

Bachelor's Thesis

Bachelor in Business Administration - International Business

2019

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EXPLORING THE NATURE OF THE ECONOMICAL ECOSYSTEM OF SPARKUP

– A Case Study on Immigrant Startups

BACHELOR'S THESIS | ABSTRACT

TURKU UNIVERSITY OF APPLIED SCIENCES

International Business

2019 | 54 + 5

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EXPLORING THE NATURE OF THE ECONOMICAL ECOSYSTEM OF SPARKUP

- A Case Study on Immigrant Startups

SparkUp is a community in Turku that works together with students, businesses and organizations by providing educational services and entrepreneurial activities. SparkUp wants to offer a community space where ideas and people are able to network and get together easily.

The goal of this thesis was to explore the nature of SparkUp's Ecosystem to determine whether the ecosystem is a Business Ecosystem, an Innovation Ecosystem or an Entrepreneurial Ecosystem. In addition, this thesis investigated what value this ecosystem delivers to Immigrant Startups and what are the possible challenges that Immigrant Startups confront in this ecosystem.

This research took an exploratory qualitative research approach by means of observation and asynchronous email interviews that were conducted with the Director of SparkUp and three Immigrant Startups that are a part of SparkUp's Ecosystem. Additionally, three Finnish Startups (that were a part of SparkUp's Ecosystem too) were interviewed in order to benchmark the findings.

The results indicated that SparkUp's Ecosystem has features of all three ecosystems, but Entrepreneurial Ecosystem is the best fit to describe SparkUp's Ecosystem. The value-deliverables of SparkUp's Ecosystem for Immigrant Startups were networking and moral support. This is while Finnish Startups also valued the moral support of SparkUp's Ecosystem the most. The weaknesses of SparkUp's Ecosystem were the financial and market support-offers that the ecosystem was not able to deliver sufficiently.

KEYWORDS:

Startup, Business Ecosystem, Innovation Ecosystem, Entrepreneurial Ecosystem, SparkUp

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SPARKUPIN EKONOMISEN EKOSYSTEEMIN PIIRTEIDEN KARTOITUS

- Tapaustutkimus Maahanmuuttajien Startupeista

SparkUp on yhteisö, joka tekee töitä opiskelijoiden, yritysten ja organisaatioiden kanssa tarjoten erilaisia opetuksellisia palveluita ja yritysllisiä aktiviteetteja. SparkUp sijaitsee Turussa ja tarjoaa yhteisöllisen tekemisen tilan, jossa ihmiset ja ideat voivat kohdata ja verkostoitua.

Tämän opinnäytetyön päätavoite oli selvittää SparkUpin ekonomisen ekosysteemin pääpiirteet – onko ekosysteemi liiketoimintaekosysteemi, innovaatioekosysteemi vai yrittäjäekosysteemi. Lisäksi, tämä opinnäytetyö pyrki selvittämään millaista lisäarvoa SparkUpin ekosysteemi tuottaa maahanmuuttajien startupeille sekä millaisia ovat mahdolliset vaikeudet, joita maahanmuuttajien startupit kohtaavat kyseisessä ekosysteemissä.

Opinnäytetyön tutkimus tehtiin tutkivana laadullisena tutkimuksena ja tutkimusdata kerättiin havainnoiden sekä sähköpostihaastattelujen välityksellä. Haastattelut tehtiin yhteistyössä SparkUpin johtajan sekä kolmen maahanmuuttaja startupin kanssa. Myös kolme suomalaista startuppia haastateltiin tutkimukseen: täten tutkimustuloksia voitiin vertailla maahanmuuttajien startuppien ja suomalaisten startuppien kesken. Kaikki startupit, joita haastateltiin, olivat osa SparkUpin ekosysteemiä.

Kävi ilmi, että SparkUpin ekosysteemissä on ominaisuuksia kaikista kolmesta ekosysteemistä, mutta yrittäjäekosysteemi on lähimpänä SparkUpin ekosysteemiä. Suurin lisäarvo, jota SparkUpin ekosysteemi pystyi tarjoamaan maahanmuuttajien startupeille, oli verkostoitumistuki ja moraalinen tuki. Myös suomalaiset startupit arvostivat SparkUpin ekosysteemin moraalista tukea. Kaikki startupit lukivat SparkUpin ekosysteemin heikkouksiksi sen taloudellisen- ja markkinatuen.

ASIASANAT:

Startup, Liiketoimintaekosysteemi, Innovaatioekosysteemi, Yrittäjäekosysteemi, SparkUp

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1 INTRODUCTION

1.1 Background

In 2015, Europe faced one of the biggest challenges of the 21st century: an extraordinary one million people outside Europe were forced to flee their home countries due to persecution, conflict and poverty. This resulted in a huge refugee wave that arrived to Europe. According to the UN Refugee Agency, a refugee is a person who has fled war, violence, conflict or persecution and has crossed an international border to find safety in another country (UNHCR, 2019). The number of refugees in 2015 is the highest number of displaced people in the Western and Central Europe since the 1990's (UNHCR/IOM, 2015). "Most of the world's developed countries have become diverse, multiethnic societies" (Massey, et al., 1993, p. 431) in the Northern Europe, Finland received a record number of refugees in 2015 – a total of 32 476 refugees. In contrast, at the beginning of the 21st century and before the year 2015 the number of refugees arriving to Finland was between 1500 and 6000 refugees per year. (Sisäministeriö, 2018)

The term *immigrant* is a general term which is used of people who have moved to a country, no matter their personal background or reasons for the move and therefore the definition can be used to describe refugees too. Usually, an immigrant is a person who settles down to stay in Finland at least for one year or more. (Hilma Vammaisten Maahanmuuttajien Tukikeskus, 2013) At the end of the year 2017, there were 249 500 immigrants living in Finland who had a foreign nationality. They constituted 4,5% (Tilastokeskus, 2018) of the total 5 513 130 Finnish population in 2017 (Väestöliitto, 2019). In contrast, there were 373 000 people (6,8% of the total population) who were born abroad but lived in Finland in 2017 (Väestöliitto, 2019).

In many cases, population migration is seen as one of the most serious threats to peace, security, and the sovereignty of nations. Especially the developed countries in the North often see immigrants as a big bulk, which might affect the countries' national security in a negative way. These countries often see e.g. the refugee problem as a humanitarian problem and say that they base their refugee policy upon this view point. However, in reality the refugee issues are often highly linked to the existing political issues of the country which the refugees arrive to. (Bariagaber, 2006, pp. 3-4)

Nevertheless, many of the refugees who arrive to Finland come in the hopes of a better life. As mentioned before, there are many reasons why people leave their homes and become refugees: some are escaping wars, persecution or insecurities in their home countries (Sisäministeriö, 2018) while others are escaping the causation of climate change (Black, 2001, pp. 1-2). Many of the immigrants and refugees wish to support their family by starting a business of their own, getting a job or educating themselves forward with degrees from all levels of the Finnish education system. They have the will power to do so, but do we have the systems to support them?

1.2 SparkUp

An introduction to the case company: SparkUp is a community in Turku, facilitated by Turku Science Park Ltd. The community works together with students, businesses and organizations by providing educational services and entrepreneurial activities. SparkUp wants to offer a community space where ideas and people are able to network and get together easily. The community has office spaces in Turku ElectroCity with an area covering almost 800 m² and consisting of a big event space, cafeteria, three meeting rooms, free open office space and two open meeting rooms. They also facilitate nine different teams of entrepreneurs with an office space in the building. In addition to this, they also host all kinds of different events during the evenings. (SparkUp Startup Community, 2019)

1.3 Research Motivation

I did my professional practical training during the fall 2018 and my motivation towards this research topic is linked to the organization I was working for – Startup Refugees. Startup Refugees is a non-profit organization that co-operates with hundreds of companies and private persons around Finland with a common goal: to find jobs for immigrants and refugees, and to support their own business ideas. The organization was registered in 2015 when the refugee crisis hit Finland. At first the organization only had one office in Helsinki but at the moment of writing this thesis there are four offices in total: Helsinki, Turku, Oulu, and Hämeenlinna all have a Startup Refugee representative working in the city and its near regions.

Startup Refugees is a part of the SparkUp community in Turku. During my practical training I discovered that SparkUp has tremendous potential in their operations, especially with startups founded by immigrants. Therefore, SparkUp was chosen as the case study for this thesis since I wanted to further investigate this network.

In my practical training I learnt firsthand by working with immigrants and refugees everyday that they have a different approach to working life, work and entrepreneurship than Finnish people. They are highly motivated to work and build a new life in their new home country. Also, many immigrants and refugees have an in-built entrepreneurial mindset: they want to work for themselves to see the results right away, to delight customers and to financially support themselves. In my opinion, it should be a common goal of the whole Finnish nation and the government to assist the integration of immigrants and refugees as much as possible by supporting their needs of finding a job or setting up their own business. This way we could increase their standards of living and help individuals in finding a right direction to their lives.

With this thesis I hope to provide useful information for the immigrant-supportive network in Turku and the immigrants who are interested in starting their own business, especially in Turku since Finland could benefit from fresh innovative ideas as well as success stories.

1.4 Research Objectives

The objective of this thesis is to explore the economical ecosystem of SparkUp to determine which type of an ecosystem this community is. In addition, this thesis will investigate what value this ecosystem delivers to Immigrant Startups and what are the possible problems that Immigrant Startups may confront in this ecosystem. The topic is further researched with the following research questions:

1. What is the nature of the economical ecosystem of SparkUp?
2. What value do the operators of the ecosystem deliver to Immigrant Startups?
3. Which limitations and problems do Immigrant Startups face in this ecosystem?

1.5 Structure of the Thesis

This thesis starts with an introduction, covering a background on the topic, an introduction to the case company, followed by motivation and the research objectives. Chapters two and three are focused on the literature review. Chapter two discusses the notion of startups while chapter three contains a description on economical ecosystems, especially the following types of them: business ecosystems, innovation ecosystems and entrepreneurial ecosystems.

The research methodology and the data collection methods along with the research reliability and limitations are introduced after the literature review. Next, the case study is analyzed using the collected primary and secondary data sources. To conclude this thesis, the research findings are presented and I make recommendations for further research. References and appendixes can be found at the end of the thesis.

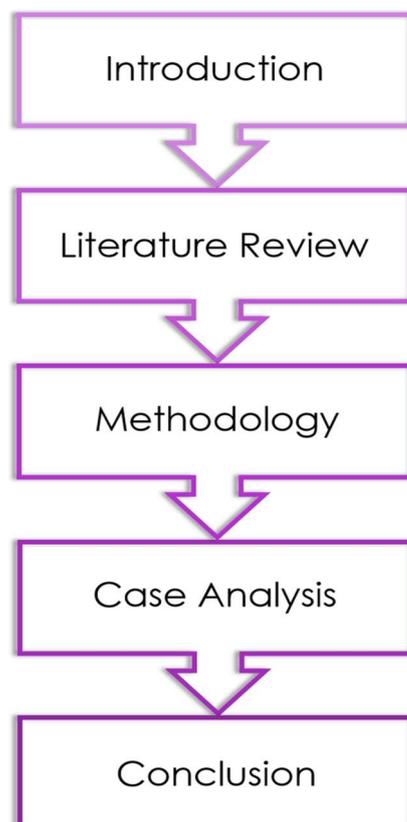


Figure 1. Structure of the thesis.

2 STARTUPS

There is no official definition on what a startup-company looks like, feels like or how they work and therefore the notion of a *startup* can be defined and understood in different ways. Ries (2019, p. 27) defines a startup as “a human institution designed to create new products and services under conditions of extreme uncertainty”. The definition of a startup is not legally defined in the Finnish law, and the concept of startups is quite open as well – anyone could use the word startup to define their company. The word startup itself is seen as a neutral: it does not evoke negative or positive feelings, but one can identify multiple homogenous features on companies who call themselves startups. (Honkinen, et al., 2017)

Typically, startups are new and small venture businesses operating in small or unusual premises. In most cases startups are financed from within, with the possible help of bank lending. However, most of these lendings are not long-term loans, at least not large amounts. Many startups are small in terms of employment and some may even involve family members of the owner. (Bridge, et al., 2003, p. 199)

According to Honkinen et al. (2017) three distinguishing factors set startups apart from other new businesses:

1) The drive for exponential growth

If a business is not designed to grow rapidly, it is not a startup. The first and foremost of the three features that startups have is the strive for strong and fast growth. Growth in this case is measured both in the increase of turnover and customers. In many cases, startups that grow exponentially operate on negative profit even though the turnover increases. There are three factors that drive the fast growth: 1) the expectations of the investors, 2) the tough competition on the modern digital market and 3) the aspiration of changing the world with new ideas, services, products, etc. A startup company must be built so that it can grow.

2) The scalability of the business model

The scale of a startup’s business model has to be at a level from which it can be scaled up at the same pace as the other parts of the business go up. This means e.g. that a service can serve all the customers in reach so that the costs stay at a

moderate level. Many startups make the best use of digitalization to scale their operations right. If the business model cannot be scaled at the same pace as the business grows, the business cannot reach its full potential and serve every consumer that would like to be the company's customer.

3) The drive towards the death of a startup

Typically, a startup is at a maximum from three to five years old. Startups are temporary organizations, and they usually have one goal: to not to be a startup. Startups usually cease to exist when they are being 1) bought to be a part of a bigger company, 2) sold otherwise or 3) listed on the stock market. This is the death of a startup and a start of something new.

One of the most important assets of startups is their immaterial wealth – mental images, knowhow, inventions and innovations as well as the look, design and the story of the company. In many cases, startups are built upon different hypothesis of the market and the uncertainty whether the business will have a gap on the market. (Honkinen, et al., 2017) Only one tenth of startup businesses make profit for their investors, even though their thinking often shows that they want to be born global right from the start (Kuusela, 2013, pp. 41, 51). This is why the people working in startups need to be passionate about what they do: it lowers the risk of being tight on money, time and resources because you get more value and happiness from working on a matter you are passionate about (Gruber, 2014, p. 14).

Even though startups are usually small businesses, they have many economic factors such as providing jobs, introducing new products, supplying the needs of larger corporations, injecting money into the economy, taking risks that larger companies are avoiding, and providing special goods and services (Bové & Thill, 2005, p. 115).

The very first step of starting one's own business is the identification of a key idea or concept. Most of these ideas are taken from previous work experience or personal interests. Some might even find their ideas from the suggestions of friends or educational training. Sometimes the idea arrives simply by being in the right place at the right time. (Martin & Crisp, 1992, p. 12) An important factor in the idea generation is to see something that people would buy if they only knew about it. According to Barrow et al. there are four possible angles one can think of when identifying the possible market gap for a new company (2015, p. 5):

1) Adaptation

E.g., Is it possible to bring a product or a service from abroad and implement it on the market you are aiming for?

2) Location

E.g., Is the nearby grocery store too far away from the customers, could you open a new one closer?

3) Size

E.g., Are consumers looking for a smaller or a bigger package of goods, for example facial cream?

4) Time

E.g., If you would keep your store open on Sundays (when the competitors are closed), would you acquire new customers?

Before entering the market, one should test the product, since inadequate testing was mentioned as one of the reasons for startup failure on a survey that was sent out to startups from 14 different international startup accelerators (Houlihan & Harvey, 2018). An important aspect of testing is to get feedback from the suspected customers, as well as facing reality e.g. on what the data tells you (Feinlab, 2011, pp. 6-7).

Ries' (2011, p. 63) Lean Startup Methodology is a good guide for a startup on the journey from the idea generation to product development onto pivoting and getting feedback: according to Ries a startup should avoid building a complete product and a marketing plan before entering the market and instead use their first experiment as the first product.

An effective way for a startup to generate ideas, develop products, pivot and get feedback is to continuously take a ride on what Ries calls a *Build-Measure-Learn Feedback Loop*. The idea of the loop is that the startup has assumptions it wants to test with the customers so the startup builds a very early experiment or a prototype of the idea. After this, the product is given to a few early adaptor customers who give them feedback on the different features. After this, the startup has data from which it can learn and further develop the product and from then on to start the loop from the beginning again, as can be seen in Figure 2. The main idea is to gather information from the customers even on the early stages to minimize the risks of building something that the

customers do not want or need and avoid wasting money as well as time. Ideally, a startup should minimize the total time that it takes to go through the loop. (Ries, 2011, pp. 75-78) Mueller and Thoring (2012, p. 159) suggest that the Build-Measure-Learn Feedback Loop seems a promising opportunity for strengthening e.g. design thinking processes. However, the method does not describe specifically how customer input could be collected within the scope of the method. Mueller and Thoring suggest the usage of different qualitative research methods to better identify e.g. the target customers and their needs and problems to support Ries' method right from the beginning of the process. In addition, Mueller and Thoring state that the Loop may benefit from the application of ideation techniques and e.g. doing pivoting even earlier. (Mueller & Thoring, 2012, p. 159)

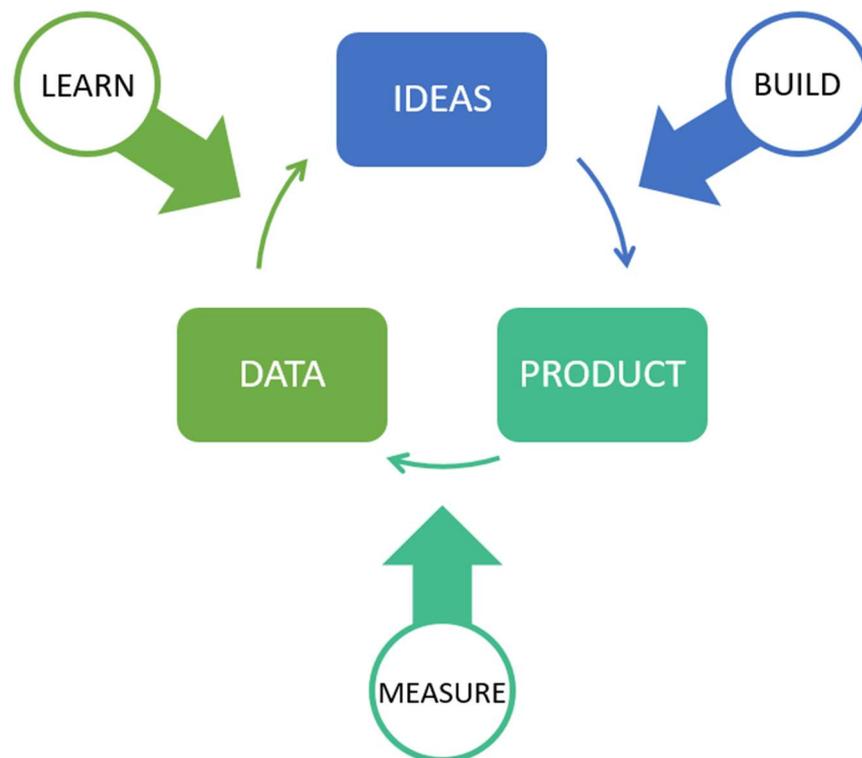


Figure 2. Build-Measure-Learn Feedback Loop (Ries, 2011, p. 75).

Once the idea is generated, it is important not to be overly enthusiastic since then, evaluating the idea's potential objectively might be tricky. The more one questions the idea, the more it will help in the long run since it will help drop unnecessary ideas before committing additional time and resources towards the idea. Examples of the questions

one may think of are: *Is it safe?, Is the need enough to support a business?, or Is the product possible to produce?*. (Martin & Crisp, 1992, pp. 12-13)

According to Graham (2006) the first and foremost mistake that kills startups, is that the startup is not making something the users want. If you do what the users want you will most likely be fine but if you do not then your startup will most likely die. Ries agrees with Graham's argument: "Too many startups begin with an idea for a product that they think people want" but they do not take the time and make the effort to really investigate what the customers want. This is why the lack of communication often leads to failure. (Ries, 2019)

3 ECONOMICAL ECOSYSTEMS

The word *ecosystem* in natural sciences is seen as the “interacting system of a biological community and its non-living surroundings”. The first and foremost function of these ecosystems in natural sciences is to nurture the processes and interactions of the different parties operating within the ecosystem – for example the energy flow, nutrient cycling, filtering and buffering of contaminants, and regulating populations of the ecosystem. (Vallero, 2010, p. 699)

The definition of ecosystem in natural sciences is an important one for economics too because the old and traditional ways of doing business are invaded by new technologies, business processes & organizational lifeforms and many people feel like economic and technological progress is getting in the way of their business. This is more of an opportunity than a threat since the changes that are happening and destructing old ways of doing business bring new and fresh ideas to the table: Economical Ecosystems. The definition of an ecosystem in economics was first introduced by Moore (1996, p. 21) in the 20th century: an ecosystem in economics is a system or a community that interacts with everyone belonging to the ecosystem and thus brings added value to everyone who is a part of the community. If the ecosystem is healthy, individual participants will succeed, but if the ecosystem is unhealthy, individual participants will suffer (Iansiti & Levien, 2004a, p. 5).

Networking is related to Economical Ecosystems, and one could argue that networks are the most essential and central tool for an entrepreneur since they encourage and nurture the creation of new business ventures, ideas and stories. Networks bring added value for the community and its entrepreneurs – both directly and indirectly. The most important function of an entrepreneurial network is to build and nurture relationships between entrepreneurs, their customers, and the whole community around the entrepreneur. Learning from one’s peers and gaining access to local expertise is crucial in order for the business to succeed. As for the community, entrepreneurial networks create common perspectives, foster cultural change, help branding the region, and harness regional competitiveness. (National Commission On Entrepreneurship, 2001, pp. 2-5)

Social capital is an important part of the entrepreneurial network: you invest in social relations and interactions with expected returns and possible profits. Embedded resources in social networks better the chances of desired actions with four different

point of views, all of which are linked to one another. First, the information flow is positively affected by the networks since in many cases social ties can provide individuals with useful information about different opportunities and choices that would not be available otherwise, which in turn would reduce the transaction costs of the entrepreneur. Second, the network may influence the decision making of critical players greatly, e.g. a recruiter or an investor at an organization. Third, the network may affect an individual's social credentials. In addition to all three mentioned above, networks also give great reinforcements to an individual entrepreneur by reinforcing e.g. identity and recognition. However, being a public good, social capital depends on the good will of the individual members to make effort and not to be so called free riders on social capital – one can take advantage of the system but not give back at all. Thus, structures, norms, and sanctions are vital for sustaining the social capital and limiting the amount of free riders. (Lin, 1999, pp. 30-32)

Moreno (1934, p. 432) first introduced the sociogram, and defined a sociogram as “a graph which visualizes the underlying structure of a group and the position each individual has within it”. Moreno's sociogram is a good example of how an entrepreneurial network may look like when put onto a graph. Figure 3 below gives you an example of a sociogram.

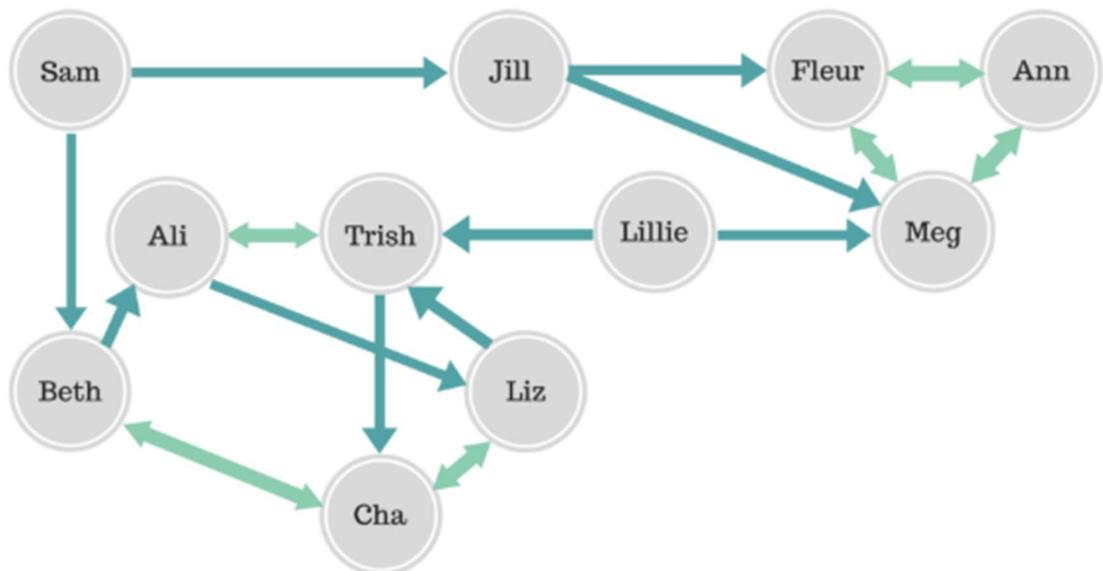


Figure 3. Sociogram on entrepreneurial networks (Miller, 2019).

There are usually **four stages** in the life cycle of an Economical Ecosystem: **Pioneering, Expansion, Authority, and Renewal or Death**. Each stage presents specific development challenges for the ecosystem. In many cases the stages blur with one another and e.g. managerial challenges on one stage might affect the other one. (Moore, 1996, pp. 18, 45) Next, an introduction to all four stages.

1) Pioneering

This is the first stage of an Economical Ecosystem – “when the basic paradigm of the ecosystem is being worked out” (Moore, 1996, p. 45). According to Moore (1996, p. 45) this is the stage in which the ecosystem needs to link capabilities and create offers after which the ecosystem and its operators build the ecosystem on these capabilities and offers. Thus, the ecosystem needs to identify innovations that create better products or services than the ones that already exist on the market. In addition to this, the whole community has to assess the potential on how to create value to customers, and how to do it more effectively than others do.

2) Expansion

This stage is seen as the stage on which “the community broadens its scope and consumes resources of all types” (Moore, 1996, p. 45). At the second stage, the first stage paradigm needs to be applied broadly, and it must be reliable and replicable at the same time. While the first stage is the most important stage for the ecosystem core offering, this part is crucial in identifying and gathering the most potential allies for the ecosystem. There may be some inter-ecosystem struggles at this stage already. (Moore, 1996, pp. 47-48)

3) Authority

At the third stage, the “community architecture becomes stable and competition for leadership and profits within the ecosystem gets brutal” (Moore, 1996, p. 45). At the Authority stage, the different parties of the ecosystem must try to position their contribution at the heart of the community to position themselves as the authorized and trustworthy core of the whole ecosystem. At this stage, there is competition both inside and outside of the ecosystem. (Moore, 1996, pp. 48-51)

4) Renewal or Death

The fourth stage of the ecosystem can go two ways: either a renewal will happen if continuous innovation takes place so that the community can thrive, or the ecosystem will die (Moore, 1996, p. 45). It is crucial to make notes and not to take existing ecosystems for granted. More importantly, it is vital to bring new ideas into the old in order to keep the ecosystem alive and ongoing and maximize improvements. At this stage, the conditions of the ecosystem do not change but the ecosystem itself changes. If the changes are not made thoroughly enough, the ecosystem may be replaced by another ecosystem, which has better offering. (Moore, 1996, pp. 51-52)

According to Iansiti and Levien (2004a) there are three indicators with which you can evaluate the health of your Business Ecosystem: productivity, robustness, and niche creation.

Productivity = the network's ability to transform technology and other raw materials of innovation into lower costs and new products which can be measured e.g. with the return on investment.

Robustness = the Business Ecosystem should be able to survive external shocks with the good relationships within the ecosystem: this way it is easier to predict unforeseen changes. The simplest way to measure robustness is to look at the survival rates of the members of the ecosystem.

Niche Creation = the ecosystem's capacity to increase meaningful diversity through the creation of valuable new functions which can then be measured by investigating at the extent to which emerging technologies are applied, especially the variety of new businesses and products.

The focus of the three subchapters of Chapter 3 is on three established ecosystems: Business Ecosystems, Innovation Ecosystems, and Entrepreneurial Ecosystems. All of these ecosystems have homogenous features: they are self-directive but at the same time dependent on one another since there may be operators that work in different ecosystems at the same time. Openness and adaptability are also important since the condition within the ecosystem may change greatly over time. In addition to this, all ecosystems are built so that there is no single operator that owns the whole ecosystem but the focus is on the relationships of different operators within the ecosystem.

Regardless of the size of the ecosystem, the different organisms of the ecosystem align themselves with a direction set by one or more central companies of the ecosystem. The central companies, who hold leadership, may change over time, but “the function of ecosystem leader is valued by the community because it enables members to move toward shared visions to align their investments, and to find mutually supportive roles.” (Moore, 1996, pp. 21-22) Many of these companies co-evolve capabilities around a new innovation: by working in co-operation and at the same time competing to support new products, the businesses satisfy customer needs. In the best-case scenario, the businesses incorporate the next round of innovations. (Moore, 1993)

Instead of seeing the ecosystem as a closed circle, one should be aware of the changing and living web within each ecosystem and around them. (Lahtinen, et al., 2016, p. 74) This web is showcased in Figure 4.

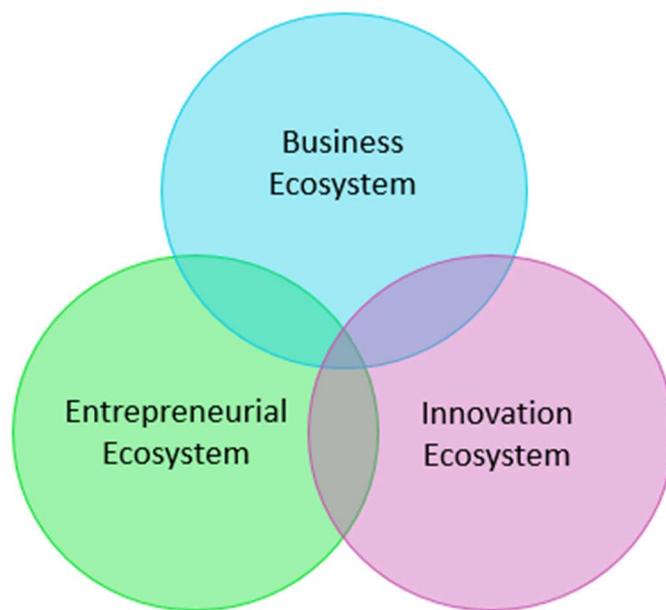


Figure 4. Economical Ecosystems and their web (Salminen & Mikkela, 2016).

According to Kaihovaara et al. (2017, p. 16), there are three **general features** that are applicable to each ecosystem:

1. **Complexity** – The development of ecosystems is highly dependent on multiple factors which are insecure and cannot be foreseen or controlled before hand.

2. **Interdependency** – Even though every operator within an ecosystem has its own interests and motives, all operators are dependent on each other since the possible success of an ecosystem is an advantage for every operator within the ecosystem.
3. **Adaptability and Life Cycle** – The adaptability of an ecosystem is crucial during its life cycle of birth, growth, development, and death and/or renewal since it can enhance the ecosystems success on these stages.

The following three subchapters will introduce **Business Ecosystems**, **Innovation Ecosystems**, and **Entrepreneurial Ecosystems** in greater detail.

3.1 Business Ecosystem

Moore was the first to introduce the concept of Business Ecosystems in the 20th century. According to Moore (1996, p. 21) a Business Ecosystem is “an economic community supported by a foundation of interacting organizations and individuals – the organisms of the business world.” Moore’s point of view was very different from the traditional way of doing business: the traditional way took into account mainly the aspects related to the product and service competition, but not the whole ecosystem around it. Moore thought it would make more sense to look at the bigger picture and not to only talk about an industry, but the whole ecosystem around it and this way get the added benefits for the whole ecosystem. (Moore, 1996, pp. 21-22) According to Peltoniemi and Vuori (2004, p. 5) however, Moore’s definition of Business Ecosystems is closer to the concepts of cluster and value network and thus cannot be used to replace the word industry.

Lahtinen et al. (2016, pp. 75-76) suggest that Business Ecosystems are often business oriented, thematic, and international and the actions of individual actors within a Business Ecosystem are highly linked to the success of the whole ecosystem. Therefore, the most important core function of a Business Ecosystem is to produce added value to the different operators within the ecosystem (Lahtinen, et al., 2016, pp. 75-76). Business Ecosystems have multiple key advantages and characteristics, e.g. they reduce transaction costs within the ecosystem and usually have multipolar decision making within the ecosystem. See Appendix 1 for further key advantages and characteristics of Business Ecosystems.

According to Moore (1996, pp. 21-22) the customers, the market intermediaries, the suppliers, and oneself are all a part of a Business Ecosystem. Moore defined these as the crucial operators, so called primary species. The owners and other stakeholders of these primary species are also included in a Business Ecosystem. In addition to these primary species and their owners and stakeholders, a Business Ecosystem also has powerful stakeholders like government agencies and regulators, associations and standard bodies who represent customers or suppliers. These powerful stakeholders can vary greatly depending on the Business Ecosystem. Even the direct competitors and companies that might be able to compete with one's company are included in a Business Ecosystem, one way or another. In other words, a Business Ecosystem is comprised of the **core business**, the **extended enterprise** and the **whole ecosystem** around these to co-evolve their capabilities and roles. (Moore, 1996, pp. 21-22) This can be seen in Figure 5. According to Galateanu and Avasilcai (2014, p. 315) to establish the main condition and actors within the ecosystem, the market type (e.g. business-to-business or business-to-consumers) and organization (e.g. small or small enterprise) need to be analyzed before analyzing the ecosystem as a whole.

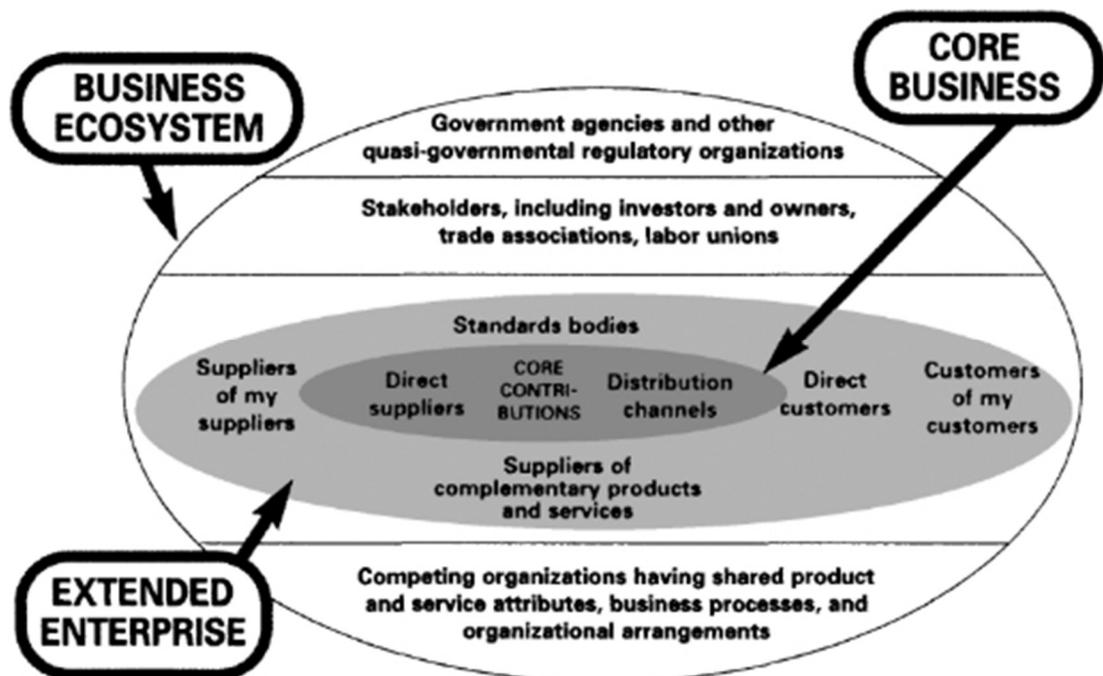


Figure 5. Business Ecosystem's stakeholders (Moore, 1996, pp. 21-22).

lansiti and Levien (2004b) state that a Business Ecosystem comprises roughly of three different stakeholders: **keystones**, **dominators**, and **niche players**.

Keystones are seen as hubs for the whole Business Ecosystems' interactions: they have characteristics which provide benefits for the entire ecosystem and its members as a whole. In order for an operator to be a keystone in a Business Ecosystem, it needs to affect the entire ecosystem and at the same time co-evolve with other parties of the ecosystem. Keystones shape what an ecosystem does. *Dominators*, however, are often only a small part of the ecosystem in which they operate, by means of both physical size and abundance. Dominators do not encourage diversity, but they eliminate other operators from within the ecosystem. After eliminating these operators, dominators either take over the functions of the lost operator or eliminate those functions altogether. Both an ecosystem with high dominance rate and an ecosystem with low keystone rate may become unstable and vulnerable to disruptions – especially when subject to external shock or stress. (lansiti & Levien, 2004b, pp. 17-19) The reaching impact of *niche players* in the ecosystem is not as broad as with keystones and dominators. However, niche players constitute the bulk of the ecosystem – both in terms of “total mass as well as variety” and are therefore a critical part in shaping the ecosystem. If keystones shape what an ecosystem does, niche players are what the ecosystem actually does. (lansiti & Levien, 2004b, p. 24)

The concept of Business Ecosystems can refer to a set of small businesses, but it can also refer to a bigger set of enterprises. Regardless of the size, the core function of Business Ecosystems is to create added value to all companies belonging to the ecosystem (Lahtinen, et al., 2016, p. 75).

According to Moore, the notion of industry boundaries in Business Ecosystems differs greatly from the traditional way of looking at an industry – this is because Business Ecosystems usually cross industry boundaries and do not respect the traditional industry boundaries. (Moore, 1996, p. 22) lansiti and Levien (2004b, p. 20) agree with Moore's views: they state that Business Ecosystems cross industry boundaries and are instead “defined by the strength and type of organizational interactions that occur” in each ecosystem. This helps companies to unite “disparate contributors to create powerful total solutions or experiences” and thus create Business Ecosystems that are dedicated on providing these solutions to customers. (Moore, 1996, p. 22)

3.2 Innovation Ecosystem

According to Godgson and Gann (2010, p. 33) innovation is “ideas that are applied successfully”. Orstavik et al. (2015, p. 4) define innovation as “humanly created changes in established ways of creating value, whatever it is that is made and whatever this value consists of”. This is while Oxford Business English Dictionary defines innovation as “the introduction or development of new things, ideas or ways of doing something” (Parkinson, 2005, p. 283). It is clear that there is no official definition on the word *innovation*, but all definitions have one thing in common: idea and change are the main priority when talking about innovations. This is why Innovation Ecosystems create a base for technological and know-how growth (Lahtinen, et al., 2016, p. 76).

The main idea behind Innovation Ecosystems is to take different organizations and people working in their own silos, and bring them together to work in an Innovation Ecosystem. This way the amount of knowledge within the whole ecosystem increases and is most likely to lead to the development of new innovations. The development of new innovations may happen even faster in an Innovation Ecosystem than how it would if the different operators worked in their silos: everything that happens within the Innovation Ecosystem is co-creation, not co-operation. (Kaihovaara, et al., 2016, pp. 3-4)

The nature of the different Innovation Ecosystems can vary drastically, but there are **four features** that can be found in each Innovation Ecosystem:

- 1) The ecosystem has globally valued know-how and business is based on the know-how.
- 2) The ecosystem produces new information and technology which are in the interest of international parties.
- 3) The ecosystem attracts new businesses and investors, both of which bring value to the ecosystem globally.
- 4) The ecosystem has operators that are globally functioning and make the most of the know-how within the ecosystem.

(Stähle & Oksanen, 2014, p. 3)

Innovation Ecosystems value interaction, openness, self-guiding, dependence on the whole ecosystem, complementary know-how and continuous adaptation to the changes of the environment within which the Innovation Ecosystem takes place. When compared

to clusters, which occur in the normal business world, an Innovation Ecosystem is usually a more tight and self-driven network. (Kaihovaara, et al., 2016, p. 3) The definition Innovation Ecosystem highlights the interdependency and self-drive of the operators in the ecosystem while open innovation and the dynamic nature of the ecosystem are also highly valued (Lahtinen, et al., 2016, p. 76).

The processes of education, learning, and innovation are at the heart of Innovation Ecosystems (Lahtinen, et al., 2016, p. 76). According to Kaihovaara et al. (2016, p. 3), there are **three main operators** within an Innovation Ecosystem:

- 1) Universities
- 2) Businesses
- 3) Public Administration

and they all have different **roles** within the ecosystem:

- 1) produces information and know-how.
- 2) turns this information and know-how into business processes.
- 3) nurtures the innovative environment in which all three operate.

In many cases, there are more than three operators within an ecosystem and the boundaries within each sector can be very faded. However, the three main operators within an Innovation Ecosystem, as mentioned above, are the ones that enable the ecosystem to work. (Kaihovaara, et al., 2016, p. 3) What is great about broad Innovation Ecosystems is that the groups involved in the innovation projects do not need a central office for their communication, but they rather reach out directly to each other to solve the problems. This helps to create an innovation culture – since there is no clear top-down governance innovations can form, thrive and grow. (Markman, 2012) The greatest outcomes of Innovation Ecosystems are knowledge, research, top class know-how and skills, which all lead to breakthroughs and innovations within the Innovation Ecosystem (Lahtinen, et al., 2016, p. 76).

Innovation Ecosystems compete on global markets, but have their local presence. A state, a city or a university campus does not set the boundaries of an Innovation Ecosystem, but they are often tied to a geographical area. Innovation Ecosystems can be local, regional, global or technology-based, but in many cases the ecosystem is global and local. In addition to this, like in Business Ecosystems, the operators within an Innovation Ecosystem can be a part of multiple different ecosystems at the same time.

(Kaihovaara, et al., 2016, pp. 4-5) However, the most valuable matter of Innovation Ecosystems is that the ecosystem has a strong basis in local know-how and pool of talent. This way the ecosystem can build on regional abilities. (Launonen & Viitanen, 2011, p. 29)

3.3 Entrepreneurial Ecosystem

The notion of entrepreneurial ecosystems emerged at the beginning of the 21st Century. There are multiple players within an Entrepreneurial Ecosystem, just as e.g. in an Innovation Ecosystem, and all the players affect and shape the ecosystem greatly with their activity: whether it is their strategies or the interaction they have with other players, all the activities contribute to building, modifying and restructuring the entrepreneurial ecosystem. (Boutillier, et al., 2016, p. 39) The first and foremost duty of Entrepreneurial Ecosystems is to support and enhance entrepreneurship and startups and their growth efforts (Lahtinen, et al., 2016, p. 76).

Entrepreneurial Ecosystems are composed of existing and future entrepreneurs and businesses, sponsors, investors, institutions and the different entrepreneurial processes. These processes are linked to the birth of new enterprises, the growth-aspirations of businesses, and to serial entrepreneurship. Newly formed businesses are often linked to the existing businesses of the ecosystem. This happens through the founders of the new businesses and is an indicator of a healthy Entrepreneurial Ecosystem. Successful entrepreneurs are a crucial part of an Entrepreneurial Ecosystem since they can affect the whole ecosystem greatly with their knowledge and resources: mentoring, angel investing, and founding of new businesses are all crucial aspects of the functions within an Entrepreneurial Ecosystem. When successful old entrepreneurs stay within an Entrepreneurial Ecosystem, it is called entrepreneurial recycling. (Lahtinen, et al., 2016, p. 76)

Entrepreneurial Ecosystems, much like Innovation Ecosystems, are usually tied to a specific geographical and political area. The presence of an Entrepreneurial Ecosystem can be national, regional, or local. This is because on national, regional, and local levels Entrepreneurial Ecosystems have a strong advantage of having the right people, know-how, financing, potential customers, and mentors all available at the specific geographical location. (Lahtinen, et al., 2016, pp. 76-77) Entrepreneurial density is linked to the geographical aspect of Entrepreneurial Ecosystems – according to Levine (2016)

“the smaller the physical space in which entrepreneurial activities taking place, the faster those activities happen, the more serendipity emerges and the more that community thrives”.

Mason and Brown distinguish **three typical characteristics** of Entrepreneurial Ecosystems (Mason & Brown, 2014, p. 8):

1. The focus is on entrepreneurial activities especially on high growth firms.
2. The emphasis is on local and regional environments, while also concentrating on the conditions that are required to generate and support ambitious entrepreneurship.
3. The interaction between the different conditions of the Entrepreneurial Ecosystem and the local and regional geographical environments are taken into consideration.

This is while Lahtinen et al. (2016, p. 77) suggest the following **three** as the **typical characteristics** for a successful Entrepreneurial Ecosystem:

1. Social cohesion and participation culture within the ecosystem.
2. Sharing of knowledge, experiences, and special know-how.
3. Positive attitude towards failures.

Suresh and Ramraj (2012, p. 98) introduced a framework on the **supportive systems of Entrepreneurial Ecosystems**: the framework has eight supporting systems, all of which have sub-supporting systems and operators. Every supporting system affects the success or failure of an entrepreneur in an entrepreneurial ecosystem either positively or negatively. These systems, operators and factors are the ones on which entrepreneurs rely on to make the most of their business. Since these are the functions that affect individual entrepreneurs within an Entrepreneurial Ecosystem, the whole ecosystem is affected by these eight supporting systems. All the supporting systems are showcased below in Figure 6.

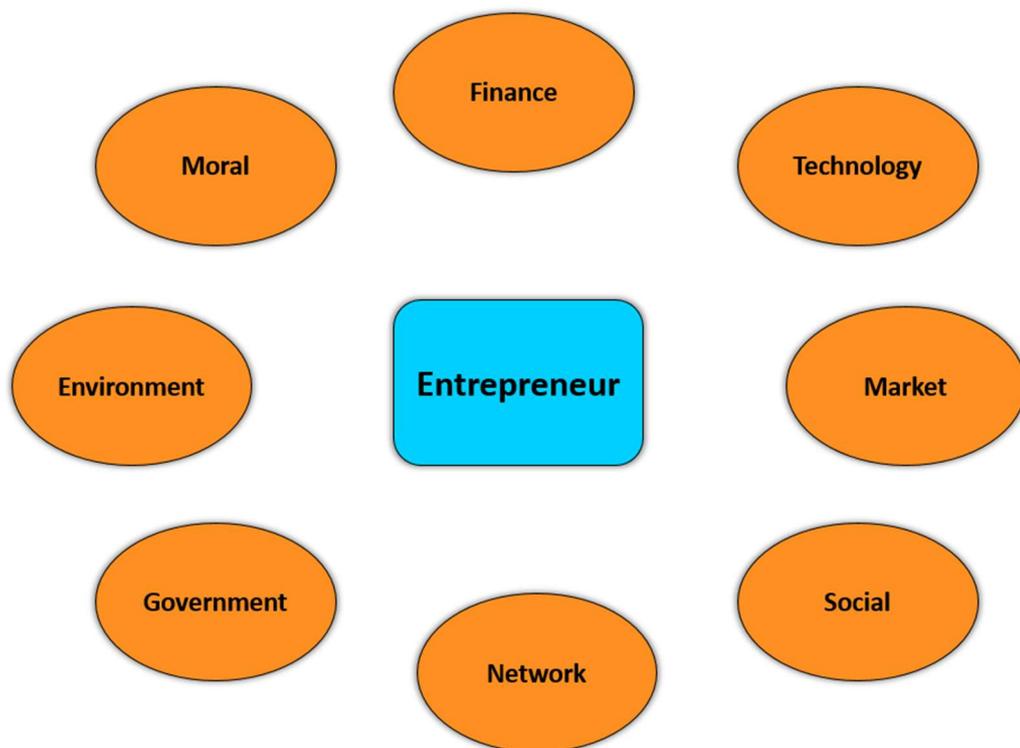


Figure 6. Entrepreneurial Ecosystem's support functions (Suresh & Ramraj, 2012).

In the following list, each supportive system is briefly described to get the overall image on how each supportive system functions (Suresh & Ramraj, 2012):

- **Financial support:** from family, friends, relatives, banks, venture capitalists etc.
- **Technological support:** from government-funded incubation centers, educational institutes, importation of know-how.

- **Market support:** reports from the government and trade associations, support of suppliers and loyal customers.
- **Social support:** awards from trade associations, acceptance of venture failure, media exposure.
- **Network support:** specific industry associations, alumni associations, online social networking sites, the network of suppliers and distributors.
- **Government support:** educational programs, incentives, incubation centers, infrastructure facilities.
- **Environmental support:** the available natural resources and climate conditions.
- **Moral support:** the role played by the entrepreneur's family, friends, relatives and society at large.

Feld (2012, pp. 187-189) agrees partly with Suresh and Ramraj: he states that intermediaries (e.g. mentors), network density (ideally across sector and industry borders, demographics and e.g. culture engagement), strong government support, support services (e.g. legal, accounting, consulting), companies, and capital (e.g. business angels, investors) are all a crucial part of a successful community. However, he also highlights the importance of strong entrepreneurships and their leadership: the entrepreneurs should be visible, accessible and committed to the community. In addition, he states that a strong pool of talent from different sectors and areas of expertise will make a difference for everyone who is a part of the community. Furthermore, engagement is a vital key in building a successful community: events (e.g. pitch days, happy hours, and boot camps) get the community together to connect with different parties of the whole ecosystem. (Feld, 2012, pp. 187-189)

All the ecosystems mentioned above – **Business Ecosystems**, **Innovation Ecosystems** and **Entrepreneurial Ecosystems** – supplement one another greatly and one should not see them as exclusive. Entrepreneurial Ecosystems create bridges between Business Ecosystems and Innovation Ecosystems, which in turn leads to a great web of networks. (Lahtinen, et al., 2016, p. 77) *Business Ecosystems* are built around key businesses in a global setting to bring added value to the operators within the ecosystem. *Innovation Ecosystems* constitute of the web of different innovators on a specific geographical area to produce new innovations, research, and know-how. The core of *Entrepreneurial Ecosystems* is the entrepreneurs who establish growth-seeking businesses and this way bring know-how and capital to the regional ja global Entrepreneurial Ecosystems. (Kaihovaara, et al., 2017, p. 17) To recap Chapter 3 and

its subchapters, the key deliverables, performers, and the scope of each ecosystem are displayed in Table 1 below.

Table 1. Distinguishing features of Ecosystems (Salminen & Mikkilä, 2016).

	Deliverables	Key performers	Focus
Business Ecosystem	Added value to all operators within the ecosystem + their customers	Established operators (especially big corporations)	Primarily global
Innovation Ecosystem	Know-how, skills, abilities, research, innovations	Research, development, innovation operators	International, nationwide and regional but also local
Entrepreneurial Ecosystem	Expansive entrepreneurship, startups	Entrepreneurs	Mainly local and regional

4 RESEARCH METHODOLOGY

The main objective of this thesis was to explore the ecosystem type of SparkUp and define which added value and problems arise within this ecosystem, from an Immigrant Startup perspective. This was done through exploratory research. An exploratory study is “a valuable means to ask open questions to discover what is happening” and also, to gain specific insights on a topic. This type of a study is especially useful to clarify one’s understanding of an issue, problem or phenomenon, and to explore it more thoroughly. (Saunders, et al., 2016, pp. 174-175) I wanted to further explore the topic of this thesis, since I had some knowledge based on my practical training but I was interested in expanding my existing knowledge. This is why exploratory study was applied on this research.

According to Krishnaswami and Satyaprasad (2010, p. 86) secondary sources are “sources containing data which have been collected and compiled for another purpose”. This is why secondary data may be used as a source of information for a research project (Krishnaswami & Satyaprasad, 2010, p. 87). This research took a deductive approach by first researching existing literature and after building up on theory that is grounded in the secondary data of this thesis from which I was able to identify the main variables, components, and themes (Saunders, et al., 2016, pp. 569-570). The secondary sources of this research gave me a thorough understanding of Startups and Ecosystems after which I was ready to conduct a research of my own to investigate primary sources from which I was able to collect my primary data.

“Primary sources are original sources from which the researcher directly collects data that have not been previously collected” (Krishnaswami & Satyaprasad, 2010, p. 86). Krishnaswami and Satyaprasad (2010, p. 86) explain that primary data gives the investigator first-hand information on the topic and can be collected by various methods such as observation, interviewing or emailing. The data collection of this research was conducted by multi-method qualitative study, which involves the use of qualitative methods separately (Saunders, et al., 2016, p. 168).

More precisely, the qualitative data collection methods used in this thesis were observation and interview. Observation was chosen as the first data collection method because observation is a great way to get insights on what is actually happening within the ecosystem by viewing, analyzing and interpreting people’s behaviour (Saunders,

et al., 2016, p. 354). Interview was chosen as the second qualitative method since in qualitative research meanings are sought from words (spoken or written), not numbers (Saunders, et al., 2012, p. 546) and because people are usually open to conversations (Krishnaswami & Satyaprasad, 2010, p. 100). Interviews also bring forefront the questions that the respondents do not want to answer (Krishnaswami & Satyaprasad, 2010, p. 100). In addition, interviews were expected to give more in-depth insights on the respondent's own experiences.

4.1 Data Collection and Analysis

The qualitative data collection of this thesis was carried out in two stages by means of observation and interviews.

The first stage of the data collection was executed by means of participant observation, more precisely by means of "complete participant". This means that as a researcher I was a part of SparkUp's ecosystem, but I did not reveal the aim of my research. (Saunders, et al., 2016, p. 358). This method was chosen for multiple reasons. First, the informality of this data collection stage was seen as an advantage since it allowed me to gather knowledge and insights on the matter. Second, it gave me the flexibility regarding time limitations and scheduling. In addition, this method was expected to show both the value and problems of the ecosystem. Different questions of ethics were taken into consideration when conducting the observations: the risks of breaching trust or creating harm were minimized by maintaining an anonymity of the informants of the observation. The observations took place during the fall 2018 at the same time with my practical training, more precisely during the time period from the beginning of September until the beginning of December, and also included informal interviews with different actors and stakeholders of the ecosystem. Since my practical training place was a part of SparkUp's Ecosystem, the internship allowed me to conduct observation as complete participant. Observation was designed to give insights and details of the possible answer-options of all the research questions. All the information from the observations and informal interviews was recorded in a diary.

Furthermore, the second stage of the data collection was conducted by means of two different asynchronous email interviews (Saunders, et al., 2016, p. 424). The interview questions were introduced to two external people before sending them out to the interviewees to ensure the wording and structure of the interviews was easy to

understand and applicable. All the interviews were carried out via email due to mine and respondents' time limitations and conflicting schedules. With all the interview participants we exchanged multiple emails in which I introduced the topic of my research, asked questions about the ecosystem, after which I was asking for clarification of some points and possible further questions (Saunders, et al., 2016, p. 424). After sending the interview questions via mail, the interviewees were given seven days to send back the interview results. All the participants were very active in responding to the interviews and highlighted that I can make additional questions and comments if needed.

Both interviews were semi-structured interviews with a standardized set of questions (Saunders, et al., 2016, p. 391). The interviews had both open-ended and multiple choice questions. Interview no 1 was planned to give a definite answer to research question number one, while at the same time giving some insights to research questions number two and three. Interview no 2 was planned to give answers mostly to research questions number two and three. Interview no 1 was carried out with the director of SparkUp and Interview no 2 was sent to four different Immigrant Startups that are a part of SparUp's ecosystem. SparkUp did not have accurate data on how many Immigrant Startups belong to their ecosystem, but the estimate was that there are 40 to 50 Immigrant Startups within the ecosystem. The number of startup interviews was chosen to be four startups since it is approximately 10 percent of the total research sample and it was expected to give insights and guidelines on the research topic so that one can make assumptions and conclusions based on the primary data. Three of the four startups replied to my emails and the interview questions. In addition, three Finnish Startups that are a part of SparkUp's Ecosystem were interviewed with the same set of interview questions (Interview no 2) to get a benchmarking population to the Immigrant Startups to find traces of similarities and differences in the research of values and problems the startups face within the ecosystem. The startups were chosen from within the ecosystem with the help of SparkUp's Community Facilitator who had insight information on the ecosystem and the different startups that operate within this ecosystem. All the startups are from different business fields and the individual respondents' age-scale varied from 20 to 50 years to make sure no age groups or business fields were highlighted in the primary data collection.

Next, a short introduction to the interviewee Immigrant Startups:

- **Startup A's** business field is technology and healthcare. The startup has been together with the idea since October 2017 but was officially founded early 2018.

- **Startup B's** business field is green and circular economy and the startup was founded late 2018.
- **Startup C's** business field is IT systems and especially environmental impact. The startup has not been officially founded yet.

Then, a short introduction to the interviewee Finnish Startups:

- **Startup D's** business field is event technology as software as a service and the startup was founded in March 2018.
- **Startup E's** business field is digital content business and the startup was founded June 2016.
- **Startup F's** business field is educational technology and the startup was founded early 2018.

Qualitative data is likely to be more varied, elastic and complex than quantitative data. Therefore the analyzing and understanding of this data needs to be sensitive to the characteristics in order for it to actually be meaningful. Qualitative data is often nonstandardized and will likely to be large in volume, while staying complex in nature. (Saunders, et al., 2016, p. 568) Therefore it is important that thematic narrative analysis approach was used to analyze the primary data: the approach focuses on the content of a narrative, rather than on the way in which it is structured. The focus of this approach is on "what" something is about rather than "how" it is constructed. (Saunders, et al., 2016, p. 601) I worked on all interview data first separately to get an indepth analysis of each individual interview, after which I worked on all the data to spot the similarities and differences from which I summarized multiple key factors which were grouped and are further presented in chapter 4.

4.2 Reliability and Limitations

The reliability of the research refers to the possible replication and consistency of the research: in a reliable research the researcher should be able to replicate the earlier research design and the findings of the research should turn out to be the same as in the first research (Saunders, et al., 2016, p. 202).

There are four possible threats to the reliability of a research: a) participant error, b) participant bias, c) researcher error, and d) researcher bias. Participant error is related

to any factors that may alter the way in which a participant performs in the primary data collection. This is while participant bias refers to any factors that may provoke false responses in the primary data collection. On the researchers side, researcher error is seen as any factors that may affect the researcher's interpretation, while researcher bias may affect especially when recording the responses of the respondents. (Saunders, et al., 2016, p. 203) In addition to this, deductive approach may sometimes lead to the theoretical framework being too restrictive in relation to the issues revealed in the data. This in turn may lead to the failure of exploring the research participants expression adequately. (Saunders, et al., 2016, p. 570)

To avoid possible threats, related to reliability, I had firstly ensured that the data collection process was well prepared and easy structured, e.g. the formal questions were listed down, and preliminary information from observation and informal interviews was categorized. Secondly, all the interviewees were informed that all data collected is confidential and anonymous (I informed them that I may use their title or business field in my analysis) which allowed room for personal opinions of the respondents. Thirdly, as a researcher, I made sure that my personal opinions and views were restrained and did not affect the research process in any way: especially thorough analysis of the existing literature during the data collection planning ensured this.

Every research has its own limitations that restrict the investigation in one way or another. As for this thesis, there were few reasons that were limiting the research work:

- 1) The eventual sample size of three Immigrant Startups and three Finnish Startups at the second data collection stage (Interview no 2) was a limitation to the results. However, this sample size allowed me to investigate & make conclusions and benchmarkings about the current state of SparkUp's Ecosystem.
- 2) The usage of email interview limited the interaction and communication with the respondents on some levels: the interview was not as easy to follow as a face-to-face interview would have been and certain questions and answers needed redefining so that both parties were clear on the topic. However, the respondents were very active in replying to my questions and were also asking questions themselves if something was unclear.
- 3) Conducting the observations as complete participant may have affected the observation results since this type of data collection often relies on

building relationships with others and thus personal flexibility on my side was needed since my own personality had to be suppressed to a great extent in order for it not to affect the results, which was proven to be difficult and some what uncomfortable in practice.

- 4) My own inexperience in secondary and primary data collections may have affected the quality of the findings. However, I made every effort to properly prepare myself for the data collections by extensively exploring research methods before, during and after all the data collections.

5 CASE ANALYSIS

This part of the thesis will present findings that are based on information gathered through the primary data collections: observation & informal discussion in SparkUp's Ecosystem (stage 1 of data collection) and formal interviews (stage 2 of data collection). The subchapters will focus on the following topics: subchapter 5.1 discusses the nature of SparkUp's Ecosystem and subchapter 5.2 discusses the value and problems/weaknesses of SparkUp's Ecosystem, from an Immigrant Startup perspective.

5.1 SparkUp's Ecosystem

This subchapter will answer research question no 1 "What is the nature of the economical ecosystem of SparkUp?" The primary data used to answer this question is mainly from the observation & informal interviews and Interview no 1 but some features were seen at Interview no 2 at the second data collection stage.

Observation indicated that SparkUp is seen as the most central player of their ecosystem, greatly affecting the shared vision of the ecosystem as a whole. In addition to this, all three features of an Economical Ecosystem that were showcased at the beginning of chapter 3 are applicable to SparkUp's Ecosystem: the ecosystem is complex and dependent on multiple factors, all the operators are interdependent on one another because the success of the ecosystem as a whole is dependent on the operators. In addition to this, SparkUp's Ecosystem is great at adopting to the life stages of an ecosystem.

SparkUp's Ecosystem is at the second stage on the life cycle of an Economical Ecosystems – expansion. SparkUp's Ecosystem has gathered many operators to their ecosystem: for example Universities in Turku and multiple startups are a part of SparkUp's Ecosystem. In addition to this, the community is trying to broaden its scope to the nearby areas of Turku – the operations of SparkUp have mainly been concentrated in Turku, but they are now trying to form allies with the operators on nearby areas such as Kaarina, Raisio, and Naantali. Furthermore, SparkUp's Ecosystem has already seen inter-ecosystem struggles: what are the ethical questions if two startups need funding and you can only direct one startup to a Venture Capitalist or to what extent should the ecosystem support a startup that is clearly dying. However, there are features of the first

stage of the life cycle of Economical Ecosystems (see Chapter 3): the ecosystem is still trying to figure out how to create value more effectively to its operators and actors.

Especially robustness is taken into account in SparkUp's Ecosystem: SparkUp's Ecosystem has been able to survive e.g. negative funding decisions from external parties with the help of the operators of the ecosystem who have made effort to find back-up funding from their networks. Also, SparkUp's Ecosystem is trying to increase meaningful diversity through the creation of valuable new functions within the ecosystem by offering e.g. incubation services and idea validation opportunities for entrepreneurs within SparkUp's Ecosystem. See Chapter 3, these are indicators of a healthy ecosystem.

On one hand the primary data of Interview no 1 indicated that SparkUp's Ecosystem has features of Business Ecosystems: the structure of the ecosystem can be seen comprising of the core business (SparkUp, Boost Turku, SHIFT, Creve, Nuori Yrittäjyys) but also the extended enterprise by Turku Science Park Oy supporting all the functions of SparkUp's Ecosystem. Also, the whole business ecosystem has presence around the core business and the extended enterprise since the City of Turku, Business Finland, Centre for Economic Development & Transport and the Environment, Finnish Business Angels Network, and different Venture Capital companies all affect SparkUp's Ecosystem on a larger scale. This is in line with Chapter 3.1. Figure 7 showcases the structure of SparkUp's Ecosystem: the core business, the extended enterprise, and the business ecosystem and the actors around SparkUp. The notion of industry boundaries of SparkUp's Ecosystem is in line with Chapter 3.1 sources of Business Ecosystems: there are no traditional industry boundaries since all interviewed startups were from different business fields and industries but still a part of the ecosystem.

The core business of SparkUp's Ecosystem was seen as the keystones of the whole ecosystem: the core business is the hub for the interactions of the whole ecosystem. This was in line with Chapter 3.1, however this research was not able to distinguish the dominators and niche players of SparkUp's Ecosystem. The operators in the core business of SparkUp have different roles: SparkUp is seen as a startup community, Boost Turku offers an entrepreneurship society with e.g. incubation activities, SHIFT organizes a business festival, Creve offers incubation activities for creative industries, and Nuori Yrittäjyys is specified on supporting the entrepreneurial activities of young people aged between 7 and 29 years.

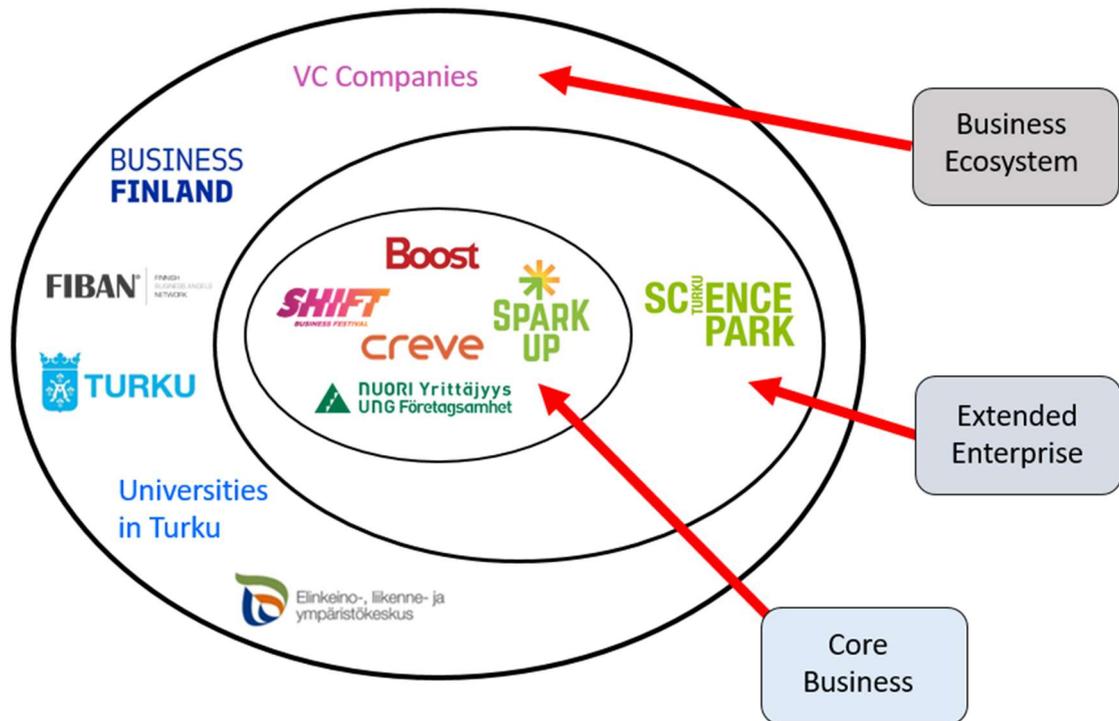


Figure 7. SparkUp's Ecosystem (Moore, 1996, pp. 21-22).

On the other hand, Interview no 1 indicated that some features of SparkUp's ecosystem refer to Innovation Ecosystems: local universities (University of Turku, Åbo Akademi University, Turku University of Applied Sciences, and Novia University of Applied Sciences) are important stakeholders in the innovation flow that occurs within SparkUp's Ecosystem. This is in line with chapter 3.2. There is no official central communication office within SparkUp's Ecosystem, but SparkUp itself in many cases is the main link between the actors of the ecosystem, connecting them and broadening their network. In many cases SparkUp first links e.g. two operators of the ecosystem after which in the future these two can reach out directly to each other to solve problems. For example, if a person enters the ecosystem and has a business idea in mind, SparkUp may direct the person to Boost Turku to take part on their Startup Journey for a ten-week incubation program or to Nuori Yrittäjyys for a 24-hour innovation camp to further develop the idea and possibly take the idea to the next level. This refers partly to Innovation Ecosystems (Chapter 3.2) that function by every operator reaching out to oneself without a central operator – which happens often in SparkUp's Ecosystem with operators that have been a part of the ecosystem for a long period of time. However, without SparkUp being the

key communicator of its ecosystem, especially the new operators could not reach out directly to each other.

SparkUp's Ecosystem has some other features of Innovation Ecosystems as well – the ecosystem attracts new businesses with e.g. two incubation programs that can be found within SparkUp's Ecosystem: Boost Turku hosts the Startup Journey every summer while Turku Science Park offers an incubation program called Business Up. Thus the ecosystem tries to produce new information and technology with the participants while at the same time taking people working in their silos and bring them together to grow networks and get peer evaluation. However, the incubation services are not the key concept of SparkUp's Ecosystem. This is different to pure Innovation Ecosystems: the core functions of them are the processes of education, learning, and innovation, in an international and global setting.

Even though there are features of Business Ecosystems and Innovation Ecosystems, the key performers within SparkUp's Ecosystem are entrepreneurs and businesses, and the focus of the ecosystem is on entrepreneurial activities. This is in line with the secondary data of Chapter 3.3: these features are mostly found on Entrepreneurial Ecosystems.

The core function of SparkUp's Ecosystem is to deliver supporting functions for entrepreneurs and startups. In addition to this, the ecosystem wants to support the growth efforts of entrepreneurs and startups – similar to Entrepreneurial Ecosystems discussed in Chapter 3.3. Furthermore, SparkUp's Ecosystem has different types of supporting functions for entrepreneurs: mentoring, angel investing, coaching for entrepreneurship, and business idea validation are all at the heart of SparkUp's Ecosystem and refer tightly to the ecosystem being an Entrepreneurial Ecosystem. Moreover, SparkUp's Ecosystem also offers team building support: the ecosystem consist of existing, new, and future entrepreneurs and businesses all of which are available to offer their guidance by sharing knowledge, experiences or their own special know-how for every operator of the ecosystem. Basically, every actor of SparkUp's Ecosystem affects greatly the ecosystem and the other actors of the ecosystem.

SparkUp's Ecosystem also has a strong social cohesion and participation culture: all the actors of the ecosystem are welcome to host events free of charge at the facilities of SparkUp, the events are open for everyone and new comers are warmly welcomed by the whole community. Moreover, SparkUp's Ecosystem does not see failure as a

negative matter but more of an opportunity to learn and further educate the ecosystem as a whole. Thus, SparkUp's Ecosystem has many of the typical Entrepreneurial Ecosystem characteristics – good cohesion culture and positive attitudes towards failure (see Chapter 3.3).

The presence of SparkUp's Ecosystem has many dimensions, many of which refer to Entrepreneurial Ecosystems – Interview no 1 highlighted that SparkUp's Ecosystem has a physical site which promotes local presence, but they also serve as a “regional umbrella”. This is while they also have visibility nationally. In addition to this, the interaction between the local and regional geographical environments is taken into consideration in SparkUp's Ecosystem. This is mainly due to having the right people, potential customers, mentors, know-how, and financing all available at a specific geographic location around SparkUp's Ecosystem. According to chapter 3.3 all of these are indicators of an Entrepreneurial Ecosystem.

Based on the primary data, SparkUp's Ecosystem has features of Business Ecosystems and Innovation Ecosystems but the most applicable of the three ecosystems in SparkUp's case is Entrepreneurial Ecosystem. However, the ecosystems are highly dependent on one another and especially Entrepreneurial Ecosystems create bridges between Business Ecosystems and Innovation Ecosystems. Business and Innovation Ecosystems around SparkUp's Ecosystem co-operate with SparkUp's Ecosystem to a great extent by creating added value and giving a thorough technological know-how base for growth.

5.2 Value and Problems in the Ecosystem

This section will answer research question no 2 “What value do the operators of the ecosystem deliver to Immigrant Startups?” and research question no 3 “Which limitations and problems do Immigrant Startups face in this ecosystem?”. The primary data used to answer these questions was gathered on each stage of the data collection, with observation and all the interviews that were conducted during the research.

Interview no 1 with SparkUp's Director gave a glimpse of what value the ecosystem delivers to Immigrant Startups: he indicated that the greatest value what the ecosystem is able to offer for Immigrant Startups is **networking**. Interview no 2 with Immigrant Startups further shared similar view: all the respondents thought that the greatest

strength of SparkUp's Ecosystem is the networks in and around the ecosystem since the community is able to give contacts to different key figures in different business areas. In addition to this, the respondents highlighted that individual people at SparkUp know many actors within the area and are always very helpful in introducing one to the key players of the industry/area, thus, SparkUp's Ecosystem broadens the social capital and entrepreneurial networks of the Immigrant Startups that belong to the community. Immigrant Startups highlighted the importance of networking towards skilled, higher-level, experienced actors of SparkUp's Ecosystem, e.g. mentoring and contacts to old experienced entrepreneurs or to CEO's of certain companies or industries were highly valued by the Immigrant Startups. However, the Finnish Startups highlighted the importance of networking from a different perspective: they thought that networking with peers was the most valuable deliverable of SparkUp's Ecosystem, thus, they can share information and brainstorm with e.g. other startups that are in the same financial situation or need help with their marketing efforts. One of the Finnish Startups emphasized that the social capital of peer support can be a limitation too since for example the ambition level of startups can vary drastically and thus the motivation of the peers and e.g. brainstorming results can vary greatly within the ecosystem and depend on the peer involved. This is in line with Chapter 3.

To find connections within the ecosystem, all startups were asked to name actors with whom they co-operate in any kinds of activities. To better understand and visualize the relationships and networks of each actor within the ecosystem, the relationships were put in onto a sociogram, which is a visualization of entrepreneurial relationships. Figure 8 below indicates the networks of SparkUp's Ecosystem's actors from an Immigrant Startup's perspective and Figure 9 describes the sociogram of the Finnish Startups that were interviewed. As one can see from the Figures (8 and 9), the Finnish Startups indeed had more connections between one another than the Immigrant Startups did with each other.

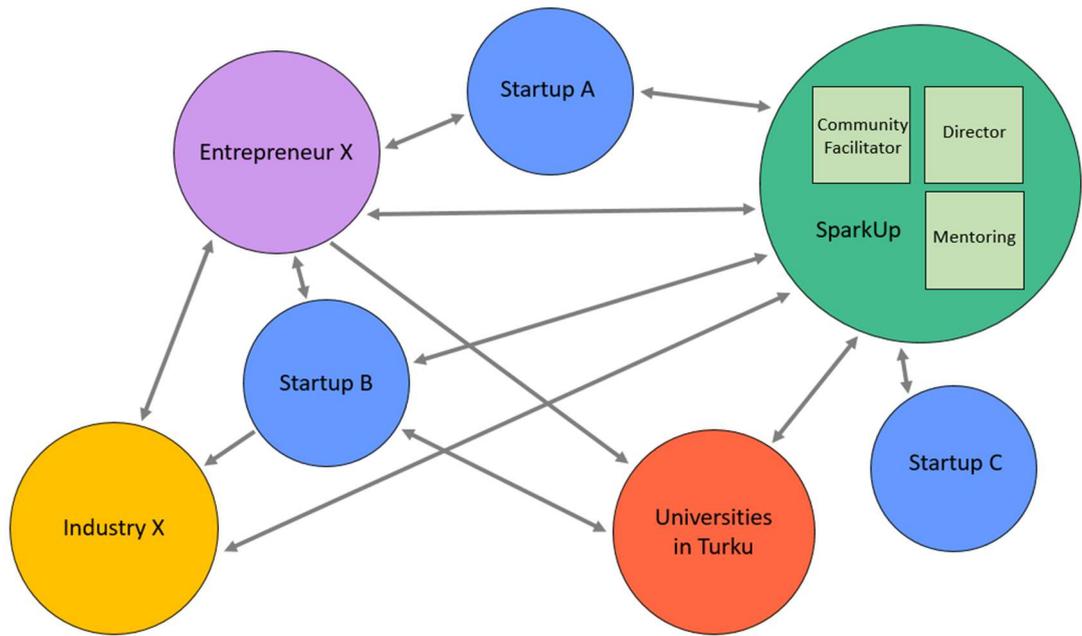


Figure 8. Sociogram of SparkUp's networks from Immigrant Startup's perspective (Miller, 2019).

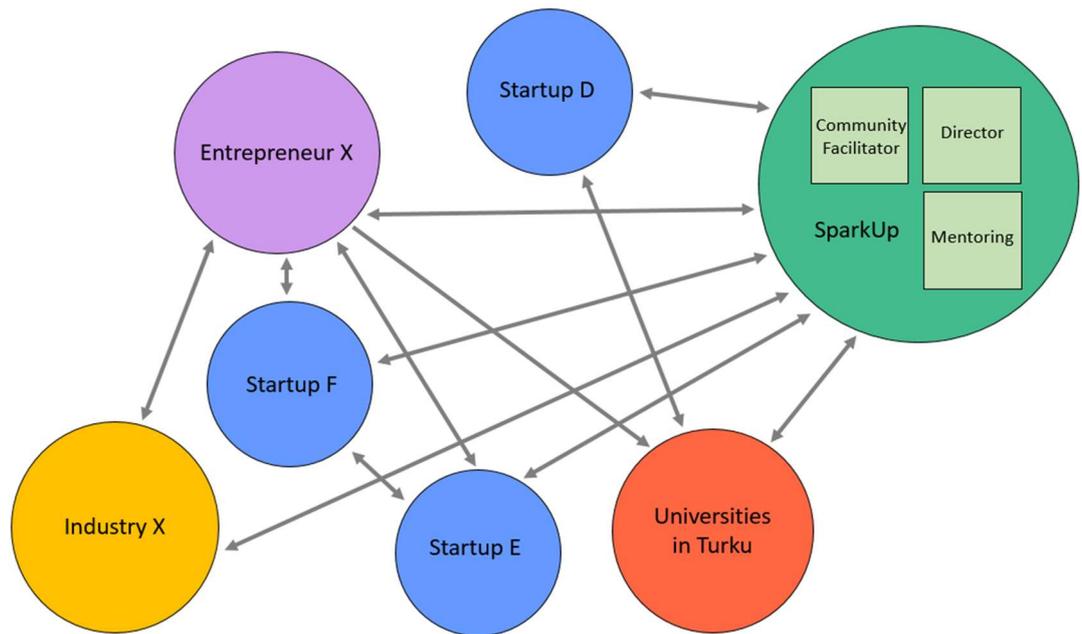


Figure 9. Sociogram of SparkUp's networks from Finnish Startup's perspective (Miller, 2019).

The startups were asked to rate the supporting functions of SparkUp's Ecosystem on a likert scale, score 1 being no support at all and score 5 being extreme support. The highest total score (= the most valued) in Tables 2 and 3 is 15 points, while the total score in Table 4 is 30 points. Immigrant Startups A, B, and C are highlighted in blue and Finnish Startups D, E, and F are highlighted in green in Tables 2, 3, and 4. The tables are based on the theory of Suresh and Ramraj (2012) (Chapter 3.3).

See Table 2, based on the total score, **network support** was the most valued supporting function of SparkUp's Ecosystem by the *Immigrant Startups*. This is while **moral support** was the second most valued supporting function – no wonder since Immigrant Startups highlighted in the interviews that they value greatly the mentoring services of SparkUp's Ecosystem. The least valued supporting functions of SparkUp's Ecosystem by total score were financial support and market support. This is due to the fact that Immigrant Startups felt SparkUp's Ecosystem is not able to deliver e.g. loyal customers or funding options for Immigrant Startups.

Table 2. Interview results of Immigrant Startups on SparkUp's Ecosystems supporting functions.

Support type	1	2	3	4	5	Total
Financial support	C	B	A			6
Technological support	C			A & B		9
Market support	B & C	A				4
Social support	C		B		A	9
Network support		C			A & B	12
Government support	C		B		A	9
Environmental support	C		B		A	9
Moral support		C		A	B	11

However, if we look at the individual answers of all startups in Table 2, we can see that startup A has continuously rated seven out of eight of the supporting functions of SparkUp's Ecosystem to be better than startups B and C. This may have to do with how long the startups have been engaged in SparkUp's Ecosystem: startup A has been a part of SparkUp's Ecosystem since June 2018 while startup B has been a part of the

ecosystem since September 2018 and startup C since spring 2017. However, the respondent of startup A has been a part of SparkUp's Ecosystem as an individual since late 2016. One could argue that the longer one is a part of the ecosystem, the broader the network is or the longer one is a part of the ecosystem, the more sufficiently one is able to use the services of SparkUp's Ecosystem. In addition to this, the business field of startups might have affected the answers. Even though SparkUp's Ecosystem is able to deliver services and added value to almost any startup from any industry, some industries may have better contacts or knowledge within SparkUp's Ecosystem. This is highly linked to the people working at SparkUp: their professional and personal backgrounds and motivation affect the links, network, and whole ecosystem greatly.

When looking at the answers of *Finnish Startups*, see Table 3, the supporting functions they valued the most differed slightly from the answers of the Immigrant Startups. Based on the total score, Finnish Startups valued most the **moral support**, e.g. mentoring, of SparkUp's Ecosystem. The second most valued support types by the Finnish Startups were **technological and government support**. This may be due to the fact that actually two of the three Finnish Startups have taken part in the incubation programs within SparkUp's Ecosystem (technological support) and all three of them actually use the office spaces of SparkUp regularly (government support). Surprisingly, the Finnish Startups saw that networking support was only the fifth most valued supporting function of SparkUp's Ecosystem. This differs greatly from the responses of Immigrant Startups. One could argue that the Finnish Startups already have good networks before entering SparkUp's Ecosystem, especially when compared to Immigrant Startups. This may be due to e.g. cultural differences, language barriers or the time that an individual has lived in Turku or its nearby areas. The least valued supporting functions by Finnish Startups were in line with Immigrant Startups: the Finnish Startups felt they do not receive enough financial and market support. The reasons for these were identical to the responses of Immigrant Startups – both felt SparkUp's Ecosystem is not able to deliver loyal customers or sufficient funding options.

Table 3. Interview results of Finnish Startups on SparkUp's Ecosystems supporting functions.

Support type	1	2	3	4	5	Total
Financial support	E	D	F			6
Technological support		D		F	E	11
Market support	E	D		F		7
Social support		D & E		F		8
Network support	E		D		F	9
Government support			D	E & F		11
Environmental support			D & E	F		10
Moral support			D	E	F	12

When looking at the individual answers of Table 3, one cannot distinguish the same pattern as with Immigrant Startups and the effective usage of SparkUp's Ecosystem. Finnish Startup D has been a part of SparkUp's Ecosystem since June 2018, but the interviewee as an individual since September 2016. Startup E has been a part of SparkUp's Ecosystem since September 2018, while Startup F has joint SparkUp's Ecosystem early 2018. If the pattern of the answers would be the same as with Immigrant Startups, Finnish Startup D would have continuously rated the supporting functions of SparkUp's Ecosystem to be better than Startups E and F have. However, in the case of Finnish Startups, startup F has continuously rated every supporting function to be better than D and E have. This may have to do with the fact that even though startup F has been a part of SparkUp's Ecosystem only from the beginning of 2018 as a startup, individuals at startup F have known different workers from SparkUp for years before. These relationships have mostly been friendships between individual persons and have not included any professional actions. Thus, one could argue that SparkUp's Ecosystem is able to deliver more value to those, who have had previous social ties to the workers of SparkUp.

Nevertheless, when combined, the answers in Table 4 by the total score indicate that there was consistency in the results of Immigrant and Finnish Startups and the two most valued supporting functions by both Immigrant and Finnish Startups, were moral and networking support. The least valued supporting functions by both Immigrant and Finnish Startup were, as mentioned in previous chapters, market and financial support.

Table 4. Both interview results on SparkUp's Ecosystems supporting functions.

Support type	1	2	3	4	5	Total
Financial support	C, E	B, D	A, F			12
Technological support	C	D		A, B, F	E	20
Market support	B, C, E	A, D		F		11
Social support	C	D, E	B	F	A	17
Network support	E	C	D		A, B, F	21
Government support	C		B, D	E, F	A	20
Environmental support	C		B, D, E	F	A	19
Moral support		C	D	A, D	B, F	23

The Director of SparkUp highlighted the importance of the services of SparkUp's Ecosystem that serve basic information about entrepreneurship and business establishment in Finland. These services affect and may greatly boost the idea generation and validation of possible ideas of startups while trying to direct startups in choosing distinguishing features for their startup, e.g. on what would be the possible market gap of the startup (see Chapter 2). The Director of SparkUp also saw that having the services available in English was a great advantage for Immigrant Startups. This was also seen at the first data collection stage: based on the observation, most of the Immigrant Startups use SparkUp's Ecosystems services and engage in the ecosystem with one common language – English. Indeed, all the Immigrant Startups that were interviewed used English as the corporate language and did not mention English as a value-deliverable of the ecosystem. This may be due to the fact that respondents have always used English within the ecosystem and did not think of the language as an asset but more of a general norm of the whole ecosystem. In addition, all the Finnish Startups used both English and Finnish as corporate languages within their startups.

When it comes to problems and weaknesses of the ecosystem, there were a couple of themes highlighted by all interview participants. Firstly, the Director of SparkUp mentioned an *entry barrier*: you have to speak English to be able to enter the ecosystem. He saw that having English as a service language, and therefore a must language skill, was a strength and a weakness at the same time. Might be that without the need of English skills the ecosystem would have even more startups, especially Immigrant

Startups. Nowadays however, it is not possible to enter the ecosystem without English skills.

Secondly, all the respondents thought that SparkUp's Ecosystem is still looking for its place in the bigger picture: whether it was the developing community aspects, the lack of fast access to different resources within the ecosystem (e.g. advice, mentoring, coaching) or better decision-making processes. Some of the respondents from Immigrant Startups highlighted that the interaction between the novices and the experienced actors of the ecosystem could be more sufficient than what they were at the moment of doing the interviews. The Finnish Startups further shared this vision as they thought that SparkUp's Ecosystem has a two-folded managerial problem: first, Finnish Startup D felt like the top-down management style of SparkUp's Ecosystem is challenging at a times since the individual actors within the ecosystem cannot affect e.g. the decision making from the "grass-roots" level. Secondly, the time management of the individuals within the ecosystem was seen as a challenge. Startup F highlighted that all the actors within SparkUp's Ecosystem are so busy that it affects the sufficient usage of the whole ecosystem.

In addition, as mentioned already, funding and financing was seen as a difficulty within SparkUp's Ecosystem. This may be due to the fact that SparkUp itself does not support startups financially. However, the great networks that SparkUp's Ecosystem offers, may increase the chances of finding funding and financing, especially since e.g. Finnish Business Angels Network is a part of SparkUp's Ecosystem. Also, as mentioned before, market support was seen as a weakness of SparkUp's Ecosystem. It was interesting to see that all startups shared the same vision of the weaknesses and problems of SparkUp's Ecosystem while the director of SparkUp did not mention these (financing & market support) as weaknesses, but he indicated that in his opinion e.g. the evolving networking power was a weakness of the ecosystem. The startups however did not feel this way, since they all greatly appreciated the networking support of SparkUp's Ecosystem.

6 CONCLUSIONS

The objective of this thesis was to explore the economical ecosystem of SparkUp to determine which type of an ecosystem the case study comprises of. In addition, the research of this thesis pursued to investigate what value this ecosystem delivers to Immigrant Startups and what are the possible problems that Immigrant Startups may confront in this ecosystem. The following subchapters will introduce the most important research findings and make recommendations for further research.

6.1 Research Findings

The primary data indicated that SparkUp's Ecosystem has features of all three ecosystems: Business Ecosystems, Innovation Ecosystems, and Entrepreneurial Ecosystems.

The aspects that related to Business Ecosystems in SparkUp's case were the formation of SparkUp's Ecosystem (core business, extended enterprise, business ecosystem) and the fact that SparkUp's Ecosystem does not have industry boundaries. Indicators of Innovation Ecosystems in SparkUp's Ecosystem were the universities that belong to the ecosystem. In addition, there were some features of Innovation Ecosystems in SparkUp's Ecosystem, e.g. the ecosystem attracts new businesses. However, SparkUp's Ecosystem was closest to an Entrepreneurial Ecosystem by its core functions, key players, and locational aspects and one could argue that SparkUp's Ecosystem is mainly an Entrepreneurial Ecosystem. In addition to this, the ecosystem of SparkUp has indicators of a healthy ecosystem and it is mainly on the second stage of Economical Ecosystems.

The greatest value that SparkUp's Ecosystem was able to deliver to Immigrant Startups were the networks and moral support (e.g. mentoring) of SparkUp's Ecosystem. These were highly valued by all the responding Immigrant Startups. In addition to this, the director of SparkUp thought these were the most valuable assets of the ecosystem. Furthermore, also Finnish Startups thought that the most valuable asset of SparkUp's Ecosystem is the moral support of the ecosystem. The technological support of SparkUp's Ecosystem was also highly valued by both Immigrant and Finnish Startups.

The usage of English as the communication language of the whole ecosystem was seen as an advantage and a disadvantage at the same time.

Both Immigrant Startups and Finnish Startups thought that the weaknesses and problems of SparkUp's Ecosystem were the financial and market support of the ecosystem – the ecosystem was not able to offer e.g. sufficient financing options or loyal customers. In addition to these, the unsure community aspects on a bigger scale, the sufficient access to different resources within the ecosystem, and at times non-sufficient interaction between newcomers and experienced actors within the ecosystem were seen as weaknesses of SparkUp's Ecosystem.

6.2 Recommendations for Further Research

The industry aspect of SparkUp's Ecosystem could be further researched: how is SparkUp's Ecosystem able to deliver value to different startups from different industries. In addition to this, comparing the differences between startups that have been a part of the ecosystem for a long time and startups that have been a part of the ecosystem for a shorter period of time in greater detail might give more insights on the networking power of SparkUp's Ecosystem.

Also, it would be interesting to see how the startups that were interviewed feel about SparkUp's Ecosystem e.g. one year after the interviews. Are they still a part of the ecosystem? Which type of value has the ecosystem been able to deliver for one year? Which have been the biggest challenges in the ecosystem during this year? Do they feel that they have expanded their networks in SparkUp's Ecosystem during this year?

Last but not least, an interesting research could be to examine SparkUp's Ecosystem e.g. in two years to find out whether the ecosystem still has many features of Entrepreneurial Ecosystems, or do they have more features of e.g. Innovation Ecosystems. In addition, would be interesting to see if the actors within the ecosystem are the same in a couple of years. This research was not able to distinguish e.g. the dominators and niche players (see chapter 3.1) of SparkUp's Ecosystem, so a further research on these might be beneficial for the ecosystem.

7 REFERENCES

- Bariagaber, A., 2006. *Conflict and the Refugee Experience: Flight, Exile, and Repatriation in the Horn of Africa*. 1st ed. s.l.:Routledge.
- Barrow, C., Barrow, P. & Brown, R., 2015. *The Business Plan Workbook, A Practical Guide to New Venture Creation and Development*. 8th ed. London, Philadelphia, New Delhi: Kogan Page.
- Black, R., 2001. *New Issues in Refugee Research: Environmental refugees: myth or reality?*, Falmer: University of Sussex.
- Boutillier, S., Levratto, N. & Denis, C., 2016. *Entrepreneurial Ecosystems*. 1st ed. s.l.:John Wiley & Sons, Incorporated.
- Bovée, C. L. & Thill, J. V., 2005. *Business in Action*. 3rd ed. Upper Saddle River: Pearson Education.
- Bridge, S., O'Neill, K. & Cromie, S., 2003. *Understanding Enterprise, entrepreneurship and Small Business*. 2nd ed. New York: Palgrave Macmillan.
- Dodgson, M. & Gann, D., 2010. *Innovation: A Very Short Introduction*. 1st ed. s.l.:Oxford University Press.
- Feinlab, D., 2011. *Why Startups Fail: And How Yours Can Succeed*. 1st ed. s.l.:Apress.
- Feld, B., 2012. *Startup Communities: Building an Entrepreneurial Ecosystem in Your City*. 1st ed. s.l.:John Wiley & Sons.
- Galateanu, E. & Avasilcai, S., 2014. Business Ecosystem "Reliability". *Procedia - Social and Behavioral Sciences*, Volume 124, pp. 312-321.
- Graham, P., 2006. *Paul Graham - The 18 Mistakes That Kill Startups*. [Online] Available at: <http://www.paulgraham.com/startupmistakes.html> [Accessed 5 12 2018].
- Gruber, F., 2014. *Starup Mixology : Tech Cocktail's Guide to Building, Growing, and Celebrating Startup Success*. 1st ed. s.l.:John Wiley & Sons, Incorporated.

Hilma Vammaisten Maahanmuuttajien Tukikeskus, 2013. *Hilma Vammaisten Maahanmuuttajien Tukikeskus*. [Online]

Available at: <http://www.tukikeskushilma.fi/materiaali/index2.php?sivu=1264>
[Accessed 4 3 2019].

Honkinen, T. et al., 2017. *Startup-juridiikan käsikirja*. s.l.:Alma Talent Oy, Lakimiesliiton Kustannus.

Houlihan, M. & Harvey, B., 2018. *Entrepreneur: The Top 4 Reasons Startups Fail, According to 14 International Accelerators*. [Online]

Available at: <https://www.entrepreneur.com/article/311064>
[Accessed 7 12 2018].

Iansiti, M. & Levien, R., 2004a. *Harvard Business Review: Strategy as Ecology*. [Online]

Available at: <https://hbr.org/2004/03/strategy-as-ecology>
[Accessed 6 11 2018].

Iansiti, M. & Levien, R., 2004b. *Keystones and Dominators: Framing Operating and Technology Strategy in a Business Ecosystem*, s.l.: s.n.

Kaihoavaara, A. et al., 2017. *Innovaatioekosysteemit elinkeinoelämän ja tutkimuksen yhteistyön vahvistajina*, s.l.: Valtioneuvoston Selvitys- ja Tutkimustoiminta.

Kaihoavaara, A., Härmälä, V. & Salminen, V., 2016. *Mitä innovaatioekosysteemit ovat ja miten niitä voi kehittää?*, s.l.: Valtioneuvoston Selvitys- ja Tutkimustoiminta.

Krishnaswami, O. & Satyaprasad, B., 2010. *Business Research Methods*. 1st ed. s.l.:Himalaya Publishing House.

Kuusela, S., 2013. *Hupparihörhö ja bisnesmies, Opas startup-kulttuurin ymmärtämiseen*, Helsinki: Taloustieto Oy.

Lahtinen, H. et al., 2016. *Startup-yritysten Kasvun Ajurit Ja Pullonkaulat*, s.l.: Valtioneuvoston Kanslia.

Launonen, M. & Viitanen, J., 2011. *Hubconcepts: The Global Best Practice for Managing Innovation Ecosystems and Hubs*. 1st ed. Helsinki: Hubconcepts Inc..

Levine, S., 2016. *VC Adventure: Entrepreneurial Density*. [Online] Available at: <https://www.sethlevine.com/archives/2016/02/entrepreneurial-density.html> [Accessed 10 1 2019].

Lin, N., 1999. *Building a Network Theory of Social Capital*, Durham: Duke University.

Markman, A., 2012. *Harvard Business Review*. [Online] Available at: <https://hbr.org/2012/12/how-to-create-an-innovation-ec> [Accessed 4 12 2018].

Martin, C. L. & Crisp, M. G., 1992. *Starting Your New Business: A Guide for Entrepreneurs*. s.l.:Course Technology Crisp.

Mason, C. & Brown, R., 2014. *Entrepreneurial Ecosystems and Growth Oriented Entrepreneurship*, The Hague: OECD & Dutch Ministry of Economic Affairs.

Massey, D. S. et al., 1993. Theories of International Migration: A Review and Appraisal. *Population and Development Review*, 19(3), pp. 431-466.

Miller, M., 2019. *Six Seconds*. [Online] Available at: <https://www.6seconds.org/2017/07/03/20125/> [Accessed 9 1 2019].

Moore, J. F., 1993. Predators and Prey: a New Ecology of Competition. *Harvard Business Review*, 71.3(May-June), pp. 75-86.

Moore, J. F., 1996. *The Death of Competition: Leadership & Strategy in the Age of Business Ecosystems*. s.l.:HarperCollins.

Moreno, J. L., 1934. *Who Shall Survive?: A New Approach to the Problem of Human Interrelations*. 1st ed. Washington: Nervous and Mental Disease Publishing Co..

Mueller, R. M. & Thoring, K., 2012. *Design Thinking VS. Lean Startup: A Comparison of Two User-Driven Innovation Strategies*, Boston: s.n.

National Commission On Entrepreneurship, 2001. *Building Entrepreneurial Networks*, Washington: National Commission On Entrepreneurship.

Orstavik, F., Dainty, A. R. J., Abbott, C. & Dainty, A. R. J., 2015. *Construction Innovation*. 1st ed. s.l.:John Wiley & Sons, Incorporated.

Parkinson, D. e., 2005. *Oxford Business English Dictionary - for learners of English*. Oxford: Oxford University Press.

Peltoniemi, M. & Vuori, E., 2004. *Business Ecosystem as the New Approach to Complex Adaptive Business Environments*, Tampere: Tampere University of Technology.

Ries, E., 2011. *The Lean Startup: How Constant Innovation Creates Radically Successful Businesses*. 1st ed. London: Portfolio Penguin.

Ries, E., 2019. *The Lean Startup Methodology*. [Online] Available at: <http://theleanstartup.com/> [Accessed 9 1 2019].

Salminen, V. & Mikkilä, K., 2016. *Yrittäjäekosysteemit kasvun ajurina*, s.l.: Valtioneuvoston Selvitys- ja Tutkimustoiminta.

Saunders, M., Lewis, P. & Thornhill, A., 2012. *Research Methods for Business Students*. 6th ed. Harlow: Pearson Education Limited.

Saunders, M., Lewis, P. & Thornhill, A., 2016. *Research Methods for Business Students*. 7th ed. Edinburgh Gate: Pearson Education Limited.

Sisäministeriö, 2018. *Pakolainen pakenee vainoa kotimaassaan: Sisäministeriö*. [Online] Available at: <https://intermin.fi/maahanmuutto/turvapaikanhakijat-ja-pakolaiset> [Accessed 19 9 2018].

SparkUp Startup Community, 2019. *SparkUp Startup Community - About*. [Online] Available at: <https://www.sparkup.fi/en/sparkup/about> [Accessed 5 2 2019].

Stähle, P. & Oksanen, K., 2014. *Uudenmaan innovaatio-ekosysteemi - toimijat ja tarpeet*, s.l.: Uudenmaan liitto.

Suresh, J. & Ramraj, R., 2012. Entrepreneurial Ecosystem: Case Study on the Influence of Environmental Factors on Entrepreneurial Success. *European Journal of Business and Management*, 4(16), pp. 95-101.

Tilastokeskus, 2018. *Tilastokeskus*. [Online] Available at: <https://www.tilastokeskus.fi/tup/maahanmuutto/maahanmuuttajat->

[vaestossa/ulkomaan-kansalaiset.html](#)

[Accessed 4 3 2019].

UNHCR/IOM, 2015. *A million refugees and migrants flee to Europe in 2015*. Geneva: UNHCR.

UNHCR, 2019. *The UN Refugee Agency: What is a refugee?*. [Online] Available at: <https://www.unhcr.org/what-is-a-refugee.html> [Accessed 17 1 2019].

Vallero, D. A., 2010. *Environmental Biotechnology, A Biosystems Approach*. 1st ed. San Diego: Academic Press (Elsevier).

Williamson, P., 2010. *Ecosystem advantage: How to boost your success by harnessing the power of partners*, Cambridge: Cambridge Judge Business School.

Väestoliitto, 2019. *Väestoliitto: Maahanmuuttajien määrä*. [Online] Available at: http://www.vaestoliitto.fi/tieto_ja_tutkimus/vaestontutkimuslaitos/tilastoja/maahanmuuttajat/maahanmuuttajien-maara/ [Accessed 4 3 2019].

Appendix 1. Advantages and Characteristics of Business Ecosystems

Williamson (2010) distinguishes six **key advantages** that Business Ecosystems have:

1. They create added value to everyone in the ecosystem.
2. They bring together differentiated partners with complementary capabilities and structure their roles.
3. They stimulate complementary partner investments in the ecosystem.
4. They reduce transaction costs within the ecosystem by providing a set of values, rules etc.
5. They enhance flexible structures by co-learning.
6. They engineer effective value capture mechanisms.

Lahtinen et al. (2016) determine nine **key characteristics** of Business Ecosystems:

1. Global nature that goes beyond geographical locations.
2. No clear industry boundaries.
3. Interaction and interrelationship between the operators.
4. Common goals and values of different operators.
5. Multipolar decision making.
6. Ability to react and adapt to the operational environment.
7. Openness of communication and innovation functions.
8. Consumers and end-customers are an active part of the value creation within the ecosystem.
9. Creation of new business models.

Appendix 2. Interview SparkUp

1. Your job title in SparkUp:
2. Can you shortly describe your role in SparkUp?
3. Who/What are the key performers within the SparkUp ecosystem?
4. If you would need to choose one of the following statements as the key performers of SparkUp, which one would it be? Please indicate your answer with an "X" on the following table.

a. Big corporations and operators	
b. Universities and public administration	
c. Entrepreneurs and businesses	

5. Does SparkUp's ecosystem have global, regional or local presence?
6. How would you describe the core function of this ecosystem in your own words?
7. If you would need to choose one of the following statements to describe the core function of this ecosystem, which one would it be? Please indicate your answer with an "X" on the following table.

a. Producing added value to different operators within the ecosystem	
b. Creating a base for technological and know-how growth by bringing together organizations and people	
c. Supporting entrepreneurship and startups and their growth efforts	

8. On which of these four stages would you say that SparkUp's ecosystem is at the moment? Please indicate your answer with an "X" on the following table.

a. Pioneering – linking capabilities and building the ecosystem	
b. Expansion- identifying and gathering potential allies	

c. Authority – parties of the ecosystem try to position themselves at the heart of the ecosystem	
d. Renewal or Death – ecosystem makes changes which lead to the renewal or death of the ecosystem	

9. What are in your opinion the strong features of SparkUp's ecosystem in general?
10. Which type of value does the ecosystem of SparkUp deliver to Immigrant Startups?
11. What are in your opinion the weaknesses of SparkUp's ecosystem in general?
12. Which type of problems do Immigrant Startups face in SparkUp's ecosystem?

Appendix 3. Interview Startups

General:

1. Name of the startup you work in:
2. Your job title in this startup:
3. Business field of the startup:
4. Could you shortly describe the core functions of the startup you work in?
5. When was the startup founded?
6. How long has the startup you're working for been a part of SparkUps ecosystem?
7. Could you name some of the actors from SparkUp's ecosystem with whom you co-operate in any kind of activities?

SparkUp's ecosystems value and limitations for your Startup:

8. What is the most valuable asset this ecosystem has in general?
9. If you think of the ecosystem from your startup's perspective, what has been the most valuable aspect/asset in this ecosystem?
10. What is the greatest weakness of this ecosystem in general?
11. If you think of the ecosystem from your startup's perspective, what has been the biggest challenge/problem in this ecosystem?
12. Please indicate how much value SparkUp's ecosystem is able to deliver on the following areas:

1 = not at all, 2 = slightly, 3 = moderately, 4 = very, 5 = extremely

	1	2	3	4	5
Financial support (e.g. funding, bank borrowings)					
Technological support (e.g. incubation centers, educational institutes)					
Market support (e.g. loyal customers, reports from trade associations)					

Social support (e.g. awards from trade associations, media exposure)					
Network support (e.g. alumni & industry associations, SOME networking)					
Government support (e.g. educational programs, infrastructure facilities)					
Environmental support (e.g. natural resources, climate conditions)					
Moral support (e.g. support from friends/family, mentoring)					