014) *The importance of business networking for entrepreneurs*. [Online] Available from: <http://www.startupist.com/2014/11/07/the-importance-of-business-networking-for-entrepreneurs/>. [Accessed: 01st November 2015]
- Peltoniemi, M., Vuori, E. (2004) *Business ecosystem as the new approach to complex adaptive business environments*. [Online] Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.103.6584&rep=rep1&type=pdf> [Accessed: 20th October 2015]
- PVNI. (2015) *Our Portfolio*. [Online] available from: <http://pvni.vn/en/portfolio.html>. [Accessed: 20th November 2015].
- Robson, C. (2002) *Real World Research* (2nd edn). Oxford: Blackwell.
- Saunders, M., Lewis, P. & Thornhill. A., (2009) *Research Methods for Business Students (5th Edition)*. Prentice Hall.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students, 4th Edition*.
- Seale, C. (1999). *Quality in qualitative research*. *Qualitative Inquiry*, 5(4), 465-478.
- Spruijt, J. (2015). *Schematic overview to understand the complexity of the innovation ecosystem [infographic]*. [Online] Available from: <http://www.openinnovation.eu/27-07-2015/schematic-overview-to-understand-the-complexity-of-the-innovation-ecosystem-infographic/>. [Accessed: 20th October 2015]
- Stenbacka, C. (2001). *Qualitative research requires quality concepts of its own*. *Management Decision*, 39(7), 551-555.
- Stenbacka, C. (2001). *Qualitative research requires quality concepts of its own*. *Management Decision*, 39(7), 551-555.
- The MentorDoctor. (2002). *Advisor versus Mentor*. [Online] Available from: http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2002_02_15/nodoi.5883469261218559534. [Accessed: 01st November 2015]
- The World Bank. (2015) *GDP per capita (current US\$)*. [Online] Available from: <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?page=1>. [Accessed: 10th November 2015]
- TradingEconomics. (2015) *Vietnam GDP per Capita*. [Online] available from: <http://www.tradingeconomics.com/vietnam/gdp-per-capita>. [Accessed: 10th November 2015].
- TradingEconomics. (2015) *Vietnam GDP Growth Rate*, [Online] available from: <http://www.tradingeconomics.com/vietnam/gdp-growth>. [Accessed: 10th November 2015].

- TradingEconomics. (2015) *Vietnam GDP*. [Online] available from: <http://www.tradingeconomics.com/vietnam/gdp>. [Accessed: 10th November 2015].
- Uden, L. et al. (2014) *Knowledge Management in Organizations*. Springer.
- VCCorp. (2015) *VCCorp – Sự hình thành và phát triển*. [Online] available from: <https://vccorp.vn/gioi-thieu-vc.htm>. [Accessed: 20th November 2015]
- VietnamNet. (2013) *Đầu tư mạo hiểm: Thừa tiền, thiếu dự án*. [Online] available from: <http://vietnamnet.vn/vn/kinh-doanh/112913/dau-tu-mao-hiem--thua-tien--thieu-du-an.html> [Accessed: 20th November 2015].
- Vnreview.vn (2014) *Hackaton là gì?* [Online] available from: http://vnreview.vn/tin-tuc-xa-hoi-so/-/view_content/content/1245492/hackathon-la-gi. [Accessed: 16th December 2015].
- Wee, W. (2012) *Intel Capital Invests \$17 Million in Reebonz and VC Corp*. [Online] available from: <https://www.techinasia.com/intel-capital-reebonz-vc-corp/>. [Accessed: 20th November 2015]
- Wild, J. et al. (1999) *Facilitation, Coaching, Mentoring, and Training: Understanding the Differences*. [Online] Available from: <http://www.amauta-international.com/iaf99/Thread3/Wild.html>. [Accessed: 20th October 2015]
- WorldBank. (2015) *GDP Growth (Annual %)*. [Online] available from: <http://data.worldbank.org>. [Accessed: 10th November 2015].

Appendix 1: Interview topics and suggested questions

Topic 1: Interviewee and the ecosystem

- How long have you performed in the ecosystem?
- What are your main roles?
- What activities do you often participate? How often?
- What is the most advantage for you from the ecosystem?
- How do you feel about the tech startup ecosystem?
- Is there anything you want the ecosystem to be different?

Topic 2: Interviewee and support organizations

- Investment and funding is a tough issue, could you please share how your company managed to secure investments?
- What do you think about investors in Vietnam? Are there many of them?
- Is there any link between organizations and fundings? Where should I go to If I want to get info about them?
- Do you know this/those organization (names)? Have you ever worked with or participated in any programs of that organization?
- Do you participate in events from a similar organization? What is it?
- Do you simply participate or you have other ways of participating?
- Do you know any coming events of them or people that I could contact?
- Besides those organizations, where are the others?
- Is it easy for you to have new connections in the ecosystem?
- Do you know (names) that work in the same fields?

Topic 3: Interviewee and startups

- What are the most successful startups in your opinion?
- What made them outstanding from others?
- What do you see your company in the future?

Appendix 2: Macro statistics of Vietnam 2000-2014

Population	GDP (Billions \$)	GDP Annual Growth Rate (%)	GDP Per Capita (\$)	Internet Users	Phone Users	Smart Users
8,773,870	28.7	6.8	450.45	205,656		
9,939,020	31.2	6.2	474.63	1,034,401		
1,098,420	32.7	6.3	500.96	1,531,259		
1,624,720	35.1	6.9	530.24	3,150,962		
2,689,520	38.9	7.5	562.59	6,431,137		
3,535,580	45.4	7.5	599.20	10,822,296		
4,402,970	52.4	7.0	796.70	14,795,377		
5,262,350	60.9	7.1	919.20	17,964,502		
6,116,560	71.1	5.7	1,164.6	20,898,713		
6,967,520	90.2	5.4	1,232.40	23,417,099		
9,571,130	97.1	6.4	1,333.60	27,293,027		
10,549,390	103.5	6.2	1,543.00	31,532,824		
1,519,290	123.9	5.2	1,755.30	35,855,249	72,300,000	25,200,000
2,477,857	141.6	5.5	1,908.60	36,592,417	108,540,000	26,500,000
2,547,959	187.8	6.0	2,052.03	39,772,424	72,300,000	25,200,000

Macro statistics of Vietnam 2000-2014

Adapted from Forestniaga, 2015; The World Bank, 2015; Internet Live Stat, 2015; Index Mundi, 2015; Statista, 2015; Forest Interactive, 2015; Mobi Forge, 2015; Vecita Gov Vietnam, 2014)