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Business Incubators as a resource provider

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Aim of the thesis

How can Norwegian business incubators be classified based on the resources they provide?

The thesis will be conducted by the completion of the following points:

- A review of the current literature.
- An empirical study on how incubatees located in the incubators uses their resources.
- An analysis of the empirical findings with use of the literature found.
- Conclusion and implications.

Preface

This thesis is written by one author from the Norwegian School of Entrepreneurship at the Norwegian University of Science- and Technology. It constitutes the master assignment in the subject “TIØ4945 - Innovasjon og entreprenørskap-masteroppgave”. The purpose of this thesis is to investigate how incubators deliver their resources to their incubatees and explore the mechanisms within the incubation process. The literature review conducted in this thesis has drawn inspiration from the project assignment in “TIØ4530 Innovation and Entrepreneurship” considerer incubator best practice. I have also prepared this thesis through a term paper in “TIØ535”.

I wish to thank the supervisor Lise Aaboen for her support and assistance through this process. The insightful guidance and feedback during this period has been of great value.

The motivation behind the research has been sparked by my background and belief on entrepreneurship as a tool to enhance innovation. The research process has been challenging, but very insightful considering what incubators have to offer the start-up community. I am very interested in starting my own company and through this research I have obtained a more thorough understanding of how resources can be delivered in the incubation process.

Trondheim, 31.07.2014



Bjørn Petter Bjercke

Abstract

Incubators are becoming an important tool to increase infrastructure and development supporting entrepreneurship. Entrepreneurship is described as a key factor in order to create new companies that generate fresh possibilities for economic growth. The background chapter explains how incubators have changed through time and how earlier contributors have described the incubation process. This thesis research explores *how* the resources within the incubator are delivered and create value for its incubatees.

The theoretical framework reviews the incubation process key components and the resources. The results disagree with Nolan (2003) and von Zedwitz (2003) who argues that co-location is not a necessity for an incubator. The findings also show that co-location does not necessarily indicate collaboration among incubatees. Through using coaching as a resource the incubator can provide an environment where collaboration is present. This is dependent on what kind of incubatees the incubator possesses. The findings suggest a clear strategy in order to maintain a fair and flexible screening process. By using the framework of Bergek & Norrman (2008) the screening process indicated a variability of screening methods among the incubators.

The incubators different approaches to coaching were categorized. The findings suggest that a proactive and continuous coaching enhances the possibility of creating a good environment for the incubatees through the incubation process.

Even though the incubation process contains somewhat the same resources the two incubators provides them in different ways. The findings suggest that if the incubators manage to create and increase the sharing culture within the incubator the incubatee's access more resources. This collaboration is based on mutual trust. The incubators roles as a mediator is not only dependent on their network, but also accessing the incubatees network and make them share them among each other. By pushing the incubatees to communicate the learning curve during the incubation period may increase. Therefore, the incubation processes consist of similar resources, but differ in the way of managing them.

Abstract in Norwegian

Inkubatorer er blitt et viktig verktøy for å forbedre infrastrukturen og utviklingen av entreprenørskap. Entreprenørskap er beskrevet som en nøkkelfaktor for å øke antallet nye bedrifter som igjen kan skape nye muligheter for økonomisk vekst. Bakgrunnskapittelet forklarer hvordan inkubatorer har forandret seg gjennom tidene og hvordan forskere har beskrevet inkubasjonsprosessen.

Denne avhandlingen utforsker *hvordan* ressursene inni inkubatoren er levert og skaper verdi for bedriftene. Det teoretiske rammeverket undersøker hvordan tidligere forskning har sett inkubasjonsprosessen og ressursene i inkubatoren. Resultatene er motstridende til Nolan (2003) og von Zedwitz (2003) som hevder at samlokalisering ikke er en nødvendighet for en inkubator. Funnene viser også at samlokalisering ikke nødvendigvis skaper samarbeid mellom bedriftene. Ved å benytte coaching som ressurs kan inkubatoren utvikle et miljø hvor samarbeidet er forbedret. Mye avhenger av hvilke bedrifter som er tilknyttet inkubatoren. Funnene indikerer at for å skape en rettferdig og klar seleksjon bør inkubatoren ha en klar strategi på hva den ønsker å oppnå. Det ble funnet store ulikheter i seleksjonsprosessene til inkubatorene ved å bruke rammeverket beskrevet av Bergek & Norrmans (2008).

For å kartlegge hva slags tilnærming de to inkubatorene hadde til coaching ble rammeverket til Rice (2002) benyttet. Funnene viser at en kontinuerlig og proaktiv coaching øker sjansen for å skape et godt miljø for bedriftene i inkubasjonsprosessen. Funnene indikerer også at bedriftene vil ha større utbytte av ressursene i inkubasjonsprosessen dersom de har en coach som følger dem tettere og presser dem til å levere i henhold til milepæler.

Selv om inkubasjonsprosessen inneholder tilnærmet de samme ressursene benytter de to inkubatorene dem forskjellig. Funnen indikerer at dersom inkubatoren skaper en delingskultur i inkubatoren vil bedriftene få tilgang til flere ressurser gjennom samarbeid. Inkubatorens rolle som senter av verdikjeden er ikke bare avhengig av nettverket sitt, men adgangen til bedriftenes nettverk og muligheten for at de deler dette nettverket. Ved å presse bedriftene til å kommunisere med hverandre kan læringskurven deres øke i løpet av inkubasjonsperioden. Derfor består inkubasjonsprosessen av de samme ressursene, men leveringen av dem er forskjellig som kan føre til ulikt utbytte.

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1. Introduction

Nordic Entrepreneurship Monitor (2014) shows that there are many entrepreneurs in Norway, but way too few of them establish to become growing companies. Norway is below average on both enterprise creation and new firms that turn into high growth companies compared to the other OECD countries (OECD, 2014). Norway may face the danger of the «Dutch disease» if the benefits from the petroleum industry were to diminish more rapidly than expected (OECD, 2014). A strategic goal for the Norwegian government is to reduce the dependency on the oil and gas sector. The Industrial Development Corporation of Norway (SIVA) is responsible for government investment in incubators and had a budget on 95,6 million NOK in 2015 (SIVA 2015). Their ultimate goal is to stimulate economic growth, through strengthening Norway's capacity related to innovation and creativity.

In order to create new companies that generate fresh possibilities for economic growth, entrepreneurship is described as a key factor. Science parks (SPs) and business incubators (BIs) have been established throughout the world as part of increasing the infrastructure and development supporting entrepreneurship (Phan, Siegel, & Wright, 2005). An incubator is seen as a support system that provides the incubatees with resources that could potentially enhance their possibility of creating successful businesses. Internationally, incubators have been extensively used through decades. However, as Hackett & Dillits (2004a) state, incubators have changed through time and the research regarding this phenomenon has just touched the surface.

The number of business incubators are growing rapidly, from 200 at the beginning of the 1980s to over 3000 in 2000 (Aernoudt, 2004). In 2014 there was estimated to be about 7,000 incubators worldwide (NBIA, 2014) of which 32 were located in Norway (SIVA 2015). Even though the publications of the practitioners often claim benefits of the business incubators (Lewis, 2001; NBIA, 2011), overall research so far conclude with uncertainty with regard to how efficient they are if there are systematic evidence from researchers regarding promoting jobs and wealth creation (Massey et al., 1992; Phan et al., 2005). Assessments and evaluations of incubators has been a topic of discussion for as long as incubators have been of existence, but there is not an agreement on how to determine good performance (Aaboen, Lindelöf and Løfsten, 2008). It is argued that researchers need to turn their attention from 'what' the

important activities are to 'how' and 'why' these activities are interrelated, as well as to focus on the incubation process and the incubatees involved (Hackett & Dilts 2004b).

This change of focus from what to *how* indicates the topic of this thesis. In previous literature less attention has been focusing on the incubatees and *how* they are accessing help from the incubator. Hackett & Dillts (2004a) state that more efforts should focus on the incubation process itself in order to access the knowledge from the phenomenon of incubators. The success of incubatees is not only dependent on the nature of these services, but also on how they are supplied (Bhabra-Remedios and Cornelius (2003). Exploring how these services are supplied is the purpose of this thesis. The next section will present the purpose more thoroughly for the established research questions and challenges regarding them.

1.1 Purpose

The purpose of this thesis is to explore the incubation process and how incubators provide their resources to its incubatees. To fulfil this purpose I seek to investigate what the incubation process consist of and how it is done. Two Norwegian incubators are examined to fulfil this purpose. The two incubators are chosen due to their objective of being both a host that increases the probability of success of the companies and a profitable incubator. Business incubators facilitate start-ups and are supposed to increase the start-ups' probability of success, as well as improving their regional and industrial environment (Nowak & Grantham, 2000). Incubators try to address many of the challenges of the market: information costs, lack of services, lack of business assistance, and funding problems (Bøllingtoft & Ulhøi, 2005). To understand what kind of dimensions that enhances or decreases the incubators role as a host I will investigate the resources within the incubators. However, before looking at the resources the following research question needs to be investigated:

RQ1: What does the incubation process consist of?

Through this research question the purpose is to get an overview regarding the two incubators processes and activities. It is important to clarify if the incubators have the same resources through the incubation process. After the incubation process is established the aim is to further research the incubators resources and how they are leveraged before digging deeper into the incubation process. Many previous researchers have been looking at the resources the incubators deliver, but not how

they are provided. The final research question aims to investigate the function the two Norwegian incubators has as a resource provider.

RQ2: How are the resources in the incubation process provided?

The research question provides me with the opportunity to look at different dimensions of how the incubators provide their resources. Business incubation performance is positively correlated to the intensity of monitoring business assistance efforts according to Hackett & Dilts (2004b). They also state that business incubation performance is positively related to the way resources are delivered. In order to explain the resources they need to be defined. This thesis defines resources as an economic or productive factor that assists someone to accomplish an activity. The resource will be seen as a source that has the potential of be benefeital for the user. RBV (Resource based theory) is applied to explain how the business incubators resources enable the start-ups to access competitive advantage. The securing of survival and the encouragement of growth of the incubatees are the competitive advantage of a business incubator (Hackett & Dillts, 2004b).

With regard to the research questions there is important to have a clear understanding of what the incubation process consist of and the evolution of incubation. This will be presented as background material before the resources within the incubation process follows as the scope of the theoretical framework.

1.2 The structure of the thesis

As this thesis addresses incubators as a resource provider from an incubator perspective, the theory of incubation and what an incubator is will first be presented. Thereafter the objective of incubators is presented as this is highly related to what the incubation process consist of and how the incubators choose to position themselves. Furthermore, the incubation process will be presented shortly to clarify what previous literature state the incubation process consists of.

In order to get an overview towards what kind of resources the incubator provides success factors will be presented next. This will give the reader a more basic understanding of why the resources are provided within the incubator. The theoretical framework will follow next and contains the different aspects of the incubation model. The resources provided by the incubator will be the foundation of the theoretical framework and will be thoroughly explored through previous research.

Before the empirical findings are presented, the chosen methodology for this thesis will be presented with focus on why a qualitative approach has been used to explore this topic. Chapter 5 contains the empirical findings discovered through the interviews and background material. In the analysis in chapter 6 the empirical findings from chapter 5 will be analysed with the theoretical framework from chapter 3. The discussion will follow next and elaborate the different findings from the analysis. Finally the conclusion, implications for practice and background information for further research will be provided.

2. Background

This chapter will give the reader an introduction into what incubators are and how they have evolved. This gives an introduction to the resources the incubator provides. The chapter begins by addressing the term business incubator, the evolution of the concept, and new emergent types of incubators. Chapter 2.2 presents the incubators objective, chapter 2.3 the incubation process and chapter 2.4 the success factors of an incubator.

2.1 The term, concept and evolution of business incubators

2.1.1 The term business incubator

Business incubators are, as of today, marketed under a variety of more or less synonymous labels. These include 'Business Accelerators' (Cohen, 2013); 'Science Parks' (Martin, 1997); 'Knowledge Parks' (Bøllingtoft & Ulhøi, 2005); 'Seedbeds' (Felsenstein, 1994); 'Industrial Parks' (Autio & Klofsten, 1998); 'Innovation Centers' (Campbell, 1989); 'Technopoles' (Castells et al.1994); and 'Networked Incubators' (Bøllingtoft & Ulhøi, 2005; Hansen et al. 2000). Hence, the term 'business incubator' is in a generic sense often used to describe this wide range of organizations that in one way or another help entrepreneurs develop their ideas from concept through to commercialization and launching (Aernoudt, 2004). This is why Aernoudt (2004) and Bøllingtoft & Ulhøi (2005) describe it as an umbrella term. In order to embrace the different explanations of what a business incubator may be, I have made a definition that will be used to address this range of different incubation models. This definition is based on the description of Sherman & Chapell (1998), Hackett & Dillts (2004b), Bøllingtoft & Ulhøi (2005) and National Business Incubation Association (NBIA, 2015). My thesis focuses on the resources and how the management team provide them to their incubatees. Therefore the definitions need to be clarified and are described as the following:

The main objective of an incubator is to create companies that are self-standing, creating jobs, strengthen local and national economies. The incubator is a support system that provides its incubatees with resources that could potentially enhance their possibility of creating successful businesses. The coaches orchestrate these resources through providing sets of useful tools and to support them in exploiting these.

The objective and the resources provided are important factors, but more importantly is *how* these resources are provided. The coaches' role as an orchestrator plays a central part in this thesis. The evolution of incubators is presented next to give the reader a clear understanding of the topic incubator and how it has developed through time.

2.1.2 Evolution of incubator

The first business incubator was established in New York, USA in 1959 (Lewis, 2001) named "Batavia Industrial Center. The idea came after struggling with getting people to rent the location and the business owner rented it out to different businesses. Some of these businesses needed help regarding advice, assistance and capital (Adkins, 2001). By 1975 incubators were established in Great Britain when parts of the steel industry was shut down. The idea behind these incubators was to create a more diversified base within the regional economy. This is similar to the objectives the Norwegian government have trying to reduce the dependency on the oil. However, it became a tool for improving the regional competition and stimulated technology-based companies (Aernoudt, 2004). The concept became widespread in the 1980s and thereafter it spread to the rest of the world in a variety of forms such as business centers and innovation centers (Somsuk et al., 2014).

In 2012 Bruneel et al. presented the evolution through three generations based on the incubators' value propositions. Table 1 shows this evolution and includes a new generation of incubators who are emerging.

Generations of incubators	First Generation (1980s)	Second Generation (1990s)	Third Generation (2000 -)	New Generation (2010 -)
Offering	Office space and shared resources	Coaching and training support	Access to technological, professional and financial networks	Network, investments, mentors and coaching.
Theoretical rationale	Economies of Scale	Accelerating the learning curve	Access to external resources, knowledge and legitimacy	Accelerating the learning curve and focusing in scalable solutions.

Table 1 - The evolution of business incubation's value propositions (modified from Bruneel et al., 2012).

Incubators of the first generation focus mainly on offering their incubatees office space and a number of shared facilities (Bruneel et al., 2012). In the 1990s these resources were further expanded to include different consultancy services and

training, aimed to accelerate the learning curve of the incubatees. This is referred to as the second incubator generation. The third generation started in the late 1990s and concentrated mainly on promising start-ups working with software products (Aerts et al., 2007; Bruneel et al., 2012; Hackett & Dilts, 2004b). Aerts et al. (2007) states that incubators of the third generation often add legitimacy to their incubatees, through the success of former incubatees and the quality of the incubator itself.

The three generations of BIs classified by Bruneel et al. (2012), show how the third generation incubatees make use of the entire service portfolio. This is opposed to their counterparts housed in older generation BIs. First and second generation BIs incubatees are older when entering the BI, and typically stay longer in incubation. The third generation has a stronger focus on high-tech and the most promising new technology based firms (NTBFs). During the late 1990s both entrepreneurs and the business industry close to the internet revolution promoted a new breed of incubators focusing on web-based technologies and services that lead to reinforcement of profit oriented and virtual incubators (von Zedtwitz & Grimaldi, 2006). The specialization and development of markets combined with globalization has led to the development of new emerging types of incubators recognized by research. This will be presented next.

2.1.3 Emergent Types of incubators

Emerging types of business incubators have gained more attention among practitioners the last decade. There are mainly four types; networked incubators, virtual incubators, accelerators and clean tech incubators. The networked incubator is a new hybrid form based on territorial synergy, relational symbiosis, and economies of scope (Phan et al., 2005). The existence of network ties between individuals and organizations in the incubator suggests that the exchange of information and resources between firms in the incubator is influenced by social norms, social structure, and individual power.

The virtual model allows the incubatees to get coaching and advice without actually being located at the incubator (Carayannis & von Zedtwitz, 2005). The model suits those entrepreneurs who need the advice an incubator offers, but want to maintain in their own offices. A virtual incubator model has the purpose of facilitating small companies and start-up successes, and to take advantage of the evolution towards distributed human resources and a business landscape dominated by strategic partnerships (Nowak & Grantham, 2000).

Along with the increasing knowledge about high-tech based companies a new model of the incubator emerged which focused on the access to knowledge and intangible assets became increasingly important (Grimaldi & Grandi, 2005). This new type of incubator is usually called “accelerators”, as they have the ability and desire to speed up time to market through injections of capital and know-how (Grimaldi & Grandi, 2005). An accelerator provides a “sense of urgency” and helps the incubatees in return for equity in their business.

As describe above there are several types of incubators. What distinguishes them is what kind of goal and strategy the incubators have. This will be presented in the next sub-chapter.

2.2 Objectives of the business incubators

The research emphasizes the importance of having an objective that aligns with the development of incubators. Objectives are very important in incubator literature (Aaboen, 2009; Allen & McCluskey, 1990; Carayannis & von Zedtwitz, 2005), being the most widely used and sometimes the most important criteria to distinguish between archetypal business incubators (Aernoudt, 2004; Barbero et al. 2012). Bøllingtoft & Uihøi (2005) state that even among incubators of similar models, there are differences between their operations and goals.

The fact that incubators may have multiple goals complicates the picture. This is to a large extent due to the fact that incubators may have multiple stakeholders with different interests (Bergek & Norrman, 2008). Most of the research done on incubators up until the 1990s has examined them as if they had the same objectives, (Allen & McCluskey 1990). Several researchers underline the importance of having goals in order to maintain strategic objectives for the incubator in order to achieve success (Aernoudt, 2004; Carayannis & von Zedtwitz, 2005). According to Barbero et al. (2012), archetypal incubator success is the type that meets the objectives for which it was created.

Bergek & Norrman (2008) emphasize that failure to take goals into account is problematic in two ways: (1) It follows from the definition of performance that comparisons should, preferably, only be made between incubators that have the same goal(s). At the very least evaluators should weight outcome indicators differently for different classes of incubators depending on the objective they have (Bearsse, 1998; Bergek & Norrman, 2008). (2) Different goals correspond to different

outcome indicators. For example, if the goal is to create jobs, a suitable indicator might be the number of employees, whereas the growth in sales might be a better indicator for an incubator striving to commercialize research ideas.

As described, objectives need to be taken into consideration when evaluating incubators. This thesis explores the incubation process. The next sub-chapter will give an overview of the most common practices of the incubation process.

2.3 The business incubation process as viewed in previous research

Today business incubation is seen more as a process, than solely the provision of physical infrastructure (Schwartz & Hornyk, 2008). Business incubation is a unique and highly flexible combination of business development processes, infrastructure and people designed to nurture new and small businesses by supporting them through the early stages of development and change (ISBE, 2011).

Key components in the incubation process of the incubatees are presented by Hackett & Dilts (2004b) and Peters, Rice, & Sundararajan (2004) to be selection, infrastructure, business support/coaching, mediation/networking and graduation. Based on Hackett & Dilts (2004b) model of incubator-incubation concept and Smilor (1987) support system the following incubation concept has been developed. Figure 1 illustrates the incubation process modified from Hackett & Dilts (2004b) and Smilor (1987).

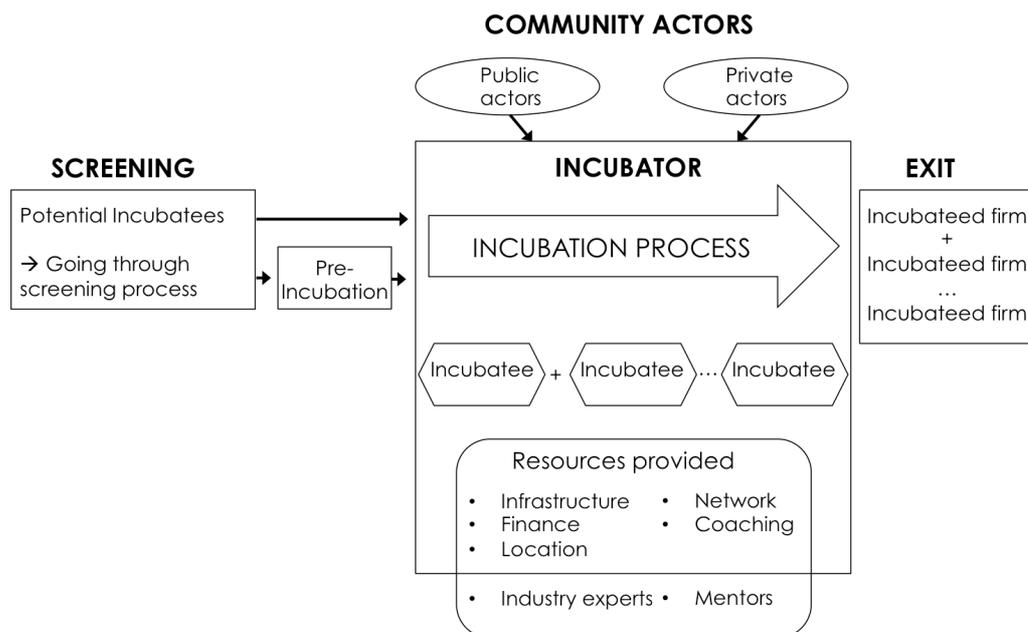


Figure 1 - Incubator-incubation process (modified from Hackett & Dilts, 2004b and Smilor, 1987).

Figure 1 shows the incubation process, actors and resources provided by the incubator. In their review on business processes and networks in university incubators, McAdam et al. (2006) conclude that very little research has dealt with the process in which incubators create value for their tenant firms. In fact, Mian (1997) claims that incubation often are considered to be like black boxes where the inputs and the outputs are measured with limited success to understand how the black box actually operates.

2.4 Success factors

Helping start-up firms is the *raison d'être* of business incubation. The incubation process and the resources provided are done for this purpose. Success factors relates to how the incubation process is set up - its' design - and what the incubator must do in order to accomplish successful incubation of its incubatees. This may include resources provided and incubator management strategies (Hackett & Dilts, 2004b). Some researchers have attempted to find success factors for business incubation. Table 2 shows the most influenced research done regarding success factors on the incubator level.

Author	Critical success factors
Campbell et al. (1985) Smilor (1987) Hackett & Dilts (2004b)	Access to finance, in-kind financial support, selection- and monitoring of incubatees, on-site business expertise and milestones with clear policies and procedures
Gibson and Wiggins (2003)	(1) Establish clear metrics for success, (2) provide entrepreneurial leadership, (3) develop and deliver value-added services to member companies, (4) develop a rational new-company selection process, and (5) ensure that member companies gain access to necessary human and financial resources.
Peters et al. (2004)	Presence or absence of coaching and access to networks.
Buyis & Mbevana (2007)	Access to science and technology expertise and facilities, availability of funding, quality of entrepreneurs, stakeholder support, supportive government policies, competent and motivated management, financial sustainability and networking.

Table 2 - Critical success factors on incubation level (modified from Somsuk & Laosirihongthong, 2014).

Hackett & Dilts (2004b) found that most incubators use a mix of factors, reflecting different perspectives. The mix of success factors is also something Campbell et al.

(1985), Smilor (1987), Gibson and Wiggins (2003) and Buys & Mbewana (2007) refers to. Peters et al. (2004) on the other hand argue that coaching is the most important success factor. He argues that a huge part of the value of the incubator is its role as an intermediary to a much larger set of networks. According to Somsuk & Laosirihongthong (2014) many studies have dealt with the determination of success factors. There are, however, limited studies to draw conclusions about which success factors should receive the most attention.

Lee & Osteryoung (2004) did a comparison of critical success factors for effective operations of university business incubators in the United States and Korea, to explore possible geographical differences. In their results it appears to be no significant difference between the two countries based on the critical success factors, apart from the goal/operations strategy where the US incubator managers perceive as more important.

Hackett & Dillts (2004b) proposes in their literature review that if the area of incubator-incubation research should advance beyond simple lists of critical success factors it has to focus on the process within the incubator. They emphasize that there should be a shift from “what” are the important factors to “how” and “why” and “in what context in future research. To fully understand the incubation process the specific resources provided must be further analysed. This will be the main area for the next topic - theoretical framework.

Through chapter two the reader has been given a clearer understanding of the incubation process and the success factors that several previous researchers have emphasized. The incubator has changed through time as Bruneel et al. (2012) described. The emergent types of creating incubators show how incubators vary both in objective and in way of managing. The way of managing relies on output and objective. The success factors emphasized by previous research all include management, but there are also other success factors in the incubation process as mentioned in chapter 2.4. The next chapter presents the theoretical framework which contains the different aspects of the incubation process (figure 1).

3. Theoretical framework

3.1 Introduction

This chapter will provide the theoretical foundation for investigating the research questions. As this thesis features incubators as a resource provider, the theory chapter will give an overview of previous research regarding the incubation process and the resources within. The screening process will be presented along with an introduction of graduation. Thereafter, the resources will be introduced. Infrastructure will be presented with focus on what kind of physical resources an incubator should provide. Furthermore, business assistance in regards to coaching will be reviewed. Finally, mediation focusing on access to network and financing will be presented.

There have been few publications regarding incubator models of how incubators provide their resources. The main components in the incubator model are indicated to be *selection, infrastructure, business support, mediation and graduation* (Bergek & Norrman, 2008). In short, selection contains decisions concerning which company to accept or reject. Infrastructure refers to physical resources such as office facilities. Business support refers to coaching activities in order to develop the incubatees. Mediation refers to how the incubator connects the incubatees to each other and to the outside world.

3.2 Screening process

Hackett and Dilts (2004b) state that most of the research concerning incubator models is related to the issue of incubatee selection. Efficient screening of potential incubatees is fundamental and critical to a successful incubator (Bergek & Norrman, 2008; Hackett & Dilts, 2004b; Peters et al., 2004; Scillitoe & Chakrabarti, 2009; Somsuk & Laosirihongthong, 2014).

Hackett & Dilts (2004b) introduced the term selection performance. Selection performance refers to the degree of which incubators behave as an “ideal type” venture capitalist when selecting incubatees. Early contributions to the topic of selection process are Smilor (1987) and Lumpkin & Ireland (1988). Through surveying US incubator managers, Lumpkin & Ireland (1988) found three groups of screening criteria:

- Experience of the managing team
- Financial strength and market

- Personal factors.

Through their analysis they concluded that there were a small group which had no screening and almost 50% did extensive screening on all three criteria's.

Becker and Gassmann (2006) emphasize that by using sophisticated selection criteria, such as pitches to a funding plenary or business plan competitions as well as an improved interaction through a structured incubation process, the quality of supported ventures will be increased. Merrifield (1987) state that no analytical scheme can guarantee 100% success, but careful incubatee selection can increase the probability of incubatee—and thus incubator—success. On the other hand, Aerts et al. (2007) found that European incubators do not screen their potential incubatees on a wide and diversified set of criteria, and claim that such balanced screening practices will lower the failure rate of incubatees.

One of the most thorough screening contributors is Bergek and Norrman (2008). They place selection as one of three differentiating components in their incubation model framework. They emphasized that selection is not only a matter of criteria, but also of flexibility or strictness in applying them. They divide the screening selection in two overall principles:

- *Selection focus on the idea*
- *Selection focus on the entrepreneur/team*

They further state that in order to approach the idea-focus the coach or incubator manager must have access to deep technological knowledge within the fields. This is in order to evaluate the idea, the market and the profit potential. The other approach requires an ability to judge personalities and knowledge of more general business development requirements in relation to experience, skills, characteristics and entrepreneurial flair. Many entrepreneurs, who do not initially have a great idea manage to develop it or change it into a better idea during the process (Aaboen, 2009: p. 661).

Furthermore, they distinguish between two approaches: (1) “picking-the-winners” and (2) “survival-of-the-fittest”, respectively. “Picking-the-winners” approach is when the incubator management acts as private venture capital firms (Hackett & Dilts 2004b). The “survival-of-the-fittest” approach differs by accepting a larger number of incubatees into the incubator, but focus on the ones that have the highest potential of succeeding. This approach relies on the market to provide the selection process for

them. Bergek & Normann (2008) combine these four approaches in their matrix, and presents thus four different selection strategies which results in different incubator portfolios of incubatees (fig 2).

Selection strategies	Survival of the fittest	Picking the winners
Idea focused selection		
Entrepreneur-focused selection		

Figure 2 - Selection strategies (Bergek & Normann, 2008).

- Survival-of-the-fittest & idea. The portfolio will presumably consist of a quite large number of idea owners (or upcoming entrepreneurs) with immature ideas related to a broad spectrum of fields.
- Survival-of-the-fittest & entrepreneur. The resulting portfolio will be diversified, and consist of entrepreneurs/teams with strong driving forces representing a broad set of ventures.
- Picking-the-winners & idea. Results in a highly niched portfolio of thoroughly screened ideas within a quite narrow technological area – often sprung from the research of highly ranked universities.
- Picking-the-winners & entrepreneur. The portfolio consists of a few handpicked and carefully evaluated entrepreneurs, commonly with ideas coupled to the research areas of a nearby university.

Kuratko and LaFollette (1987) concluded that variability in the tenant screening and selection process may lead to the selection of incubatees that are too strong or too weak to be hatched in an incubator, which in turn may lead to incubatee or even incubator failure. Somsuk & Laosirihongthong (2014) state that the first step in an effective selection process is to establish clear admissions criteria. These criteria could include assessment of potential incubatees and assessment of the fit between the potential incubatee and its incubator (Smilor, 1987; Somsuk & Laosirihongthong, 2014). How these admission criteria's should be established and what they should

maintain is, however, highly debated. This could indicate that there are no common agreements of how a screening process should be done for incubators.

3.3 Exit policies

The exit policies mark the end of the incubation process. These two managerial features have been considered to be among one of the business incubators' most important management features (Aerts et al., 2007; Bruneel et al., 2010; Lee & Osteryoung, 2004; Lumpkin & Ireland, 1988). Peters et al. (2004) propose that when the objectives of the incubator match those of the incubatees, there will be a higher number of graduates.

Large-scale studies report a formal graduation time typically after three years stay in the business incubator (EC, 2002; Bruneel et al., 2010). Others report income level, performance indicators agreed between the incubatee and BI (Peters et al., 2004) or specific deadlines (Allen and McCluskey, 1990; Peters et al., 2004) set by the BI as operational exit policies. BIs often incrementally increase rental rates to induce tenant graduation (Allen and McCluskey, 1990; Peters et al., 2004). Peters et al. (2004) found in their interviews that some incubators increase the rent as an incentive for non-performing start-ups to leave the incubator.

Bruneel et al. (2012) performed a multiple case study on seven incubators across the three business incubator generations, and found that none of the incubators had clearly specified exit policies. The strictest criteria for exit found was a statement that all incubatees should leave after a maximum of 36 months within the incubator. Bruneel et al. (2012) propose that timely incubatee graduation is an important part of business incubators, and that they should enforce graduation within a 3-year period.

Exit policies is an important factor in the incubation process as it involves the closing stage. However, it is more difficult to examine graduation than the rest of the incubation process. Few studies have made a thorough research in this area. The next sub-chapter will present the resources within the incubation process.

3.4 Providing resources

A central purpose of the incubator is to provide resources in those areas where entrepreneurs have gaps. If the incubator cannot provide the missing resources directly, then it must connect the entrepreneurs through its external network to those connections that can provide the missing resources (Rice & Matthews 1995).

Allen & McCluskey (1990) emphasize that different resources, needs, constraints, and opportunities are likely to affect incubator missions, policy, services, and performance. While most incubators have certain common services and activities they also offer distinct services that reflect their own customer-base as well as the specific resources available within their communities. These differences give rise to different incubating models (Grimaldi & Grandi, 2005).

A concern regarding RBV is focusing on the ability of the firm to maintain a combination of resources that cannot be possessed or built up in a similar manner by competitors. Furthermore RBV helps understanding that the sustainability strength of competitive advantage depends on the ability of competitors to use identical or similar resources that make the same implications on a firm's performance. Therefore, the securing of survival and the encouragement of growth of the incubatees are competitive advantages of a business incubator (Hackett & Dillts, 2004b).

In this context, RBV theory can be applied as a means of explaining how the business incubators resources and capabilities enable start-ups to gain competitive advantage and superior performance, and to explain what resource-based factors influence the success of business incubators. These resources will be introduced next.

3.5 Infrastructure

According to Bergek & Norrman (2008) infrastructure consists of localities, office facilities and "administrative services. Based on previous publications (Bollingtoft and Ulhoi, 2005; Chan and Lau, 2005; Colombo and Delmastro, 2002; Lalkalka, 2003; Lyons and Li, 2003; Mian, 1996a; Rice, 2002) most incubators seem to supply much of the same set of general administrative services. According to Allen & McCluskey (1990), infrastructure is the basic function common to all kinds of business incubators and the core of their value proposition. Provision of space is critical to business incubation and has been identified by tenants as the most beneficial feature of BIs (Chan & Lau, 2005).

Shared tangible resources such as reception, clerical services, meeting rooms, conference rooms or car parking often complement office space (McAdam & McAdam, 2008). More specialized tangible resources such as laboratories and

research equipment may also be regarded as part of an infrastructure proposition according to Grimaldi & Grandi (2005). For many smaller technology incubators, access to laboratories and testing facilities is provided through partnerships/referrals with universities, technology transfer agencies, or the leasing of equipment (McAdam & McAdam, 2008)

In their study of the evolution of business incubators, Bruneel et al. (2012) found no significant differences regarding infrastructure across generations of business incubators. Bergek & Norrman (2008) do not include this as a distinguishing resource for incubators in their incubation model framework, as their findings also points to that these resources do not differ significantly across incubators. Both Nolan (2003) and von Zedwitz (2003) argue that co-location is not a necessity feature for an incubator. However, Lewis (2001) disagrees with this and argues that it provides the opportunity to share resources, knowledge transfer and experience between startups. Lyons (2000) claims that incubatees that are physically located under the same roof makes collaboration among tenants much more likely. Löfsten and Lindelöf (2001) found that incubatees located in science parks are more likely to have links with local universities and to develop some kind of organizational relationship with each other because of geographical proximity.

Based on multiple case-study research Chan & Lau (2005) found that incubatees should be clustered in the same sector for sharing of knowledge within the incubator to take place. This is contrary to Schwartz and Hornych (2010), which could not find support for that specialized incubation strategies increased the effectiveness of internal networking compared to more diversified business incubators.

3.6 Business support - Coaching

Coaching refers to one-to-one support initiatives geared to accelerate incubatees learning and skill development processes. This generally depend on the incubatee firms being assigned coaches or mentors, either for a fee or free of charge (Barrow, 2001). Audet and Couteret (2012) argue that coaching is encouraging entrepreneurs to put their own strategic vision into action. The entrepreneur is invited to think differently rather than simply absorb advice on the basis of past cognitive schemes.

Gibbs (2002) states that coaching unquestionably has a role to play in the start-up process. He claims that isolated entrepreneurs risk lacking the tools and support (advice, practical aids) needed to build a successful business. However, incubators

need experienced entrepreneurial coaches in order to help incubatee firms in a direction that links them to investors, industries and motivating them to reach their goals (Lee & Osteryoung, 2004). The success of incubatees is not only dependent on the nature of these services, but also on how they are supplied (Bhabra-Remedios and Cornelius (2003). Audet and Couteret (2012) argue that the success of a coaching relationship appears to be explained by a set of factors or “winning conditions”, especially the entrepreneur’s open attitude to changes. Rice & Matthews (1995) believes that all incubators must offer a "standard package" for entrepreneurial education, organized as on-going activities and programs entrepreneur can participate in. These must be structured and not too long, but often in the format of short courses like half-day seminars and lunch meetings.

Scillitoe and Chakrabarti (2010) state that coaching interactions between the incubated company and BI management increases tenants’ understanding of business concept such as market and buyer preferences. Rice & Matthews (1995) argue that the aim must be to gradually transfer responsibility to the incubatee key personnel. They explain that this is a major challenge in many incubators because many entrepreneurs tend to seek counsellor only in "emergency situations", and this will entail a proactive and continuous approach from the counsellor’s side to take action before crisis situation is a fact. Such an approach is demanding but necessary. In order to give hands-on coaching Wiggins & Gibson (2003) argue that optimizing a management milestone plan for their tenants is a tool to make sure the incubatees are a good fit for the incubator is crucial. This could be a tool to help the coaches handle what Rice & Matthews (1995) state is their biggest challenge; to make time and focus on the intensity of the start-ups. They emphasizes that caring coaches keep on pushing the incubatees, which may be crucial for their performance. Furthermore, they underline that it’s not enough to give advice "on demand", but follow-up of the individual incubatee must be tailored to the entrepreneur’s strengths and weaknesses in relation to the phase of development it is in.

According to Somsuk & Laosirihongthong (2014) cooperation can only be fully implemented in an environment where both the incubatee and the incubator management are comfortable and have mutual trust. Especially for incubatees that have a high-tech technology background there has to be a transfer of knowledge and communication if the incubator shall be able to assist the incubatee.

Rice (2002) discovered that the relationship between business incubator management and the program of support for its clients is interdependent. He addresses several areas of the incubator as for example client interaction, and proposes factors that affect the variability of the impact. In the eight incubators Rice studied (2002), he found that the gap between the knowledge, competencies, and resources of the incubator managers and their clients generally is substantial. Hence, there is significant potential for driving the flow of knowledge from the incubator manager to the entrepreneur (Lewis et al. 2011).

As shown in table 3 Rice (2002) has three different approaches to counselling.

1. Reactive and episodic	In this mode, the entrepreneur requests help dealing with a crisis or problem. This is similar to the kind of counselling that is received through other business assistance programs. The entrepreneur initiates the counselling effort. The business assistance is focused on a particular issue and is generally of limited duration.
2. Proactive and episodic	Because of co-location, the incubator manager can be proactive in engaging entrepreneurs in counselling on an episodic basis described by an incubator leader as "counselling by walking around" - an informal physical presence and ad hoc characterized counselling.
3. Continual and proactive	This implies sustained and intensive monitoring by the manager of the incubator. He will be focusing on the developmental needs of the incubatee. The incubator manager acts as he was the incubator company business partner. The counselling efforts are focused on the on-going developmental needs of the entrepreneur and the incubator company (Rice, 1992a,b).

Table 3 – Approaches to coaching (Rice, 2002).

Bergek & Norrman (2008) have a similar approach where they differ between the extremes called *strong intervention* and *laissez-faire*. The *laissez-faire* refers to the incubators who leaves the incubatees to themselves and gain very little assistance unless they ask for it. Strong intervention is on the other side of the extreme and the coaches are guiding the incubatees through their processes and sometimes even supplied with management teams.

Rice (2000) focuses on the mutual cooperation relations that take place between the incubatee and incubator manager and seek to find a deeper understanding of what this partnership means and calls on both parties as well as the impact it has on the development of the enterprise. Rice (2002) argue that a startup company potential is fairly easy to map before being accepted in an incubator, but that knowledge transfer often remains inadequate through the incubation process because the incubator managers lacks the capacity to do the job. This capacity is limited to the incubator

managers' tasks. Furthermore, he states that the balance between the time spent on co-activities leads to a reduced support of the incubatees. The study by Rice (2002) reveals that the incubators who achieved the best results, had an organizational structure that relieved incubator manager for co-activities.

Incubators need experienced entrepreneurial coaches in order to lead the incubatee firms in a direction that links them to investors and industries, and motivating them to reach their goals (Lee & Osteryoung, 2004). Managers can play an important role in nurturing incubatee firms to success, and in effectively managing the business incubators. The incubator is connected to network through its coaches, cooperation partners and the incubatees. In the next sub-chapter the incubators role as a mediator for the incubatees regarding access to network and financing will be presented.

3.7 Mediation

An important role of the incubator is to act as an intermediary or a mediator between incubatees and relevant innovation systems (Peters et al., 2004). Mediation is in Bergek & Norrman's (2008) model one of the three characteristics that differentiates incubators. They describe mediation as how incubators are connecting incubatees to the outside world and each other.

3.7.1 Access to network

Business incubator internal network includes both networking between the incubatees (Bøllingtoft & Uihøi, 2005; Bøllingtoft, 2012), and incubatee networking with the incubator management (Ahmad, 2014; McAdam & McAdam, 2006; Peters et al., 2004; Rice, 2002; Scillitoe & Chakrabarti, 2010; Somsuk & Laosirihongthong, 2014). Lyons (2000) argues that internal and external networks are equally important for the incubatee as both enhance the opportunity to gain access to business networks. The external networks are, however, considered crucial to the companies as they could be a potential link for the incubatees with partners and customers.

Lyons (2000) found that most networks seem to be informal as opposed to contractual relationships. Birley (2000) also found that formal sources were hardly used at all. Thus the entrepreneurial actors were mainly relying on networks of informal contacts to help build their companies. Birly (2000) stated that informal networks aren't as easily arranged as formal networks by coaches. However,

coaches can rather attempt to facilitate and accelerate the formation of informal networks by bringing the incubatees together.

Papers discussing networking activities among tenants include Bøllingtoft & Ulhøi (2005) and Bøllingtoft (2012). Incubatees are supposed to borrow and exchange competencies from each other and cooperate in a kind of symbiotic relationship, based on the complementarity of intangible resources available in the incubator (Bøllingtoft & Ulhøi, 2005).

Thus, developing and managing a networking infrastructure is a critical function of the incubator. Since the entrepreneurs lack credibility and a history of operations, the incubator allows them to overcome this liability by providing a networking infrastructure. Networking can be seen as a function of overcoming credibility problems and filling resource- and knowledge gaps according to Birley (1985) and Dubini and Aldrich (1999).

Hackett and Dilts (2004b) claims that the incubation process transcends the incubator. Somsuk & Laosirihongthong (2014) argue that firms can overcome their resource constraints through networking, and thereby accelerate firm growth. Löfsten (2010) states that from a firm perspective, the incubator provides an opportunity to gain access together with the creation of business links (both internal and external) that are important for the firm's daily business activities, and its performance. Chan & Lau (2005) is the only contributor within the field that found no impact for technology-based incubatees when it comes to networking. They only found that sharing technological resources had an impact if the incubator specialises in the field of technology.

External network include proximity to university or other R&D relations, capital and potential customers (Löfsten, 2010). In some cases start-up firms are not able to get access to the information or the network they are looking for. This is so-called information asymmetry, which refers to situations where there is a gap in information possessed by either the demand or the supply side (Phan et al, 2005).

3.7.2 Financing

The incubator may regulate the contact with venture capitalists. This regulation can be made either by inviting the venture capitalists to the incubator or being the intermediary for contacts and preparing the NTBFs for the meeting. It varies among

the incubators as to how they developed their network of business angels and venture capitalists are (Aaboen, Löfsten, & Bengtsson, 2011). According to Aaboen, Lindelof, & Lofsten (2008b), finding an investor also means the potential of additional contacts to key customers, additional investors and increased credibility and legitimacy for the newly started firm (Carayannis & von Zedtwitz, 2005; Löfsten, 2010; Markman et al. 2005).

Many entrepreneurs are unaware of potential investors, and investors with available capital may be unaware of existing ventures that fit their investment profile (Zahra et al. 2008). The problem of obtaining finance is normally one of the major difficulties faced by incubatees, and financial resources are crucial for incubatees at an early stage in order to grow and begin the commercialization phase. Aernoudt (2004) points at seed financing, links with business angels and business angel networks, as well as involvement in second round financing and IPO assistance should be part of, or integrated into, the real business incubation concept. According to Carpenter & Petersen (2002) firms' growth rate is depending on the financial capital of the firm. Young firms that are able to use external financing grow significantly faster.

The lack of financial capital, experienced management teams, and capabilities hinders start-up companies' development and subsequent growth. Research shows that these firms can overcome their resource constraints through networking, and thereby accelerate firm growth (Zhao and Aram, 1995). Aerts et al. (2007) observed in their investigation of the critical role of business incubators in Europe, that merely a minority of the incubators investigated invests in their tenants themselves.

3.8 Summary framework

Through the theoretical framework the incubation process has been presented with screening and exit policies followed by the different resources provided. The screening process was described as vague and poorly defined in most cases. Bergek & Norrmanns (2008) framework for classifying incubators screening strategy was presented and will be the basis for the theoretical screening framework in the analysis (chapter 6). The theory of exit policies was summarized and previous researchers argue that there is no clear consensus on what kind of exit policies an incubator should have.

The main categories of resources within the incubation process were explained. The physical resources of the infrastructure were described as a common service

(Bollingtoft and Ulhøi, 2005; Chan and Lau, 2005; Colombo and Delmastro, 2002; Lalkalka, 2003; Lyons and Li, 2003; Mian, 1996a; Rice, 2002). They see the physical resources as a “standard package” and claim that almost every incubator supplies the same set of general administrative services. However, Lewis (2001) argues that co-location provide the opportunity to share resources, knowledge transfer and experience between startups. The effect of co-location will be further evaluated in the analysis.

The second resource presented was coaching. Coaching has gotten more popular the last decade, but there is still no common agreement of what the role of coaching should be within the incubator. The frameworks of Rice (1995) and Bergek & Norrman (2008) were presented in order to show the difference of coaching and their influence on the incubatees. These frameworks will be analysed to evaluate the empirical findings in the analysis chapter 6.

Lastly, mediation was described as a critical asset for the incubatees to gain access to internal network and the innovation society outside of the incubator. Chan and Lau (2005) only found sharing technological resources as having an impact if the incubator specialises in a technology field, but other researchers have found access to network as an essential part of the incubation process. Mediation is a critical resource in order for incubatees to grow (Zhao and Aram, 1995) and the firms growth rate is dependent on access to both network and funding (Carpenter & Petersen (2002).

The theoretical framework and the empirical findings (chapter 5) will be used to answer the research questions in the analysis (chapter 6). Before the empirical findings are presented the chosen method for this thesis will be presented.

4. Method for exploring the incubators

In this chapter the research for the thesis will be presented. First, I will describe why explorative case study was chosen and why a comparative study was used as research design. Second, the data collection will be presented answering how the data got collected and why the data is relevant for this thesis. The data analysis will be described focusing on what I did during the analysis period. Lastly, I will evaluate and reflect on the process. The validity, reliability and trustworthiness will be the main topic of my reflections.

4.1 Research Design

The purpose of this thesis is to explore the incubation process and how incubators provide their resources. Qualitative research suits this purpose by having open-ended data possibilities. I wanted to explore the incubation process and selected the resources within as the main topic. The first research question asked what the incubation process consists of. I wanted to see if the mechanisms in within the incubation process were the same for the incubators. In order to answer this question I needed to answer research question two *how* are resources in the incubation process provided. To investigate the incubators resources a comparative case study was chosen. Because the field of study is fairly new, and especially how the resources are delivered, a case study seemed beneficial. Also, the resources are difficult to estimate precise and measure which made a quantitative approach less attractive. Qualitative data is also more suitable because it can be flexible and explorative. It may detect details and mechanisms that are easily overlooked in quantitative data (Graebner et al., 2012). Therefore a qualitative method was chosen to answer the research questions and fulfill the purpose.

The choice of a comparative case study was made in the hope of finding mechanisms that can explain how the incubators deliver their resources. Comparative case studies involve the analysis and synthesis of similarities, differences and patterns across two or more cases that share a common focus or goal (Yin, 2009). The research questions focus on the incubators way of working and the qualitative data has allowed me to potentially capture the individual's own subjective experience and interpretations. The potential similarities and differences seemed suitable for a comparative case study. Case studies are also preferred in

cases where researchers have no control over events and where there are contemporary phenomena to be examined (Graebner et al., 2012).

4.2 Data collection

4.2.1 Planning data collection

In cooperation with representatives from SIVA there were four incubators that were found most relevant: StartupLab, Ipark Stavanger, Campus Kjeller and LEN in Trondheim due to their high performance level as a Norwegian incubator. It was found most relevant to interview StartupLab and LEN due to the time frame of this thesis. Both incubators had many incubatees working with technology and the number of coaches was the same. Both of the incubator managers serve as one of the main coaches.

To gain rich and valid information the interview guide in appendix 1 was revised after conducting pilot interviews. The research questions have also been revised a couple of times after having received input from the expert interview and my supervisor. After evaluating the research questions more thoroughly, pilot interviews were conducted and the research question posed were moderated to a certain extent by focusing on the resources instead of attempting to find best practice. The questions around resources were modified to focus more on their output level. This was done in order to make the data more reliable.

It was important to capture the incubatee's perception and get insight into what they regarded as relevant. It was also necessary to cover categories that could be of specific interest to this thesis. The research method selected for data collection was therefore semi-structured interviews. The semi-structured interviews gave the respondents room to elaborate on and emphasize their topics of special interest. However, because semi structured interviews offer flexibility I needed to prepare questions carefully in order to direct the respondent into the incubation topic. An issue to be aware of is the potential information bias of the qualitative research and the way I conducted the interview. Researchers may need to be conscious of introducing their own bias by imposing their interpretation onto the informant's word (Graebner et al., 2012 P: 281). This will be further elaborated in sub chapter 4.4.

4.2.2 Executing data collection

The respondents were encouraged to talk freely about themselves, the incubator and the resources provided. An advantage by using qualitative data is for investigating process phenomena's that enables researchers to unfold situations and causal mechanisms in a detailed and sophisticated way (Graebner et al., 2012). The questions were tried formulated in an open way and supplementary questions were added to round up the interview. Interviews offer flexibility to pursue interesting points (Yin, 2009). The interview guide (see appendix A2) was meant to provide a framework for the interview. The questions did not necessarily have to follow the outlined schedule, and it was allowed to ask additional questions to follow up on interesting points. The same interview guide was used for all the firms because this would make it easier to compare the findings when analyzing the results. The coaches had a similar interview guide, but more focus on managing the resources and how they got delivered (see appendix A3).

Secondary data consisting of information from the firms- and the incubators website was collected to learn as much as possible about the firms in order to prepare for the interviews. From my experience founders are eager to talk about their idea and explain what the value of it. Many of the incubatees had very technical ideas and I wanted to understand the idea before the interview to achieve common base with the respondent and free time to focus on the incubation process. This would make it easier to understand the context of their replies and help reveal other aspects that could be further probed during the interviews.

As presented below there has been conducted a total of nine interviews. Six of the interviewees were with the CEO of each incubatee, two coaches and one expert interview. The expert interview was done in order to test out questions and get background information regarding the topic. Four of the interviews were conducted on StartupLab in Oslo and four were done on LEN in Trondheim. Letters have been labeled the firms in order to preserve anonymity.

Case 1 – LEN

Firms	Focus Area	Technology
A	Retail - B2B- sustainable solutions	Software and product development
B	Stock-Market - B2C and B2B	Software
C	Gamification - B2C	Software
Coach A	Business development	Broad

Table 4 - Information of field, focus and technology of case 1.

Case 2 – StartupLab

Firms	Focus Area	Technology
D	Retail - Data Analysis - B2B	Software
E	IoT - B2B and B2C	Hardware & Software
F	Video Communication - B2B	Hardware & Software
Coach B	Business development	Software

Table 5 - Information of field, focus and technology of case 2.

The firm's all origin from Norway and involve some kind of technology solutions. However, all the incubatees interviewed approach different markets and is are not direct competitors. The companies were established between 2009 and 2013 making them fairly young, but not starting level. Three of the companies had been sitting in co-working spaces before. The companies have been part of the incubator between nine months and 1,5 years and had the opportunity to use all of the incubators infrastructure and resources available. All of six interview objects are co-founders in their company. They have always been part of their companies and been involved in most of the activities that have led to what the companies have become today. They have communicated and worked with the coaches in the incubator and used the resources they believe their companies are in need of in the incubator.

The criteria's for selecting the firms-interviewees is presented below.

- Been in the incubator for at least 9 months
- Technology component in them
- Norwegian companies

The technology component was a criterion because I wanted to interview incubatees that had somewhat the same challenges toward making a product. It could be either software or a hardware component, but by having a technology the interviewees could have some of the same attributes. Below is a list of the time spent on each interview.

Interview object	Role	Interview length
LEN	Manager	1:07:28
Firm A	CEO	53:04
Firm B	CEO	52:35
Firm C	CEO	1:02:16
StartupLab	Manager	1:03:17
Firm D	CEO	57:03
Firm E	CEO	1:03:12
Firm F	CEO	48:19

Table 6 - Key informants from the case study

The managers were interviewed because they are both one of the main coaches. The manager from LEN is one of three coaches that works closest with the incubatees while the manager from StartupLab is the contact coach for eight of the 65 incubatees. During the beginning of the interviews, the interviewees were explained the purpose of the interview as to explore more about the incubation process and how they worked in the incubator. This was in order to establish the motivation for the interviews and the interviewees' trust in the motives (Kvale, 1996). All of the interviews were conducted face to face except for one, which was done through Skype due to the fact that the interviewee did not show up to either of the two appointed interviews. The interviews were conducted in Norwegian and then transcribed in Norwegian before translated to English.

4.3 Data Analysis

The data was transcribed in several steps. First, I transcribed the interviews directly to Norwegian. It was easier to transcribe in the same language as the interviewees spoke. It resulted in roughly 80 transcribed pages. I started analysing the data of one firm at the time and divided the incubation process for each interviewee into:

- Background for choosing incubator
- Selection process
- Infrastructure
- Coaching
- Access to network
- Financing

By analyzing the different interviews one by one I got a clearer overview. Three of the incubatees got follow up questions through email to clarify their statement. Two

of them were from LEN and both follow-ups were regarding statements among synergies with other incubatees. The one from StartupLab got questions regarding the funding situation. Categorizing the data of each incubator together to make the case-descriptions complete was the next step before translating to English. After the empirical data was collected they were analyzed against the theoretical framework. In this process Begek & Norrmans (2008) framework was mainly used to categorize the screening process of the incubators. The framework helped evaluate the different aspect of how their screening was done. Because StartupLab uses continuous coaching as their screening method some of Hackett & Dillts (2004b) viewpoint on screening as a venture capitalist was added to provide a clearer part of the analysis. With regard to the infrastructure several contributors have emphasized that infrastructure doesn't differ among incubators. This is not supported by my thesis. Only Chan & Lau (2005), Lyon (2000), Lewis (2001) and Bergek & Norrman agree that synergies among incubatees physically located under the same roof make collaboration easier. Within the coaching as a resource Rice (2002) and Rice (1995) have made a huge influence structuring coaching in the three states described. These states have been found to be suitable for the case-descriptions. One of the incubators uses what Rice (2002) describes as a reactive approach in order to free time for other co-activities such as consultancy work and managing their investment portfolio. The other incubator uses a continual and proactive approach to counseling the incubatees. This distinction is important to bear in mind because the incubation process becomes different for the incubatees because the coaching has been found to reflect the influence how the incubatees are cooperating.

4.4 Reflection of method, limitation and critique

The chosen method could be questioned. To explore the resources within the incubation process a longitudinal perspective could be beneficial. Considering the limited time frame of the thesis such a study would to comprehensive. The theoretical framework limited the scope of this thesis has probably led to some perspective falling out of the analysis. On the other hand, using a rigorous framework strengthens the validity of this thesis (Yin, 2009). Conducting a rigorous framework also decreases the general criticism of the method case study (Yin, 2009). The data collection has been systematically collected which strengthen the reliability of this thesis (Yin, 2009). On the other hand, as mentioned in the data collection 4.2 I prepared questions in order to lead the respondent into the incubation topic. One of the main challenges for case study researchers are to develop a well-considered set of actions, rather than using "subjective" judgments (Yin, 1994, p. 41). Even though I

tried to prevent bringing up my own judgments it may be subjective judgment that could have affected the analysis.

Another point to question is that one author has written this thesis. Teamwork enables constant critical feedback from other researchers (Ritchie et al.,). I have been aware of this through the process, but it could question the validity of this thesis. On the other side, writing alone has given me freedom and complete control of content and process. This has given me the opportunity to pursue my startup in addition to writing my thesis. I knew LEN and StartupLab by reputation and had met one of the interview objects before through innovation activities in Trondheim. In order to select the incubatees in the incubator the interview with the coaches were done first. At the end of the interview they were asked which of the incubatees that could fit the criteria mentioned above. Based on the answers I obtained a list of 10 incubatees at StartupLab and six incubatees from LEN. By randomly selecting three from each incubator the list could be a "flaw of this study".

The fact that I am pursuing a master's degree in Entrepreneurship and also commercializing a project could impact the interpretation and analysis work. This could in worst-case cause unwanted bias that destroys the validity of the study. An important part of studies when researchers possess the knowledge and opinions on the topic is thinking about how prejudice and considerations can affect any part of the method worked (Graebner et al. 2012). The need of questioning done in order to create no promotion of my own view is critical. However, the fact that I am working with commercializing a project could also be a positive aspect regarding the interview guide and what questions to ask the respondents in a semi-structured interview setting.

Trustworthiness includes credibility and credibility involves one's findings and interpretations from the sources the data was drawn (Guba & Lincoln, 1986). There is credibility in the findings because the respondents were interviewed in their own environment and the interview questions were thoroughly designed to make sure I received the whole picture of the respondent's story. That does not mean that the analysis is done without the influence of prejudice, because in practice it is impossible in qualitative interviews to have complete objectivity (Yin, 2009). However, one of the respondents (firm A) was interviewed through Skype, which could question the credibility of this interview. I was careful not to lead the

interviewees into my own conclusions and I was attempting to share as little of my knowledge as possible (Miles and Huberman, 1984).

The incubators have been found to have some of the same objectives, but also different objective especially due to the co-activities of one of the incubators. These different objectives complicate the picture. Future research should evaluate incubators that are having the same objective and structure in order for comparisons to be stated.

5. Results

In this section, the results from the data collected are presented. The empirical data focus on the incubation process and the resources provided within in each incubator. The findings from the three firms and the incubator manager are presented together representing one incubator. First, the reason behind the establishment of the incubator and the background for picking the incubator are introduced. Then the findings of the incubation process with evaluating the screening follow. The resources provided are described next and summarized under the resource topics infrastructure, coaching and access to network. Lastly, the results within each incubator are summarized and a model of the incubation process is presented. Furthermore, the findings will further be discussed in the next section, which deal with the analysis of the incubators resources according to previous research.

5.1 LEN

The firms are categorized as A, B, C and the incubator manager is referred to as Coach A representing the incubator LEN.

Incubator	LEN
Coaches	8
Incubatees	15
Owned by	22 different companies primarily from the Trondheim region (both private and public companies including SIVA).
Coaches as investors	0
Industry focus	Mostly software in Health, ICT, Oil, Gas, Subsea
Located	Trondheim

Table 7 - Contextual factors LEN

Leiv Eiriksson Innovation (LEN) is the oldest innovation company in Trondheim, and offers incubatees business consulting, incubator space and venture capital. The incubator was established in 1994 and has rated around 1400 ideas. They have invested in 70 of the companies, are shareholder in 30 of them and invested around 125 million NOK. The company currently has 10 employees whereas 8 of them can be described as having a coaching role. The incubator is located on Pirsenteret by Bratørkaia in Trondheim.

Coach A explains that the incubator was established with a focus on academia, but after a while the Universities established TTOs (Technology Transfer Offices) in order to benefit from their own innovations. The focus shifted towards a wider

perspective. Oil, Gas and Subsea became their core industries, but during the last decade technology products within other industries have also been a focus area. Coach A emphasizes the shift towards a wider portfolio as positive measures because it generates almost as many new growth firms from existing industries than from academia.

LEN has a slightly different model than many other incubators due to their co-activates of consulting and investments outside the incubator. According to Coach A LEN is an innovation company and elaborates "...the incubator is just part of what we're doing. It must be emphasized that this is a very important part, but the reason why we have been successful for many years is that we operate in different business systems that generate synergies". These different business systems are managing external investments, consulting services within different fields and legal issues (see 11). The co- activities are decreasing the focus on coaching according to firm A, B and C.

5.1.1 Background

Firm/Coach	When did you arrive	Why did you pick this incubator?
A	August 2014	Wanted coaching and support. Especially the expertise within B2B sales.
B	September 2014	Network and coaching. Advised by their network at NTNU.
C	September 2013	Coaching, office space and lack of other options in the area.
Coach A		Wanted to work with entrepreneurs, but didn't want to take the risk of not having income.

Table 8 - Background for choosing the incubator LEN

The reasons for choosing the incubator is primarily the office space, the coaching and network the provided by the incubator. The firms also emphasize that the incubator is the only acceptable offer in the city. The firms wanted to stay in Trondheim because of the technical competence at NTNU (firm A and B) and private obligations (firm C). The firms knew the importance of having an environment that could optimize the possibilities of success. To gain access to resources and coaches who had expertise in various fields was crucial for firm A and B. Firm A further explained "...We developed concept and momentum in Digs (a co-working space), but we were looking for customers and LEN had the best reputation and network in the city. It was the right place to go in order to grow as a company."

5.1.2 Screening

The screening process of LEN is described below.

Firm	1st meeting	2nd meeting
A	Team, business idea	Team, business model, future goal
B	Team, business idea, goal	Team, business model, future goal
C	None	None
Coach A	Team (synergies), Entrepreneurial mindset, Uniqueness (business idea)	Team, business model, Entrepreneurial mindset, Strategy

Table 9 – Screening factors LEN

The screening process is somewhat similar according to firm A, B and Coach A. It consisted of establishing contact and two separate meetings. Firm C differs from the other because they had no screening process since fact that they participated in workshops organized by LEN earlier. LEN got to know them and they were accepted them without having meetings. Coach A emphasizes the importance of being active in the innovation environment in the region to get an overview of the different companies. In addition to evaluating applicants, they search the region for potential incubatees. By being active in the innovation activities within the region coach A believes they can attract potential incubatees with great talents.

The incubator has changed their screening during the years and coach A explains "...We have created a pre-incubator consisting of companies that may have great potential, but which have not yet the funding to be part of the incubator. Therefore, we have a very open and free solution. They get to know us to find out if an incubator is something that might be suitable for them. At the same time we are helping them to apply for establishment fund from IN (Innovation Norway) or other funding possibilities". He states that the screening process is about getting to know the entrepreneur and the team. The main characteristics they look for is called "entrepreneurial flair". Coach A describes this as being able to "go the extra mile". In addition they focus on business mindset and a team that has the synergies between them to become successful entrepreneurs. Other evaluation criterions he mentions are business model and uniqueness. Firm A emphasizes the importance of having a tough screening process that will contribute to higher quality on the incubatees.

Based on the screening provided on the three incubatees and the explanation of coach A the following screening process is illustrated in figure x below.

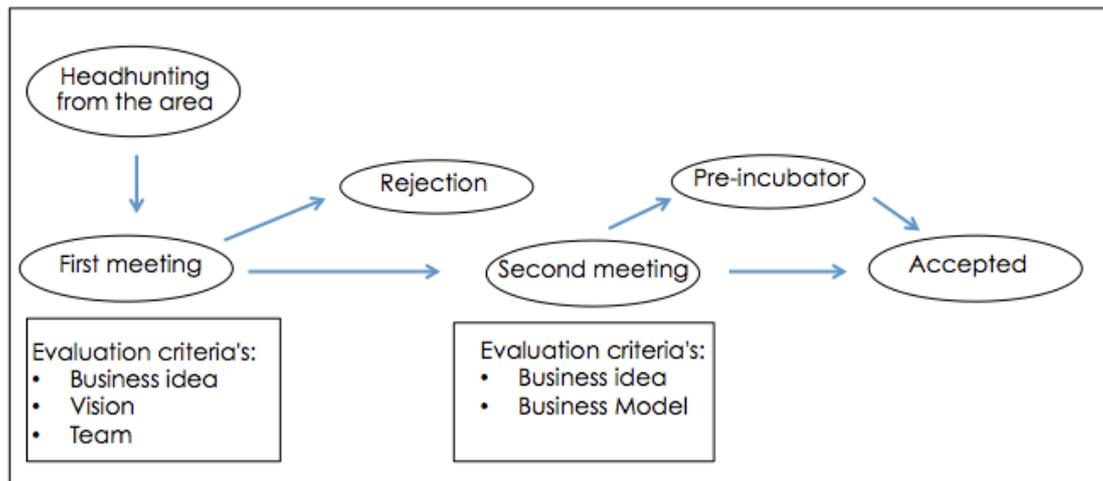


Figure 3 - Screening process LEN (based on firm A, B and coach A).

The collection of applicants is done through being active in innovation activities within Trondheim and headhunting. During the first meeting the applicants get tough question about their business ideas. The focus is to clarify if the team got “entrepreneurial mindset”. If the applicant is qualified a new meeting is done with at least two coaches from the incubator. The focus is still on the business idea, but also their business model and strategy. If the applicants survive the two meetings, but lack funding the pre-incubator within the incubator is an option.

5.1.3 Infrastructure

When being accepted to the incubator the incubatees are provided with physical resources. One key finding regarding infrastructure is the office as the most important physical asset for all of the firms (see appendix A1). This is where they use most of their time and the firms are satisfied with the offices. However, another finding is that the offices are not as transparent as the firms would like them to be. This is described in the figure 4 below.

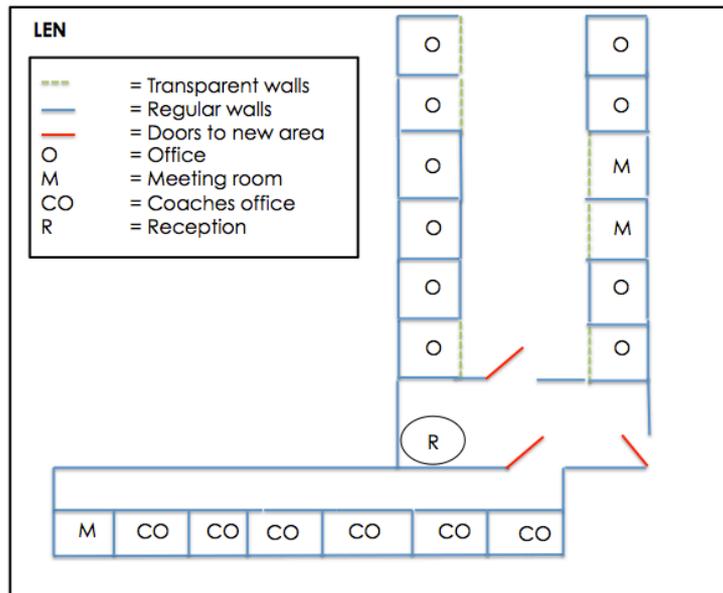


Figure 4 – Facilities LEN

Figure 4 show there are many closed doors among the. The meeting rooms are transparent, but few other rooms have any transparency. Firm A and C emphasizes that this reduces the communication with other incubatees because it is difficult to get an overview if the incubatees are available or not. The lack of open office facilities is also a factor that reduces the communication among incubatees according to firms A, B and C. Firm A underline this by stating “...*there has to be an open communication between incubatees in the incubator. We don’t need walls to hide our patents, but we need interaction on a daily basis in order to prevent falling in the same pits.*” Firm B admits that it could be because of the different incubatees in the incubator, but he argue that the communication had increased if the facilities had been more open.

Another finding is the difficulties of interacting with the coaches due to the distance and many closed doors. Firm B and C state that in order to get access the coaches they need to go trough the facility and through the reception. This distance increases the threshold for contacting the coaches. Firm C also underline the facilities as an issue and state “...*the problem is the facilities. It’s a long journey to get out of the office and through the reception to see if the coaches are available. It was better when the coaches were sitting here*”. Firm C further appreciate that the coaches encourage the incubatees to visit them more often, but the barriers to communicate are to high in firm Cs opinion.

The dining area is another physical space firm A and C mention as having room for improvement. The plastic cutlery gives the indication of a “use and throw a way culture” and firm A points out that in a hectic entrepreneur life it is crucial to have sufficient food supply in order to use the time on core activities. Firm C suggests that the coaches should dine with the incubatees in the common area instead of dining for themselves and emphasizes that this would increase their awareness regarding challenges and create synergies. Firm A and C want a more Human Resource-driven management.

The last finding regarding infrastructure in LEN was a hardware lab. Both firm A and C are in need of testing facilities and wants a hardware lab. This is non-existing at the incubator and the lack of access made them use personal resources and network. Based on the information retained table 10 show the physical resources the incubatees find most important.

Findings	Infrastructure
Crucial	Offices, facilities, meeting rooms, dining area with cooking possibilities
Worth mentioning	Video conference, reception
Lack of	Hardware Lab, open offices, transparent offices

Table 10 - Findings infrastructure LEN

5.1.4 Coaching

Coach component	LEN
Contact person	No
Interaction with incubatees	4 hours of free coaching in the rent. Discounted price after this.
Outsourcing of expertise	None
Co-activities	Yes
Hours of coaching per month	4
Activities	Yes
Expert fields	Retail, Wholesale, Oil, Gas, Maritime Sector, Fish Farming
Coaching style	Reactive
Deliver coaching within	<ul style="list-style-type: none"> - Marketing - Business Development - Legal - Financing
Interaction with incubatees	Follows 4/10 thoroughly

Table 11 - Coaching information LEN

Coach A highlights that they provide coaching in the areas within marketing, business development, economical and legal support. He emphasizes that they have the ability through their network to access what the incubatees need. He emphasises that if there are 10 incubatees in the incubator they work closely with four of them.

He explained that this is because several of the incubatees are self-motivated and experienced, but also because of the resources available and the time they use on co-activities makes it a struggle. One finding is that the young entrepreneurs without experience use significantly more coaching.

Most of the coaches have started companies before and coach A points out the experience as their best attribute combined with the communication and synergies between them. He state that the incubator has the experience needed to provide the “total picture” for the incubatees and highlights experience from fish farming industry, finance and acquisition and retail industry.

One key finding is the importance of coaching and lack of coaching. Firm A, B and C emphasizes coaching as the most important resource provided. Firm A and B stress the experience within the industry retail as highly relevant for them. On the other hand, they note that the coaches have other tasks than incubation and express that they should use more time on coaching activities. There is no contact person and there is a lack of continuously advising from the coaches. Firm A state, “It would work better if some of their positions were just 100 % coaching because they are busy very often, underlines this. As a startup I need answers to my questions within a day or two, if not, the customer is gone. An example is when we were asked to give a tenant offer to a customer. I needed help and knew that this was something coach X had done before, but he could not help me within the next three next days. We didn’t have three days and we didn’t get that customer ”.

Figure 5 illustrates the coaching and involvement from the incubators coaches based on the incubatees answers.

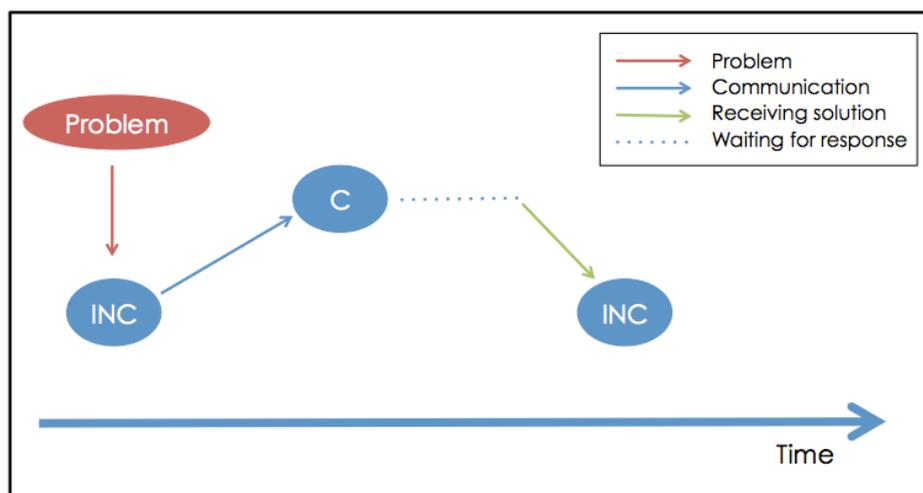


Figure 5 - Coaching assistance LEN

The dotted spot show a significant time used in the coaching area to solve the issue. This is usually not because the coaches don't know the answer, but because they don't have the time to deal with the challenge due to their co- activities.

Firm A, B and C wants closer cooperation with the coaches and firm A and B suggests milestones as part of the follow up routine. Firm B emphasizes that they can get short answers from the coaches now and then, but these answers don't always give him the knowledge he needs and explains "... The incubator has one mission and that is to make the incubatees ready to sail. How will it happen? Through interaction and constantly measure the degree of achievement towards that goal. It is important that they will help. Perhaps one could include a incentive agreements with advisers where they some stakes in companies against contributing more to the incubatees?"

Another finding is the need for curiosity and interest from the coaches. According to firm A the coaches need to be more "hands on". Firm C wants a more active environment in the incubator and argues that the coaches can contribute to this by being more involved. He believe the coaches' co-activities activities takes focus away from the coaching. This reduces the effect of the coaching and culture according to firm C. Firm B emphasizes the importance of being helped in situations where they were not necessarily in "crisis" so they avoid spending time on irrelevant situations. One example he mentions is before a pitching competition where he got help from one coach that didn't have this as his expertise area instead of using what he describes as the "best coach on pitching". He also points out that if they had been more available it might have been room for better dialogue underway in such processes.

The coach has the perception that many of the incubatees are quite different and it can be challenging to create synergies between them. He argues that this is both in terms of different personalities, different learning aspects and different industries. Due to the different personalities he claims that the culture in the incubator varies based on what kind of incubatees they got. He emphasizes the difference in culture as extraordinary depending on what he describes as "alpha males". He explains that this as the key ingredient to a great culture. In periods where they have no "alpha male" in the incubator the coaches need to take over this responsibility.

Another finding is something coach A describes as “comfort-founders”. He elaborates that there are a couple of the incubatees that are so comfortable being an entrepreneur just in order to be their own boss that they have no ambition of becoming a high growth firm. Further, coach A admits that these incubatees are hard to get rid off because they pay their rent and obligations, but the coaching loses its function in these cases. Firm A also explains that there are some incubatees that lack ambition. He claims that these incubatees reduce the culture and synergies in the incubator. Firm A state that it’s irritating to have other incubatees that only use space and don’t bring something to the table. Firm B described similar events and stated that some offices are rarely used.

5.1.5 Access to network

Coach A emphasizes their access of network as being able to find resources the incubatee can leverage from. Further he states that this is not about finding the specific individual that holds the answer, but rather finding the network that would access contribution to the incubatee. He emphasizes that they have made collaboration with different actors especially within the Mid-Norway region and Mid-Sweden in order to widen their external network. He mentions Connect as a tool where they access individuals in a board for developing different business cases. Connect consists of companies that represent competences from all branches both public and private sector. Their aim is to help entrepreneurs speed up their commercialization process and prepare them to meet investors and industrial partners. Firm C emphasizes that they have accessed knowledge and speed from the collaboration with Connect. He explains that the collaboration between LEN and Connect is helping their business case and connecting them to mentors and external resource providers.

Another access to network coach A mentions is that they provide “Friday Forum”. This is a different arrangements held at LEN where both external and internal speakers provide input on a subject. It could be funding possibilities, learning from mistakes, how to recruit employees and so on. He also mentions the LEN DAY as a yearly arrangement where they try to bring their network together in order to “keep them warm”. LEN gave Firm A the possibility to sell their products to companies that were there and introduced some of their products on stage. Firm A regarded this event as a door opener for them.

Firm C mentions Technoport, which is the largest innovation conference in Trondheim, as an access to possible funding opportunities. He explains that one of the founders from Trondheim tech sat on the incubator before. Through this connection they became a part of Technoport's private crowd funding arrangement that was a huge investment possibility for them.

Another point firm C emphasizes is that the company is focus on B2C in the gaming industry and this is somewhat outside the expertise area for the coaches. This makes business development through the coaches more difficult because they don't have the knowledge about the industry and the effects of it. They haven't got the network in the industry either and that makes personnel network more effective for the incubatee.

Another key finding is that by using the incubator's name towards different actors it shows credibility. The incubatees argue that they are being taken more seriously. Firm A explains, *"Being part of LEN has open some doors because they have a good reputation, especially towards the Mid-Norway region."* He further explains that they use the credibility of being a part of the incubator as an introduction to customers and potential partners. Firm B also state that being part of the incubator is an advantage for funding because of the credibility factor. Even though the credibility of using the LEN-name in application is of great help to the firm the lack of access to business angels and venture capitalists is high.

Even though the firms argue the credibility factor has helped, the funding possibilities have room for improvement. The firms argue that it should be easier to access microloans or other funding possibilities. Firm A want it to be easier to receive microloans in the area around 100 000 NOK and argue that in a start-up company the need to act fast is crucial.

Firm B has turned down an investment offer from the incubator. He state that this was because the offer wasn't good enough and explains that the investment model consisted of both financial and human capital. Firm B was not convinced that the coaching LEN provided to them could help them enough considering the value of the deal. The offer was of 350 000 NOK for 7,5% of the company. The offer contained 250 000 NOK of human capital (coaching) and 100 000 NOK of financial capital. Firm B state that if the coaches had followed them more thoroughly and given them more leads towards business concept, collaboration partners and acted more as a

connector between the company and the market they would reconsider the deal. This is similar to what coach A explains. Coach A emphasized that incubatees they haven't worked closely with have a more difficult time accepting this funding model, while the incubatees they have worked closely with accepts this deal more easily.

Firm B explains that the way LEN invests in their incubatees is that they first offer a smaller amount. Thereafter they work with the incubatee and find other co-investors that could invest. In this funding round they invest more financial capital and usually looks at time horizon of 5-7 years depending of the company.

Access to	Have access to	Want access to
Internal network	Incubator network, Friday Forum, LEN DAY	Incubators funding, Marketing expertise
External network	Connect, Innovation Norway	Business angels, Venture capitalists

Table 12 – Findings network LEN

5.1.6 Summary LEN

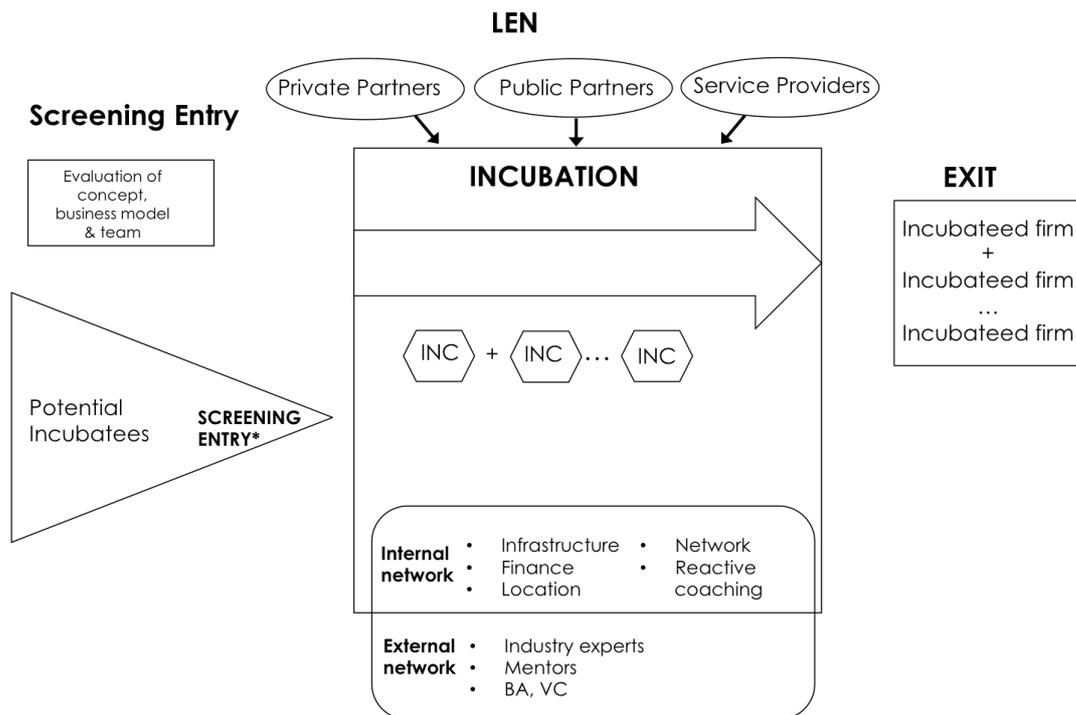


Figure 6 - The incubation process LEN

The most important resources LEN is providing are the office space, coaching and their access to network. LEN has a fairly tough screening with two meetings and does not accept any companies that don't have sufficient funding. They will be place

in the pre-incubator first. The same goes for the potential incubatees that do not have a sufficient business model. Firm A, B and C also state that the facilities have improvement to create more synergies among the incubatees. Firm B suggest more transparent offices and firm C a location where the coaches sit more closely to the incubatees so they have the ability to leverage their resources more often.

The incubatees have four hours free with the coaches every month. If they work with the coaches more than this it will cost a reduced consultancy price. This model makes it difficult to get to know the coaches according to firm A, B and C. According to coach A they only follow 40 % of the incubatees closely. The firms claim that the reactive coaching approach reduces the effect of the coaches' role. They believe it is mainly due to co-activities. The potential "comfort-founders" reduces the synergies among the incubatees. The incubator has high credibility in the region according to the firms. This has opened many doors for the firms to collaboration partners and customers. The empirical findings from StartupLab are presented next.

5.2 StartupLab

Incubator	StartupLab
Coaches	6
Incubatees	65
Owned by	23 Different companies. Both private and public companies including SIVA and UiO.
Coaches as investors	4
Industry focus	Wide – Software component
Established	2012

Table 13- Contextual factors StartupLab

StartupLab was established in 2012 and is hosting 65 companies on 1700m2 with 8 employees. They have had 130 start-ups since they started and invested in 13 of them. The background for establishing the incubator was a need in the market according to coach B. He explains that it was a very good startup environment in Oslo in the 1990s and they had a desire to bring back this environment. It was a very old-fashioned incubator at the University of Oslo and they wanted to recreate it to a modern one. Coach B can't understand why Norway cannot make more new successful companies. He believes all the prerequisites are there, but it's about people. In addition, most importantly according to coach B, there was no commercial value and oriented alternatives in Oslo. He states that StartupLab redefines early phase with their model.

5.2.1 Background for choosing incubator

Table 14 shows the arrival of the incubatees and a summarized reason why they and Coach B chose the incubator.

Firm	When did you arrive	Why did you pick this incubator?
D	July 2014	Wanted an environment with other entrepreneurs.
E	August 2014	Wanted coaching and especially tech-support.
F	August 2014	Wanted experience and guidelines through coaching.
Coach B		A market for IT. Re-start the Norwegian IT culture from the 1990s

Table 14 – Background for choosing the incubator StartupLab

Firm D explains they had been sitting on two co-working spaces earlier MESH and Digs, but wanted a larger environment with more IT-companies and coaching. StartupLab was the best alternative in the Oslo area. Firm E points out primarily two reasons why they picked the incubator.

1. There are many other entrepreneurs in the same situation and they are highly educated people
2. Potential partner in StartupLab and the other incubators in the area could not offer the legal services they were looking for.

Firm F went first to “Gründergarasjen” in Fornebu, but firm F needed proper coaching. The main reasons why they choice the incubator was coaching and emphasizes that they have much experience within the industry, but lack entrepreneurial experience.

5.2.2 Screening Process

Firm	Meeting	Headhunted
D	Team, business idea	
E		X
F		X
Coach A	Team (synergies), Software component, Educational background	

Table 15 – Screening factors StartupLab

The coach explains that they thoroughly screen all applicants and there has been an average acceptance rate of 1 out of 5 applicants since they started in 2012, but in the last 6 months this has reached 1 out of 10. If granted access, coach B state that they provide an affordable and flexible office, built to meet the needs of the incubatees running rapid-growing technology businesses. Coach B also points out that if they would have a more "niche incubator" they would have three companies or many bad once in the incubator.

Coach B further explains that they are trying to meet with everyone and that it should be very low threshold to get in touch with the coaches. There is no application form so he expresses that the companies need to send mail or call to get the application form. When they meet the applicants they have three criteria's:

1. It should be Technology
2. It should be software component (because of the coaches expertise)
3. The team

The hardest and most important screening is definitely the team according to coach B. He says that they always meet with the companies and they are usually two coaches in the meetings. They take into consideration the incubatees experience and emphasizes that young entrepreneurs must compensate with passion and enthusiasm. They prefer that companies that have in-house development competence. At the meeting they try to understand the team dynamics, the concept and vision of the founders. He points out that they are going to make mistakes both ways, they're going to pick incubatees that should not have been there and reject a incubatees that should have been here. Further, he states that if they find out that they made the wrong choice they evict the incubatee. He emphasizes that they can use this screening process because they work closely and follow all the companies. Coach B also states that they screen the incubatee's cooperation partners and investors through their personal network. Figure 7 illustrates the screening process of according to coach B and firm D.

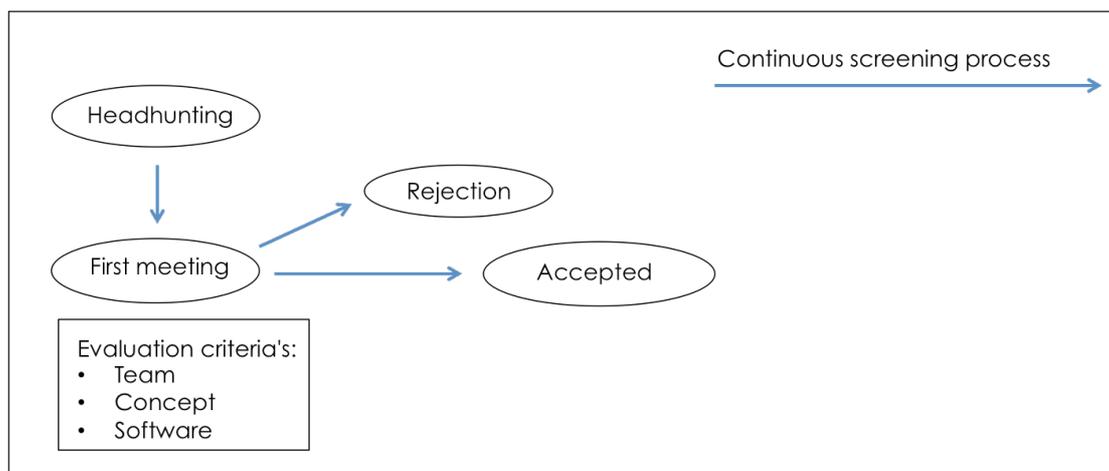


Figure 7 - Screening process StartupLab

Firm D, E and F are all technology companies that work with software and have high educational background. Another point that all of the firms acknowledge is the fact that the screening is continuous during their stay at the incubator. Firm E and F expresses this gives them a sense of urgency and they are more focused.

The firms screening process are different. Firm D perceived the screening process as fairly mild and explains, "*...it was sending an email and then have a meeting where I talked about the business, the team and the future plans.*" Firm D explains that the meeting lasted for about one hour and there were two coaches who attended. He then received an email and they got accepted. His impression of the screening was that the coaches were concerned about what kind of people they are accepting and there was primarily focus on the team. He states that they also asked many questions about his network and thought this was primarily to see if they could help him with access to new network possibilities.

Firm E emphasizes that they had a different screening than they heard others have. They were headhunted through Venture Cup in 2013. He was told to sit with one of the coaches at the dinner event and the coach discussed the business case with him. The coach told him that the company would be suitable for StartupLab. A couple of weeks later he called the coach and they had a conversation about the team and the future plans. He then met two of the coaches in San Francisco at an event and they thought the idea was exciting. After he came back he sent one of the coaches an email and received an answer that they were accepted.

Firm F also had a different screening process than firm D and coach B explains. He believes they got accepted on different premises than the other incubatees. They knew two of the coaches through previous work. StartupLab got interested in the concept and after talking to some of the coaches about the concept they got accepted. The incubator also invested in the company before they entered the incubator. This will be further described in access to network chapter 5.2.5.

5.2.3 Infrastructure

According to coach B, StartupLab delivers facilities with offices and an open office space where the coaches are sitting (see appendix A1 for full list). Figure 8 represents the facilities.

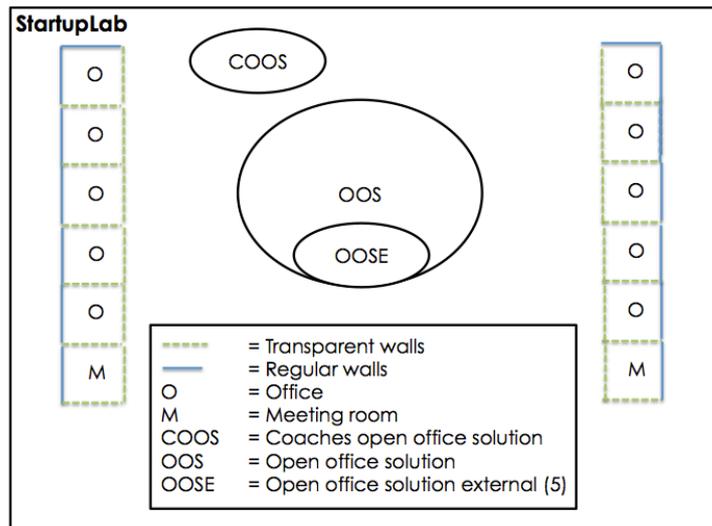


Figure 8 – Facilities StartupLab

Firm D, E and F points out that the most important physical services provided are the office spaces. However, the open office solution is also regarded as valuable because it provides a possibility to communicate with the other incubatees as well as the coaches. Due to the open office facilities and transparent offices the sharing culture and synergies among the incubatees are high according to firm D and E. Firm F values the environment of the incubator and explain that this has proven to help their business getting investors through other incubatees sitting among them and explains “had it not been for company X had we never been able to get the investor we have today. We are very pleased with this investor.” Coach B explains that they have deliberately chosen to place them as accessible as possible because it should be a low threshold for taking advantage of their expertise.

The common area (OOE in figure 8) is also pointed out as an aspect ease communication according to firm E and F. There are also possibilities to get external help within legal and financial questions from external resources that are available once a week. Because of the open area solution it is easy for the incubatees to see if the external resources are available and act on that opportunity according to firm D and E.

Another finding is the lack of test facilities. All of the firms want a test lab and both firm D and F want a hardware-lab. Especially firm F points out that they are in need of a hardware lab and would like the incubator to get one. Instead, they have used their own network to access hardware development.

5.2.4 Coaching

Coach component	StartupLab
Contact person	Yes
Interaction with incubatees	4 Workshops a year. Otherwise ad-hoc
Outsourcing of expertise	Economic and Legal
Co-activities	No
Hours of coaching per month	Including when your accepted
Activities	Yes
Expert fields	Start-ups using Software and has high educational background.
Coaching style	Proactive
Deliver coaching within	<ul style="list-style-type: none"> - Marketing - Business Development

Table 16 – Coaching information StartupLab

Coach B emphasizes that the most important job they do is to always have "the entrepreneur in focus". He explains that they work with all the incubatees "no matter" if they have invested in them or not. Another advantage coach B mentions is that they have "been to war before". Several of the coaches have successful start-ups behind them. Coach B argue that they look at the following:

- Talented people
- A good network
- Focusing on recruitment
- Customer first
- Mutual funds that invest early and a management team that can answer all questions or direct them to their network.

Another finding is their working method. Coach B emphasize that due to the high amount of start-ups they must have a structure in order to follow the incubatees thoroughly. Every incubatee has their own "contact-coach" and they use excel as a tool to keep track the incubatees. Every incubatee has four workshops a year with the coaches. This is a tool to make sure the incubatees follow their milestones and show development. If they lack the ability to achieve goals they get thrown out according to coach B. The firms underline this as well.

Another finding is the activities StartupLab offer to their incubatees. Firm D and F highlights Wednesday lunches as a useful activity in order to get to know other incubatees and coaches. This is an activity where everyone is encourage to sit with

people they do not know to enhance the start-up environment. Coach B believes that the key behind a good culture is about putting the entrepreneur in focus. Therefore, they focus on creating a better culture and facilities than they have today. Coach B wants to create a culture as in McKinsey where most work until 11:30 p.m. because others do it. He believes that if you work much you get more done.

Firm E states that the coaches can be seen as advisory board for them and state that the quality on the coaches is very high. An example of this is the understanding of their product. He explains that they have a very technical product, which is combined of hardware and software. He states that it took a while before the coaches understood it, but when they did they have improved the development of the product. Firm F explains that they receive help primarily on business development, but also advice on who they should contact. He emphasizes that one of the coaches introduced his company to a collaboration partner and emphasizes "... one of the advisers in marketing linked us to different reporters which got us the media coverage we needed. Further he says that they discuss their issues with all of the coaches based on the expertise they hold. He emphasizes the value of getting help with funding possibilities such as Innovation Norway. Further he says that the communication is very ad-hoc based on the situation the company find itself in. Firm E expresses the dialog with the coaches as exponential and that it consists of a test-period where they see if you have what it takes before they invest time and effort in you.

Figure 9 represents how the firms describe the interaction with the coaches when a problem has occurred.

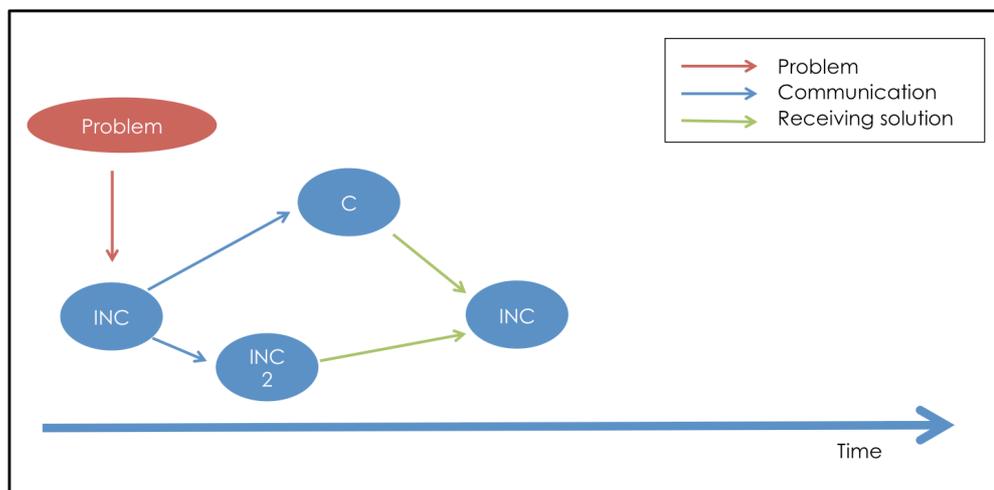


Figure 9 – Coaching Assistance StartupLab

Once a challenge occur the incubatee asks the coach or a fellow incubatee. The coaches are easy to approach in the open office area and know the company and what process it is in. Incubatee2 will use a little more time unless they have solved the exact same problem before. Either way, the problem occurred will be solved in a relatively small time amount.

Another finding is that one of the most important values the coaches give is the interesting people the incubator attracts according to firm E and F. Firm D emphasizes the collaboration with Telenor and Microsoft as highly valuable. This will be further described in the next resource *access to network below*.

5.2.5 Access to network

Coach B emphasizes the importance of having five open office spaces to “resource – persons” in the incubator. These spaces are created to increase so-called "casual" contact between people skills and start-ups. The coaches are trying to bring in competent external persons who act as mentors and sparring partners with some of the incubatees. Several of the advisors have been advisors before being recruited by the incubator as a coach.

Firm D describes the offer of activities as various, but explains that he hasn't used it to a large degree due to the fact that he focus on customers during the working hours 8-17, but indicates that when the arrangements are on the evening he visits if its relevant. Firm E expresses that continuously contact with the coaches is important so they are aware of what they need in order to leverage their network He emphasizes that he have gained access to partners through their network and that there has been some potential customers linked to them.

The arrangement held by the incubator also has some value according to the firms. Firm E states that the themes differ but there are arrangements such as “*growth hacking, tech-peers from silicon valley, former incubatees such as Swipe which tells about their successes and challenges and cooperation partners such as Telenor which share their experience in marketing or product development*”. The coaches call these arrangements for Minbizz.

StartupLab has accessed firm F to several key resources. He explained that through the network of StartupLab they got a mentor who is going to take over the

responsibility as CEO. They are in need of expertise within mergers & acquisitions and they got this from the StartupLab's network. The incubators corporate partners have also been of use for the company. He explains that they have worked closely with Appear.in. They have continued cooperation with Telenor and received support from Innovation Norway to a project with Telenor and another company.

The incubator has invested in the firm F through what he calls "Founders fund". Founders fund is the incubators investment fund that is owned by some of the coaches, a couple of businesses and private investors. StartupLab invested 1.3 million NOK in the company, but he states that its not the financial capital he value the most, it's the human capital. He states that they are in need of more money and looks at Norwegian investors. He emphasizes that they have many approaches to getting these investors through their own or the incubators network.

StartupLab also has a wide external network through for example Hafslund and Telenor as two strategic corporate innovation partners according to coach B. Microsoft and North Zone are connected as service providers that are sponsors to the incubator. StartupLab has a wide network of venture capitalists in Norway, which is confirmed by firm D, E and F. The establishment of corporate cooperation partners to the incubator is something firm E and F value highly. Firm E states that Telenor, Microsoft and Hafslund are large actors that contribute with expertise within their sectors as well as infrastructure. In addition, these actors have large investor networks that could be beneficial for the company he states.

Coach B says the only thing they can't help the incubatees with is financing. It is primarily because their cases are not clear or investor ready according to coach B. He states that they have invested in 13 of 130 companies. He points out that there are several reasons, but primarily because some companies are prepared to make the investment, some do not want investment and some have not gotten out potential although they are ready to be invested in. The fund they invest with is a fund created by the coaches and local people who are passionate about the entrepreneurial start-up environment according to coach B. He explains that this model is challenging because it can lead to envy and therefore they try to communicate clearly that the companies they invest in have above-average probability to succeed.

He also states that they have a Business Angels environment that they are working with. He wants this to be improved through workshops with entrepreneurs and

Business Angels. Therefore, they have adapted to 5 office spaces in open plan offices where so-called skills people can sit. He says that they want the coincidences will occur by facilitating those them to occur.

Firm D points out that if they want more investors they would probably use their own network instead of StartupLab's. This is due to the network they have accessed before they got to StartupLab. He mentions that the one of the other incubatees has received contact person to his network. The lack of funding opportunities is one point firm E mentions. Especially the access to private investors is something his company is in need of, but hasn't gotten from StartupLab. He also emphasizes that he would like backing from the incubator, but know that they only invests in a handful.

5.2.6 Summary StartupLab

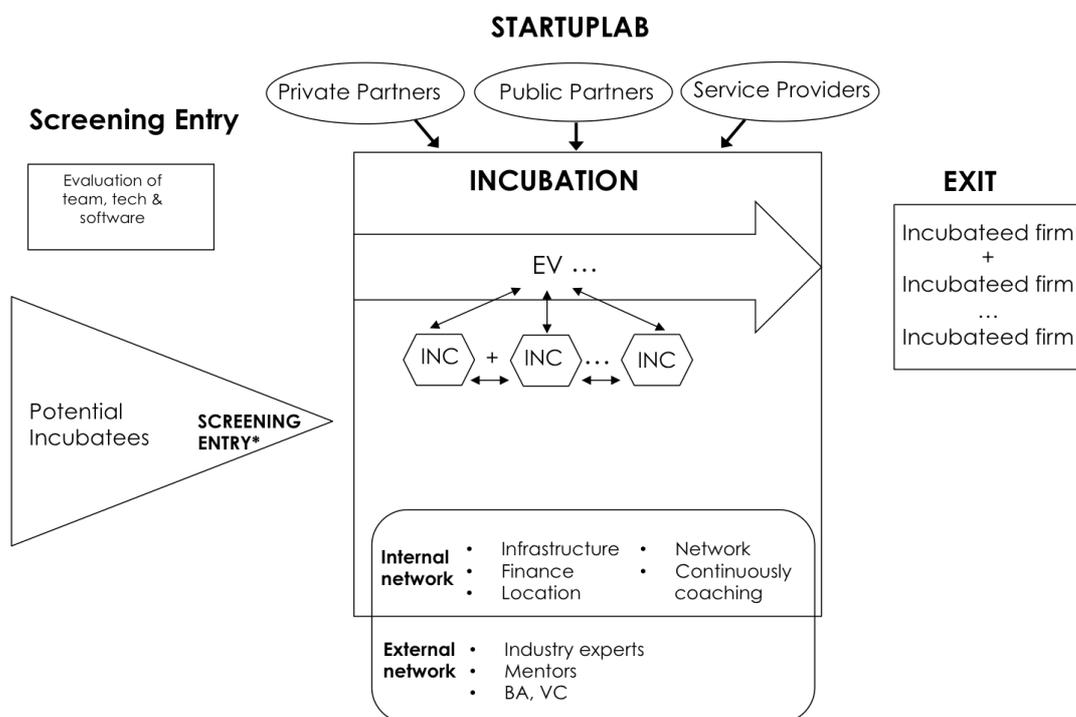


Figure 10 – The incubation process StartupLab

The most important resources StartupLab is providing are the office space, coaching and synergies between incubatees as well as synergies between incubatees and coaches. StartupLab does not accept any companies that don't have develop a technology and have high educational background. This is due to the coaches' expertise area, network and team-focus. Through the incubation time the coaches have four workshops with every incubatee. These workshops consist of business

development, evaluation of milestones and new goal settings. If the incubatee does not meet the evaluation criteria they are thrown out from the incubator. The screening process is continuous from the incubatee arrives until its departure as a failure or incubated firm. Even though this could indicate a competitive culture firm E and F state that it is a sharing culture among the incubatees, which makes the synergies increase. Without the continuous screening process the quality of the incubatees would decrease which would make the synergies among the incubatees less effective according to coach B. The office space is also a critical resource mostly because of two factors. First, every incubatee needs an office in order to progress, have meetings and work according to firm D. Secondly, the combination of open office solution, glass wall offices makes the entry barriers decrease. The potential investment from StartupLab is somewhat critical as well for some of the companies in order to stay alive. However, this is a resource that is only provided by a handful of incubatees. Besides the critical resources the possibility to get legal and financial assistance from external experts is found to be a “nice to have resource” for the three firms at StartupLab.

In the following chapter the incubation process and the resources will be analyzed according to the theoretical framework from chapter 3.

6. Analysis

The previous section presented findings from the case descriptions separately. In this chapter I will analyze and contrast the incubators together. The theoretical framework described chapter three will be used to analyze the incubators. The screening process will be classified by the screening model of Bergek & Norrman (2008). Second, the resources will be analyzed one at the time starting with infrastructure. Thereafter coaching will be analyzed based on the three categories of Rice (2002) and Bergek & Norrman (2008) differentiations of coaching interaction. Lastly the incubators role as a mediator will be analyzed before the research questions are answered. Figure 6 and 10 from chapter five described the incubation process and will be the basis of this analysis.

6.1 Screening

In the theory chapter the screening process was referred to as a fundamental for the incubators success and critical in order to select the right incubatees to the incubator (Bergek & Norrman, 2008; Hackett & Dilts, 2004b; Peters et al., 2004; Scillitoe & Chakrabarti, 2009; Somsuk & Laosirihongthong, 2014). Both coaches stressed screening as an important part. Firm A, D, E and F argue that the quality of the incubatees is important for the cooperation and synergies among them. The lack of a clear screening process could potentially harm the incubatee or eventually lead to incubator failure (Kurato and LaFollette, 1987). Merrifield claims that careful selection can increase the probability of incubatee and thereby also incubator success. The screening factors are presented in the table 17.

	LEN	StartupLab
Screening process	Contact, Intro meeting and Second meeting	Contact and one meeting
Focus area	<ul style="list-style-type: none"> • Concept • Business Model • Entrepreneurial flair 	<ul style="list-style-type: none"> • It has to be technology driven • It has to have a software component • Team
Strategy	Entrepreneurial flair & concept	Entrepreneur in focus
Team/entrepreneur or idea	Mostly team	Team
Incubatees	15	65

Table 17 – Screening factors summary

As mentioned in chapter three, Bergek & Norrman (2008) differ between four approaches in their matrix of incubators selection strategy. The two opposites are the “picking-the-winners approach” as Hackett & Dilts (2004b) describes when the incubator management acts as a private venture capitalist firm and the “survival-of-the-fittest approach” where the incubator admits a larger number of firms and relies on the market to provide the selection process.

Bergek & Norrman (2008) also focuses on strict versus open selection criteria's. LEN has strict selection criterions through two meetings with the incubatees focusing on concept, business model and entrepreneurial state of mind. In addition they have opened a pre-incubator, which suggest further focus on funding possibilities and business concept. StartupLab has three screening factors focusing on technology driver, software component and team. This indicates a more open approach. However, StartupLab also focus on high educational background by only accepting team with high technical background or serial entrepreneur. This implies that both incubators uses the “picking-the-winners & entrepreneur strategy” according to the model of Bergek & Norrman (2008). The screening process of LEN and StartupLab is similar to the findings of Lumpkin & Ireland (1988) who state that screening criterions should include experience of the managing team, financial strength-and market and personal factors.

Even though LEN seem to have a “picking-the-winners & entrepreneur strategy” coach A emphasized that they have something he called “comfort-founders”. The incubator does not follow these incubatees and this could imply a “survival-of-the-fittest-strategy” letting the market decide. By not being involved in the process, Audet and Couteret (2012) argue that the incubatee's strategies are harder to put into action. LEN follow approximately 40 % of their incubatees thoroughly. Gibbs (2000) state that isolated entrepreneurs risk lacking the tools and support (advice, practical aids) needed to build a successful business. Coach A claims that it is hard to get rid of the “comfort-founders” because they are paying their rent every month. Peters et al. (2004) found in their interviews that some incubators increase the rent as an incentive for non-performing start-ups to leave the incubator. The “comfort founders” also indicate an idea-focus where the entrepreneurs isolate themselves from the rest.

Based on the analysis of the screening methods for both incubators the framework of Bergek & Norrman (2008) has been applied in figure 11.

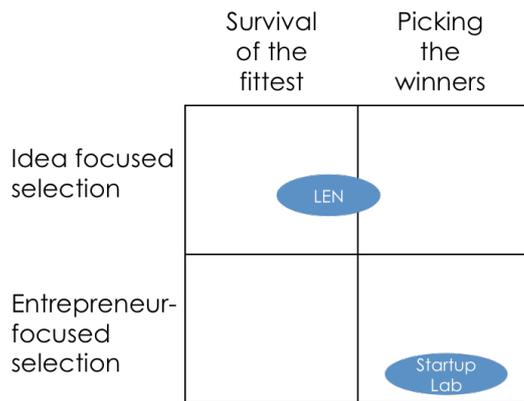


Figure 11 – Screening selection (Bergek & Norrman, 2008).

The screening of StartupLab is fairly strict due to the fact that they evict incubatees that don't perform according to their milestones. Even though firm E was headhunted through a business plan competition the strong focus on background and team indicates an *entrepreneur focus selection*. The searching for entrepreneurs with high educational background and team attributes indicates a "picking-the-winner-strategy" (Bergek & Norrman, 2008).

As seen from this analysis LEN has a somewhat tougher screening with two meetings, but their lack of continuously coaching has given rise to the "comfort-founders". Bergek and Norrman (2008) state that if the incubator has an idea-focus the management team must access deep technological knowledge within the market. LEN has a wide focus on incubatees in many different markets. This could question the choice of screening method and as firm A and B stated (chapter 5.1.3) the communication among the incubatees is regarded as low. The low degree of communication among incubatees also indicates an *idea focus*.

StartupLab's team-focus requires more general business skills and being able to judge personalities (Bergek & Norrman, 2008). The continuously screening with the possibility of evicting the incubatees makes this strategy suitable. Establishing clear admission criteria and making sure that potential incubatees fit the incubator is important to provide a good nurture home for the incubatees (Smilor, 1987, Somsuk & Laosirihongtong, 2014). Firm E and F were headhunted to StartupLab, which indicate a "picking-the-winners" approach. Firm F was headhunted due to the fact that the team had much experience and could therefore be categorized as a "team-focus". Firm E was accepted through a business plan competition, Venture Cup, which could indicate a success factor criterion according to Becker and Gassmann

(2006). The variability in screening processes may lead to the selection of incubatees that are too strong or too weak to be hatched in an incubator. This may eventually lead to incubatee or even incubator failure (Kuratko and LaFollette, 1987).

Therefore, the incubators have different strategies when selecting incubatees. LEN uses a “survival-of-the-fittest approach” and search the area to find ideas they want to have in their incubator. Because they don’t work closely with all of their incubatees some of the incubatees have become “comfort-founders”. StartupLab uses a “picking-the-winners-approach” while focusing on the entrepreneur and the team. The low degree of focus on concept could lead to poor ideas in the incubator, but Coach B argue that by focusing on people the idea will come by itself.

6.1.1 Exit Policies

An exit can either be done through failure or success (Bruneel et al., 2012). By having strict exit policies the incubator has the opportunity to manage which incubatees that are staying and who is going. StartupLab evicts incubatees that don’t deliver according to their milestones plan. Peters et al. (2004) found that some incubators increased the rent for non-performing start-ups to get them to leave the incubator. Firm A, B, D and F stated that they would exit the incubator when they feel they have nothing more to learn from the incubator or the increasing staffing has become too large to remain.

6.2 Infrastructure A

As mentioned in the theoretical framework in chapter three previous researchers claims that infrastructure consists of localities, office facilities and "administrative services. They also stated that most incubators seem to supply much of the same set of general administrative services (Böllingtoft and Uihöi, 2005; Chan and Lau, 2005; Lyons and Li, 2003; Mian, 1996a; Rice, 2002). One key finding regarding infrastructure is the office as the most important physical asset for all of the firms in both incubators. Even though both incubators provide office space for their incubatees two of the incubatees at StartupLab (firm D & F) want larger office space due to increase of staff. This is something Chan & Lau (2005) points out as critical asset to a business incubator and could indicate an improvement area on this resource. Firm B state they were given a larger office from LEN due to increase of

staff which could indicate that LEN look at this resource as important for their incubatees.

The incubators deliver almost the same infrastructure (see appendix A1). However, there are significant differences in the way the firm's perceive the synergies the facilities create. At StartupLab, the open area facilities and the transparent offices seem to ease communication according to firm D, E and F (see figure 8 in chapter 5). The coaches are sitting in the open plan offices which firm D and E claims makes it convenient to get in touch with them. Chan & Lau (2005) found that incubatees should be clustered in the same sector within the incubator for sharing knowledge to take place. All the firms from StartupLab have some kind of software in them, but they are not in the same sector. Schwartz and Hornych (2010) could not find support for specialized incubation strategies that increased the effectiveness of internal networking compared to more diversified business incubators. The coach from StartupLab explained that they have deliberately chosen to place themselves as accessible as possible because it should be a low threshold for taking advantage of their expertise.

The firms from LEN stated they want to improve the communication between the incubatees and also between themselves and the coaches. The closed offices with few transparent walls and many closed doors could decrease the communication (see figure 4 in chapter 5). Earlier theories disagree about the effect of synergies between incubatees in incubators. Nolan (2003) and von Zedwitz (2003) argue that co-location is not a necessity for an incubator. However, Lewis (2001) disagrees with this and argues that it provides the opportunity to share resources, knowledge transfer and experience between start-ups. Lyons (2000) argues that incubatees that are physically located under the same roof make collaboration among incubatees much more likely. The firms from StartupLab emphasize sharing culture among incubatees where they share experiences, network and financial contacts as very important. Firm D and E claims that the facilities (see figure 8 in chapter 5) eases the collaboration. Firm F states that they have gained important contacts from both the coaches and other incubatees underline this. In the case of StartupLab, the collaboration also involves knowledge transfer with coaches who sit in the open plan offices.

None of the incubators have hardware a lab for development and testing. Firm C, E and F are in need of testing facilities and want a hardware lab. This is non-existing at

the incubators and the lack of access to product development through a hardware-lab made them use personal resources and network. For many smaller technology incubators, access to laboratories and testing facilities is provided through partnerships with universities, technology transfer agencies, or the leasing of equipment (McAdam & McAdam, 2008). Both of the incubators are located in cities with high quality universities. StartupLab is located within the University of Oslo (UiO), but this link has not been found relevant. More specialized tangible resources, such as laboratories and research equipment, can also be regarded as part of an infrastructure proposition, according to Grimaldi & Grandi (2005).

Therefore the analysis of the physical resources has found that StartupLab and LEN deliver somewhat the same infrastructure, but their design is different. The communication among the incubatees at LEN seem to be low because of the lack of transparent wall, long distance and lack of open office area. The lack of these physical resources seems to make it more difficult to engage with the coaches as well as other incubatees. For StartupLab these physical resources seem to enhance the possibility of collaboration. The fact that the coaches sit in the open office area makes it more convenient to approach them and eases communication. The transparent walls give a higher degree of overview what the other incubatees are doing, which increases the possibility of communication with other incubatees. Earlier contributions disagree about the effect of infrastructure. Many believe that the incubators provide the same physical resources.

The next resource being presented is coaching as business support.

6.3 Coaching

The incubators provide coaching, but there are several differences among how they interact with their incubatees. Rice (2002) and Bergek & Norrman (2008) describe different approach to coaching. In the following section these two frameworks will be the basis for analyzing the two incubators. Rice (2002) differentiates between *reactive and episodic*, *proactive and episodic*, and *continual and proactive*. Bergek & Norrman (2008) differ between the extremes *strong intervention* and *laissez-faire*.

Coaching	LEN	StartupLab
Rice (2002)	Reactive and episodic	Continual and proactive
Bergek & Norrman (2008)	Laissez-faire	Strong intervention

Tabel 18 – Coaching approach

LEN positioned as the *laissez* by leaving the incubatees to themselves gaining very little assistance unless they ask for it. This is a *reactive and episodic* approach in order to free up time for their other activities such as investment portfolio and counseling other companies outside the incubator. This kind of coaching is assisted when the incubatee are asking for help considering a crisis or problem (Rice 2002). All the firms from LEN argue that they want to have what Rice (2002) describes as proactive and continual coaching. This could indicate that the coaching delivered is of great help for the incubatees, but the duration of the coaching is limited. Rice & Matthews (1995) underline that it's not enough to give advice "on demand", but follow-up of the individual incubatee must be tailored to the entrepreneur's strengths and weaknesses in relation to the phase of development it finds itself in.

Coach A point out that LEN only follow 4 of 10 incubatees closely and focuses primarily on those firms the incubator invests in. This has lead to the origin of "comfort-founders". According to Rice & Matthews (1995) the biggest challenge regarding coaching is to make time and focus on the intensity of the start-ups. This is contradictory to the approach LEN has chosen, but in order to cope with the co-activities this is the way they are managing their incubator.

StartupLab lean towards what Bergek and Norrman (2008) describes as *strong intervention*. Firm D emphasizes that the coaches are "pushy" and they have eagerness to see achievements. Coach B points out that if an incubatee fails to deliver satisfactory results towards the set milestones they could be evicted. This model can be regarded as tough, but firm E says it makes the culture more competitive and they must always be on their toes. Rice (2000) found that the incubators that achieved the best results had an organizational structure that relieved incubator manager for other activities.

Coach B explains that it may go months between an interaction with an incubatee in extreme situations, but they can also interact with them on a daily bases depending on the stage the business is going through. This may indicate that the incubator uses ad-hoc approach of coaching in addition to monitoring. Coach B justifies the coaching concept because the coaches are experienced and caring of the incubatees. He compares the incubator with a good university where the quality of teaching attracts the best students. The firm's background for picking the incubator supports this. The continuous coaching may indicate that the coaches get an overview of what stage the incubatees are finding themselves in and help

accordingly. According to Rice (2002) the counseling efforts should always focus on the need of the entrepreneurs and the incubator companies when it comes to the on-going development needs.

As described in chapter 5.2.4 firm E has a complicated product. The coaches put efforts into understanding the product and have been able to help the firm. Somsuk & Laosirihongthong (2014) argue that this is a key factor to fully have cooperation between the incubatees and the coaches. They emphasize that especially for incubatees that have a high-tech technology there has to be a transfer of knowledge and communication if the incubator can manage to help the incubatee (Rice, 2002).

Therefore as figure 5 and 9 from chapter five illustrates the coaching is different among the incubators. LEN uses a reactive approach where the incubatees are asking the coaches questions after the problems have occurred. They have 4 hours of coaching free every month. However, because of the co-activities LEN is doing the availability of coaches is considered low. Rice & Matthews (1995) argue that a major challenge for many incubators is to transfer knowledge from the coaches to the incubatees because most incubatees only use counseling in “emergency situations”. By having a reactive approach the time spent on the situation could be more demanding and in worst case destroy the incubatees possibility of succeeding. The reactive approach has led to the existing of “comfort-founders” in the incubator.

StartupLab’s interaction with the incubatees is continuously and of two-way communication. As describe in the results chapter they have one contact coach they are obliged to report to. In periods with many challenges the coaches are working with the incubatee on a daily bases. If they don’t deliver according to the set milestones they are evicted. Through this method the coaches have an overview of the progress the incubatee and can provide resources to them accordingly. Wiggins & Gibson (2003) argue that optimizing and follow a milestone plan is a great way of making sure the incubatee is well suited for the incubator.

6.4 Mediation

From the theoretical framework the incubators role as a mediator was found critical (Begley et al., 2005; Böllingtoft and Ulhöi, 2005; Hindle and Yencken, 2004; Mian, 1996a; Rice, 2002; Rickne, 2000). The network and the actors within have similarities among the incubators, but *how* the incubator acts as a mediator differ. Several previous theoretical contributions reviewing incubator as a mediator between

incubator and innovation systems state that if incubatees are not coached properly, it may indicate that the incubator does not work as a mediation for all companies (Peters et al., 2004).

6.4.1 Access to network

Both incubators have internal network through different activities. The activities are described in 5.1.5 and 5.2.5 and the firms regard the main activities “Friday Forum” (LEN) and “Minibizz” (StartupLab) as valuable. The main difference is StartupLab’s “Wednesday Lunches”. The incubatees are encouraged to sit with people they don’t know. StartupLab deliberately creates this happening for the incubatees to communicate and get to know each other.

Another finding is the incubators credibility. The credibility of LEN has been of great help to the firms. They emphasize that the credibility has been a door opener to get both customers and cooperation partners. The value of credibility is stated by Birley (1985) and Dubini and Aldrich (1991), which explains that because the entrepreneur lack credibility and a history of operations, the incubator allows them to overcome this liability by providing a networking infrastructure.

The external network of LEN differs from StartupLab primarily because it has a strong attachment to the location Mid-Norway and Mid- Sweden. The geographical proximity to the Mid-Norway section makes development of organizational relationships with other companies, customers and VCs easier (Jou and Chen, 2001). StartupLab has established private partners that contribute to the incubator by cooperating with some incubatees, holding presentations, deliver material and invest. Firm D, E and F look at the cooperation with private partners as a positive contribution and firm F has already established collaboration with the partner Telenor. Rice and Matthews (1995) argue that if the incubator cannot provide the missing resources directly, it must connect the entrepreneur through its external network

Figure 12 illustrates the sharing of knowledge in StartupLab.

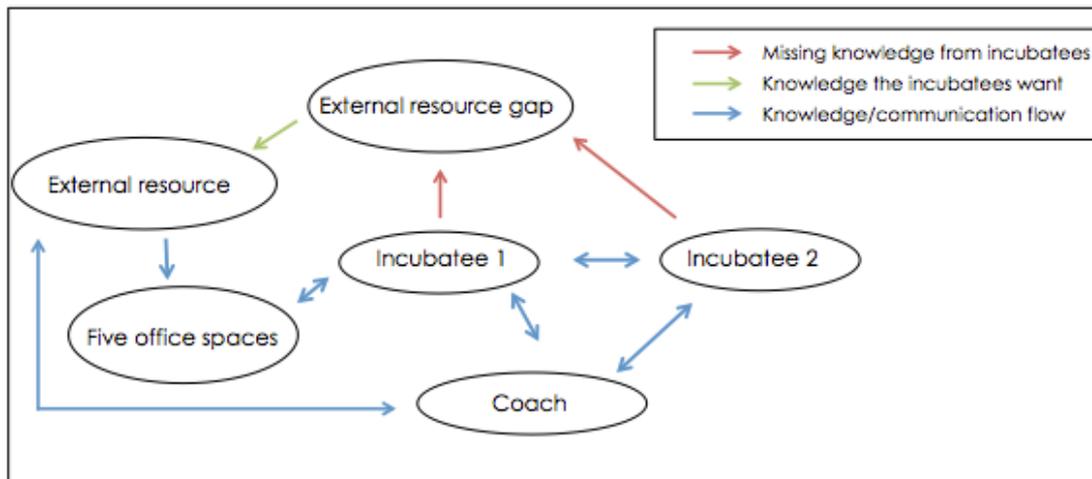


Figure 12 - Sharing knowledge StartupLab

The red arrows show the missing knowledge from the incubatees. The green arrow shows the knowledge the incubatees want. The blue arrows show the communication flow through the different actors.

Even though, previous theories express that informal networks are harder to achieve the coaches of StartupLab facilitate the possibility of creating an atmosphere for sharing and interaction with networks. It may be done by having five spaces in the incubator for external competence where informal networks might occur. This enhances the possibility for incubatees to find potential network that could be beneficial for the company. Figure 12 shows how the knowledge gap of incubatees 1 and 2 can be fulfilled through different approaches. By using proactive and continual coaching the coach has the overview of how to connect the incubatees with the external resource he has access to. This is what Merrifield (1987) describes as how the incubators provide the incubatees with the bridge between the incubatees and its environment.

Another approach is by using the five open office spaces to resource persons within the incubator. The connection to the external resource could be reached through interaction initiated by the incubatee. This is what Lee & Osteryoung (2004) describe as being able to link incubatees to external resources such as investors and competence people. The third approach is the incubatees that are interacting with each other and one of the incubatees realizes that it could help the other through their external resource as described in figure 13.

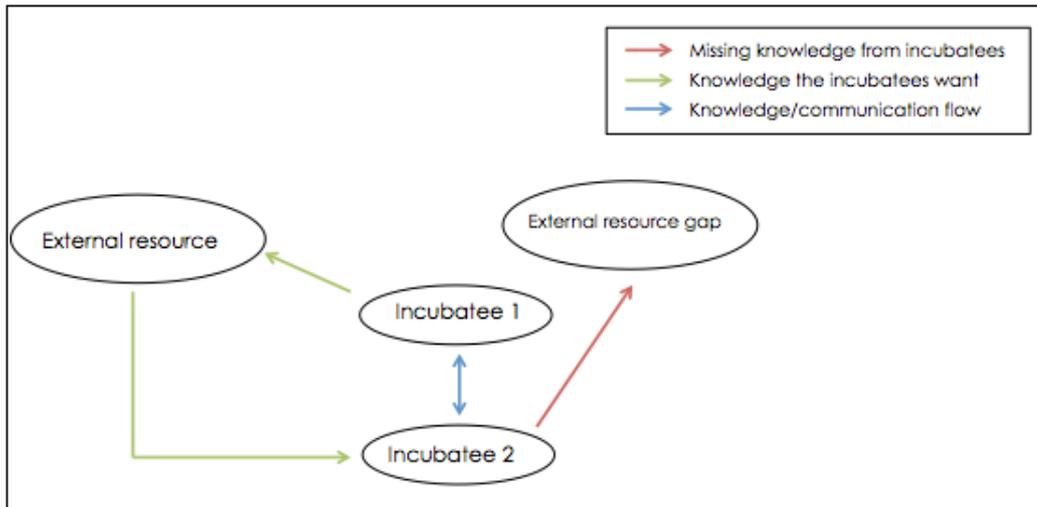


Figure 13 - Finding a solution to resource gap by communicating with another incubatee

Incubatee 2 has a resource gap and uses synergies with incubatee 1 to access the external resource through interaction. StartupLab’s incubatees state the importance of sharing network among each other. Firm E and F emphasize that they have gained access to co-operation partners, customers and employees through the internal network of the incubator with other incubatees. Bøllingtoft & Ulhoi (2005) argue that incubatees are supposed to borrow and exchange competencies from each other and cooperate in a kind of symbiotic relationship, based on the complementarity of intangible resources available in the incubator.

The sharing and synergies among incubatees in LEN has not been found to a large extent. Firm A and B argue that this is because of the range of different companies within the incubator. An example of the communication is provided in the figure 14.

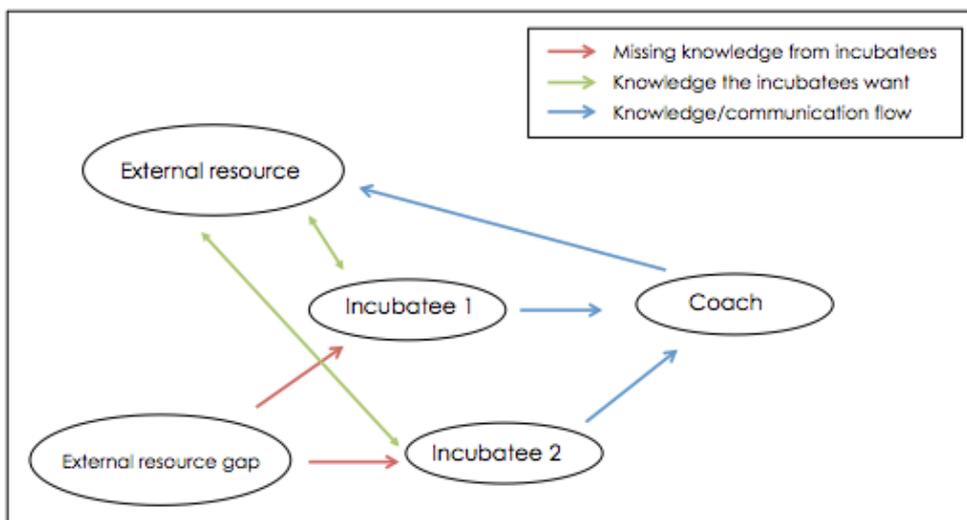


Figure 14 – Sharing knowledge LEN

The knowledge transfer takes time and the interaction between the incubatees is almost non-existing. This makes the interaction with the coaches more common, but as stated in the coaching section, LENs coaching has a reactive and episodic approach. The incubatees are engaging the interaction. Lyons (2000) found that most networks seem to be informal which doesn't make them based on contractual relationships. Birley (2000) found similar tendencies in her study of business ventures located in the same region. Formal sources were hardly used at all, thus the entrepreneurial actors were mainly relying on networks of informal contacts to help build their companies. Informal networks cannot be arranged as easily as formal networks by coaches. However, coaches may rather attempt to facilitate and accelerate the formation of informal networks by bringing the incubatees together.

Therefore both incubators have used mediation contributing with various events that have accessed interaction between incubatees and their network. This is regarded as a positive initiative by the firms. They believe the arrangements will provide a bridge-builder to innovation communities. StartupLab seem to enhance the communication level among the incubatees through the event "Wednesday lunches". This weekly event forces incubatees to communicate with each other and seem to contribute to a more frequent form of communication among the incubatees.

6.4.2 Financing

There are major differences in the financing structure and network around funding incubators. LEN uses a model where they invest micro investments of about 100 000 NOK combined with a pricing of consulting hours. The coach from LEN emphasizes that it is difficult for the incubatees to accept this deal unless they have worked closely with the coaches and seen the value of these co-activities. Coach A believes they invest in around 10 % of their incubatees.

StartupLab uses another model and the coach explained that they invest a range of USD 100k to 300k and typically take 5-15% of the equity". However, the coaching is not part of this financing, but part of the "package" where they have incentives to make the incubatee a success by having ownership in their own company. They invest in around 12 % of the incubatees. Thus both incubators only invest in a handful of their incubatees. This is also an observation Aerts et al. (2007) made when they investigated incubators in Europe. This could indicate that the incubator look at their incubatees as risk takers and only invest in the incubatees that have

greatest opportunities of success. The firms from both incubators wanted more access to funding possibilities from the incubator.

Another difference in funding between LEN and StartupLab are the network connected. Based on information from the firms it seems as LEN is related to the investment community in Trondheim, but the investment community may be somewhat fragmented. On the other hand, StartupLab seems to have a good overview of the investment community in Oslo and abroad. This is something firm F emphasizes when expressing that a business angel (BA) who worked with one of the coaches has invested in the company. Aernoudt (2004) points out that seed financing, links with business angels and business angel networks, as well as involvement in second round financing and IPO assistance should be part of, or integrated into, the real business incubation concept. The reason why previous theories point to these attributes within an incubator is that many entrepreneurs are unaware of potential investors, and investors with available capital may be unaware of existing ventures that fit their investment profile (Zahra et al. 2008).

6.5 Summary Analysis

Through this chapter the different aspect of the incubation process of the two incubators has been analyzed. The incubation model of the two incubators was stated in the empirical findings in chapter five.

The first research question asked, *“What does the incubation process consist of?”*

The empirical findings of the incubation process were illustrated in figure 4 and 10. The incubation process of the incubators was found to consist of the most important components that previous literature suggests including screening, a development phase with access to infrastructure, coaching, mediation and graduation (Hackett & Dillts 2004b; Peters et.al., 2004). However, after exploring how the incubators delivered their resources there were other findings regarding the incubation process as well. These findings will be elaborated further after answering RQ2.

The second research question was *“How are the resources in the incubation process provided?”*

Through this analysis the key resources found were:

- Infrastructure

- Coaching
- The incubator as a mediator with focus on external and internal network.

Within the infrastructure the office space was acknowledged as the most important physical resource for the two incubators. As summarized in 6.2 both LEN and StartupLab deliver somewhat the same infrastructure, but they differ in design and level of interaction. StartupLab's open office area with transparent localities and a large common area seem to increase the degree of synergies among their incubatees. Earlier contributions disagree about the effect of infrastructure (Bergek & Norrman, 2008). Many believe that the incubators provide the same physical resources and argue that co-location is not a necessity for an incubator (Nolan, 2003 & von Zedwitz, 2003). The findings from StartupLab suggest otherwise and agrees with Lyons (2000) who claim that incubatees that are physically located under the same roof make collaboration among incubatees much more likely. On the other hand, none of the incubatees at LEN state that they have cooperated to a large degree. This could question the value of co-location in the incubator. The findings described in chapter 6.3 indicate that this has to do with the coaching approach and how the coaches are interacting with their incubatees.

As summarized in section 6.3 the incubators have different approaches to coaching and *how* they deliver this as a resource. LEN uses, what Rice (2002) describes as a reactive approach. This approach is not recommended by Rice (2002), but because of LEN's co-activates this style of coaching will free time to other activities. StartupLab provides a proactive approach where their incubatees need to report to the incubator four times a year and show results according to the milestones or otherwise evicted. Wiggins & Gibson (2003) argue that optimizing a management milestone plan for their tenants is a tool to make sure the incubatees are a good fit for the incubator. It also make the coach aware of the challenges the incubatee are facing and by acting as a mediator the incubator has the possibility to link the incubatee to other incubatees in the same position or their external network.

The third resource that was analyzed was the incubator acting as a mediator between the incubatees and its surroundings. The results of *how* the incubators acted, as a mediator was quite different. Both incubators provided their incubatees with knowledge to solve an occurring problem. The coaches either solved the problem themselves or accessed their network in order to solve it. As summarized in 6.4 StartupLab seem to enhance the communication level among the incubatees

though the event “Wednesday lunches”. This weekly event forces incubatees to communicate with each other and seem to contribute to the communication among the incubatees. The communication is described in figure 11,12 and 13 and shows how the incubatees in StartupLab access more resources than the incubatees from LEN.

Going back to RQ1 the incubators was stated to have somewhat the same incubation process and holds much of the same resources, but the way they deliver them differ. The main differences are the coaching style. While LEN has a reactive approach due to their co-activities StartupLab focus mainly on being a host for the incubatees with their proactive coaching style. The fact that StartupLab are having a contact coach for each incubatee and make them follow milestones through the incubation process could increase the learning curve. The potential evictions of the incubatees make the incubation process more demanding, but might also imply that they develop more. The securing of the survival and encouragement of growth of the incubatees are the competitive advantage of an incubator (Hackett and Dillts, 2004).

The arrangements “Friday Forum” and “Minibizz” seem to increase the learning curve through the incubation process for both the incubators. However, the arrangement “Wednesday lunches” combined with the facilities described in chapter 6.2.2 seem to have reduced the barriers of communication between incubatees at StartupLab. This ease of communication could increase the learning curve even more during the incubation period by having more actors to rely on. Therefore, the incubation processes consist of similar resources, but differ in the way of managing them. StartupLab’s way of engaging in the incubatees provides the incubatees with easier access to resources such as network and assistance.

7. Discussion

The purpose of this thesis is to explore the incubation process and how incubators provide their resources to its incubatees. The analysis answered the research questions concerning the incubation process and how the incubators deliver their resources. As stated in the analysis, the incubators operate in different even though they provide almost the same resources through the incubation process.

Infrastructure in combination with coaching

From the figures 4 and figure 8 in chapter 5 the offices seemed quite similar except for transparent rooms and open office solutions. The firms from LEN did not collaborate even though they are co-located, but the firms from StartupLab did. The findings indicated that the facilities ease the collaboration, but in order to actually create synergies the incubatees needs to collaborate with each other. Even though the findings of co-location have different outcome the possibility of knowledge transfer is present. The findings therefore disagree with Nolan (2003) and von Zedwitz (2003) who argues that co-location is not a necessity feature for an incubatee. In addition, all of the incubatees from LEN wanted more communication both among incubatees and among incubatees and coaches. This is also an indication that co-location is a necessity for the incubatees. Bøllingtoft & Ulhøi, 2005 stated that incubatees are supposed to borrow and exchange competencies from each other and Bøllingtoft (2008) agrees with Lewis (2001) and Lyons (2000) who argue that co-location makes collaboration much more likely among incubatees. The findings suggest the same, but they also could indicate that it is *how* the resources are delivered, especially with regard to focus on managing and access network. It seems to be up to the coaches to provide the incubator with a culture for collaboration.

According to Rice (2002) collaboration also requires a greater effort from the incubatees. The findings also indicate that the incubatees at LEN do not collaborate very well because they have few similarities among each other. According to Bergek & Norrman (2008) the risk of having an *idea* focus is that the incubator managers must have access to deep knowledge in relevant technological fields in order to evaluate the viability of ideas. Having a wide portfolio with many different markets makes the screening approach more comprehensive. This could lead to large differences among the incubatees, which make it more difficult to both communicate

and cooperate. Findings from Aaboen (2009) showed that a team focus could be more suitable to find out if the person are coachable or not. This is not fully possible to detect during the screening meetings. However, a team focus require a more proactive approach than LEN has had up to now. By not being involved in the process, Audet and Couteret (2012) argue that the incubatee's strategies are harder to put into action. With a reactive approach the coaches from LEN lack the overview of the incubatees, which have led to the emergence of so-called "comfort-founders". Coach A acknowledges that they don't follow these "comfort – founders" thoroughly. Gibbs (2000) state that isolated entrepreneurs risk lacking the tools and support (advice, practical aids) needed to build a successful business. Coach A state that its hard to get rid of these incubatees because they are paying their rent every month. Peters et al. (2004) found in their interviews that some incubators increase the rent as an incentive for non-performing start-ups to leave the incubator. This could be an incentive for the incubator to get rid off their incubatees. The findings from this thesis indicate that LEN could increase the collaboration among incubatees by having a more focused portfolio. Through a more focus portfolio their reactive style of coaching could also be more efficient resulting in more time focused on their co-activities. The findings also indicates that a proactive coaching style is more suitable for the incubatees, but in order to change coaching style some of the coaching positions should be 100 % focused on the incubator. Another finding is that having a contact coach for each incubatee could reduce the number of "comfort-founders" since this provides a better overview towards the incubatees.

StartupLab's proactive styles of managing combined with arrangement such as "Wednesday lunches" where the coaches suggest that the incubatees should sit with people they don't know seem to ease the communication. Somsuk & Laosirihongotng (2014) argue that cooperation can only be implemented in an environment that is based on mutual trust. This indicates that StartupLab focuses on a sharing culture in order to make collaboration more efficient. Figure 12 and 13 showed how the incubatees access different resources to solve their problems. The findings also suggested that some of the problems might not occur when the coaching is continuously, which could free even more time. According to Rice (2002) it is not just the resource of coaching that needs to be delivered in another way to enhance collaboration. It is also up to the incubatee to adopt the knowledge transfer from the coach and other incubatees. Thus mutual trust is important as described by Somsuk & Laosirihongtong (2014).

Mediation

The incubatees from StartupLab have a sharing culture. With regard to the screening on team as described in chapter 6.2 this sharing indicates that incubatees relate well to each other. Open offices access communication among them and the coaches are proactive and link them each other as illustrated in figure 12 & 13. Providing network and resources across the incubatees is a resource in itself (Hackett & Dillts, 2004). At the same time firm D statement differ by claiming that the company has not used its internal network to a large extent. Previous research has found that founders in the early stage of development have smaller networks and use less time on them than founders in later stages (Greve, 1995). Based on previous theories this could suggest that firm D is a more mature start-up that has a somewhat stronger network due to the fact that it was established in 2009. Firm D also emphasized that it had gotten more out of the incubators role as a mediator if they had arrived earlier. However, it could also indicate that the incubatee is not as proactive as the other incubatees in the network sharing. This is according to the findings by Rice (2002).

Funding

There are differences regarding financing structure and network in the incubators. LEN uses a model where they invest micro investments around 100 000 NOK combined with a pricing of consulting hours (250 000 NOK). The coach from LEN emphasized that it is difficult for the incubatees to accept this deal unless they have worked closely with the coaches and seen the value of this co-activities. StartupLab uses another model and the coach explained that they invest a range of USD 100k to 300k and typically take 5-15% of the equity". However, the coaching is not part of this financing and coach B describes it as a part of the package where they have incentives to make the incubatee a success by having ownership in the company.

LEN has invested in around 10 % while StartupLab has invested in 12 % of the incubatees. Both incubators only invest in a handful of their incubatees. This is also an observation Aerts et al. (2007) made when they investigated incubators in Europe. This could indicate that the incubators look at their incubatees as risk investments and only invest in the incubatees that have the largest possibilities of succeeding.

8. Conclusion

The purpose of this thesis was to explore the incubation process and how incubators provide their resources to its incubatees. Through a literature review covering the relevant research within this field the theoretical framework was created. Case studies of two incubators were conducted where three incubatees and one coach represented each incubator. The incubators were categorized based on Bergek & Norrmans (2008) screening framework (chapter 6.2). The two research questions were answered based on the results and the analysis. The first research question asked:

RQ1: What does the incubation process consist of?

The findings were similar to Hackett & Dillts (2004b) and Peters et al. (2004) who found that the incubation process consist of selection, infrastructure, coaching, mediation and graduation. However, even though the incubators have the same incubation process they differ in how they are managing the process. These important mechanisms were found through research question two:

RQ2: “How are the resources in the incubation process provided”

The incubators deliver co-location and by providing an environment based on sharing and trust the co-location could increase collaboration. This was found in one of the incubators. The incubators had the same infrastructure, but different design. The findings suggest that providing facilities with transparent walls and open office solutions could increases the probability of collaboration.

The role of the coaching is found as an important resource. The incubator that had a proactive and continuous coaching style provided the incubatees with easier with access to resources such as network and assistance. This incubator was also providing access to more resources to its incubatees. The coaching is closely related to the role as a mediator assisting them with access to network possibilities. By collaborating the incubatees have shared network among each other. This has resulted in collaboration with business angels, collaboration partners and new customers.

8.1 Implications

The conclusion above involves some implications for the incubators. The findings suggest that LEN should focus more on what kind of incubatees they are accepting to the incubator. The co-activities of the coach's leads to limited time assisting the incubatees. They should therefore focus on accepting incubatees that are in somewhat in the same sector to ease collaboration among incubatees, which could free time for coaches' co-activities.

The findings from this thesis also imply that LEN should have a contact coach for each incubatee. This could reduce the rice of "comfort-founders" which might improve the culture. In order to evict "comfort-founders" Peters et al. found that some incubators increase their rent as an incentive to get rid of them. Another approach is to focusing on milestones as StartupLab. If the incubatees do not perform accordingly, they should be evicted.

8.3 Further Research

Based on the conclusion future research should provide examination of types of coaching styles. Rice has given some contribution, but which coaching style are most effective needs to be further elaborated. There are indications of a proactive coaching style as most beneficial for the incubatees, but further investigations need to be done. There would be interesting to investigate the coaching style in different countries as well.

The coaches' incentive for working with the incubatees should also be further examined. Being an entrepreneur is not an eight hours a day job. It needs to be questioned if the coaches working with the entrepreneurs are willing "to go the extra mile, not just the other way".

There has been found differences in the collaboration among the incubators. The culture within the incubators is a topic that has not been investigated by previous research to a large degree. This topic should also be investigated.

8.2 Limitations

The purpose of this thesis was to *explore* how incubators provide their resources to their incubatees. Some of findings I assumed would be discovered were not. These are presented below.

Focus on infrastructure, business support and internal network.

This study has a mainly focus on internal resources. Some of the external resources have not been taken into enough consideration such as business angels and collaboration partners. The theoretical foundation may have been too small to give reliable results. On the other hand, this kind of investigation will never be able to give absolute reliable findings.

Exit-policies

The scope of this study has not been around the exit policies or graduation. This is mainly due to the time frame. For investigating graduation a longitudinal study would be more appropriate. There is also a lack of previous research regarding graduation even though it is mentioned among the most important management features of business incubators (Aerts et al., 2007; Bruneel et al., 2010; Lee & Osteryoung, 2004; Lumpkin & Ireland, 1988).

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10. Appendix

Appendix 1 - List of physical resources

Physical resource	LEN	StartupLab
Offices	X	X
Open offices	-	X
Transparent offices	-	X
Meeting Rooms	X	X
Reception	X	X
Testing facility	-	-
Laboratory	-	-
UX-Lab	-	-
Hardware Lab	-	-
Video conference	X	X
Internet access	X	X
Dining area	X	X
Kitchen facilities	X	X
Cafeteria	X	X

Appendix 2 – Interview guide firms

Bakgrunn: Om idéen/produktet og bedriftsetableringen

- Fortell om historien til bedriften, hvordan kom den til live?
- Hvor kom ideen fra? (internt, arbeidslivet, kunde, konkurrent, FoU-miljø?)

Bakgrunn: bedriftsledere/entreprenøren(ene)

- Fortell om bakgrunnen din (spør nødvendigvis ikke om dette, men kartlegger utdanningsbakgrunn, arbeidserfaring osv gjennom research og smaltalk)
 - Utdanningsbakgrunn
 - Arbeidserfaring
 - Tidligere erfaring med bedriftsetablering
- Hvor lenge har dere sittet på inkubatoren?
- Har ideen blitt endret i løpet av bedriftsetableringen? Pivoting

Internt

- Hvordan ble du/dere oppmerksomme på denne inkubatoren?
- Hva gjorde at dere valgte nettopp denne inkubatoren?
- Fortell meg om en typisk dag på jobben.
- Kan du forklare meg hvordan en inkubator fungerer?
- Fortell litt om inkubatoren du sitter på.
- Hvilke ressurser leverer inkubatoren? La dem selv definere ressurser
- Hva er viktig for deg med tanke på de ressursene du nettopp beskrev?
- Hva var motivasjonen din for å søke om opptak til XXX Inkubatoren? (Samhold, kompetanse, nettverk, subsidiert kontorplass, andre faktorer?)
- Samarbeider dere med noen på inkubatoren? Hvem, Hvordan?
- Bruker dere andre inkubatorbedrifter som sparringspartnere?
- Har du kontakt med andre bedrifter?
- Hvordan fikk dere kontakt med disse?
- Har dere beholdt kontakten med utflyttede startups?
- Hvordan fungerer Inkubator XXX med tanke på felles aktiviteter og møteplasser? (praksis)?
- Har dere rådgiver? Hvordan fikk dere rådgiver? Fortell om denne prosessen
- Hva har rådgiveren bidratt med?
- Hva slags plan har dere for fremtiden? Når tenker dere å flytte i egne lokaler?

Fysiske ressurser

- Kan du fortell om de fysiske ressursene dere får? Kartlegg hva som er viktigst og hva som har bidratt.

Finansielle

- Hvordan finansierer dere bedriften?
- Har dere fått penger/kunnskap fra inkubatoren?
- Har dere fått muligheten til å dra på kurs?
- Har dere fått hjelp til å skrive forretningsplan?

Nettverk

- I hvilken grad er dere fornøyd med den kompetansen bedriften får tilgang til gjennom Inkubator XXX? (inkubatorleder, forretningsutviklere, kompetansenettverk osv?)
- Får alle bedriftene *samme* kontakter? Utdyp
- Hvor ofte kan dere bruke rådgiveren deres?
- Har dere fått tilgang på ressurspersoner eller nettverk gjennom inkubator? (Finansielle, nettverk, fysiske, menneskelige)
- Var det rådgiveren som satt dere i kontakt? Utdyp

Betydningen av nettverk?

- Har dere fått tak i noen leverandører/kunder/samarbeidspartnere allerede?
- Har bedriften noe spisskompetanse/unik kunnskap som skiller seg fra konkurrentene? (**VRIN**)
- Har inkubatoren noe spisskompetanse/unik kunnskap som skiller seg fra de andre inkubatorene? (**VRIN**)
- Har dere fått noen nettverksfordeler ved å sitte på denne inkubatoren for å skaffe denne kontakten?
- Var det dere eller inkubatorledelsen som tok kontakt ?
- Er det noen nettverk du har hatt spesielt nytte av med tanke på bedriften?
- Hvordan kom du i kontakt med dette nettverket? Kjente dere dem fra før? Rådgiver?
- Er du fornøyd med kompetansen til rådgiver? Evt hva savner du?
- Har inkubatoren sitt nettverk bidratt til noe?
- Er det noen aktører som bidrar med flere ressurser?
- Beskriv de viktigste utfordringer og barrierer knytte til bedriftsetableringen og de ulike fasene? (nettverk, kompetanse, ressurser) (stort spørsmål)
- Er det åpen kommunikasjon? Vilje og praksis for å utveksle informasjon internt i inkubatoren? (kunder, nettverk, virkemiddelapparat, etc.)?

Avslutningsvis:

- Har du noen forslag til andre jeg bør kontakte?
- Kan jeg ta kontakt senere for oppfølgingsspørsmål?

Tilleggsspørsmål:

Har bedriften din vært hos andre inkubatorer enn denne? Hva er de største forskjellene?

Hvor lenge har bedriften vært tilknyttet inkubatoren?

Hvor ofte har du vanligvis møte med inkubatoren (ressursperson i inkubator etc) der møtet handler om utviklingen av din bedrift?

Hvor ofte hadde du vanligvis møte med inkubatoren (ressursperson i inkubator etc) der møtet handlet om utviklingen av din bedrift?

Har bedriften din hatt behov tjenester mens bedriften var tilknyttet inkubator?

I hvilken grad har tjenesten(e) fra inkubator dekket din bedrifts behov for kompetanse/kunnskap?

Hva hadde skjedd med bedriften dersom den ikke hadde blitt tilknyttet en inkubator?

Kan du tegne verdinettverket til bedriften din – de aktørene som er av innflytelse og markere hvor stor innflytelse de har på bedriften din.

Utdyp med egne ord om, og eventuelt hvordan, tilknytningen til inkubatoren har bidratt (positivt/negativt) til bedriftens innovasjonsarbeid.

Utdyp gjerne med egne ord hvorfor du ville ha anbefalt/ikke anbefalt andre bedrifter å bli tilknyttet inkubatoren?

Hvis du kunne valgt på nytt, ville du da ha valgt å bli tilknyttet inkubatoren?
Utdyp med egne ord hvorfor du ville ha anbefalt/ikke anbefalt andre bedrifter å bli tilknyttet inkubatoren?

Kan du gi ett eksempel på hvordan inkubatorleder/rådgiver og/eller hans/hennes team har hatt en positiv eller negativ betydning for å realisere verdiskapingspotensialet i din bedrift?

Forklar med egne ord om andre bedrifter i samme incubator har vært viktige for din bedrift?

Appendix 3 – Interview guide coach

Intervjuguide Management/Rådgivere

Tema: Bakgrunn

1. Bakgrunn Inkubator

Hva var årsaken til at dere valgte å starte Inkubatoren?

Hvordan velger dere ut bedrifter? (basert på teknologi, team osv) (om de passer inn osv)

Fortell om screeningprosessen.

Bedriftsleder/rådgiver

- Fortell litt om bakgrunnen din
- Utdanningsbakgrunn

- Arbeidserfaring
- Tidligere erfaring med bedriftsetablering

- Hvor lenge har du jobbet på inkubatoren?
- Har inkubatoren endret mye siden oppstarten?
- Hvor kom ideen om å starte en inkubator fra?
- Hva var målet med etableringen?

Kunne du tegnet opp prosessen fra dere screener bedrifter, gjennom hva dere leverer til startupen forlater inkubatoren?

- Foran deg her er en figur. Du har nettopp tegnet prosessen, men er det noe du tenkt å tilføre inkubatoren i noen av disse stegene? Samsvarer tilbud og etterspørsel?
- Hva er det viktigste dere leverer?
- Hvordan finansieres inkubatoren?

Om inkubatoren og rådgiver

- Hvor mange bedrifter er du rådgiver for?
- Hvordan velger dere hvem dere er rådgivere for?
- Hvor ofte er dere i dialog med startupsene?
- Er det de som kommer til dere eller dere som kommer til dem?
- Er du rådgiver for bedrifter innenfor samme stadiet eller marked?
- Hva slags startups ser dere etter når dere gjøre screening? (teknologibasert osv)
- Tar dere høyde for hva slags kompetanse dere kan tilby startupen? Utdyp
- Hvilke støttespillere er viktige for dere som inkubator og hvorfor?
- (Hva ser dere etter når dere rekrutterer rådgivere/mentorer?)

Om bedriftens kunnskapsbase

- Hvilken kompetanse/ressurs mener dere er viktigst å levere?
- Hvilken kompetanse mangler dere/skulle du ønske at dere kunne levert.
- Hva vil du si er de viktigste faktorene for at en Startu-up skal bli til en vekstbedrift gjennom et inkubatorløp?
- Har inkubatoren noe spisskompetanse/unik kunnskap som skiller seg fra de andre inkubatorene? **VRIN**
- Har dere noen inkubatorer dere samarbeider mer med enn andre?
- Hvilke områder er dere sterke på? Hvilke områder er dere eventuelt svake på?

Betydning av nettverk i bedriftsetablering/Produktutviklingsfasen?

- Hvilken betydning har ulike typer nettverk for utviklingen av startups?
- Har dere fått andre nettverk ettersom inkubatoren har utviklet seg?

Inkubatoren sin rolle i etablering og utvikling av bedriften

- Samhold, kompetanse, nettverk, kontorplass – andre ressurser?
- Felles aktiviteter og møteplass for diskusjon av ideer? (sparringspartnere)
- Holder dere kontakt med "utflyttede" startups?
- Hva er målet for fremtiden?
- Har dere noen kriterier dere setter for bedriftene, evt mål, som de må levere etter?

Avslutningsvis

- Har du forslag til andre jeg bør kontakte?
- Kan jeg ta kontakt til senere for oppfølginsspørsmål?