

Aalto University
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Degree Programme of Service Design and Engineering

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Common Business Development Activities In Successful Technology Startups

Master's Thesis
Helsinki, February 17, 2015

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ABSTRACT OF
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<p>This research examines the most common business development activities carried out by technology startups. The purpose of this study was to find out whether there is a set of common business development activities across successful technology startups. The main research question was formulated as follows: <i>“What business development activities are most common among successful technology startups?”</i></p> <p>This research was conducted as a qualitative study using the methodology of theory building from selected study cases. The sample consisted of six Finnish technology firms, which were interviewed twice, totaling 12 interviews altogether. The first interviews were an initial survey over email or phone, whereas the second interview was carried out as a face-to-face meeting. Each company was also cross-interviewed about the rest of the sample firms, to obtain an additional viewpoint to the history of each company.</p> <p>This research was based on a combination of two types of case firms, according to their transition from startup to company: successful startups and underdeveloped startups. Among the case firms, certain business development activities were found to be exclusively run by the successful startups, where some others were exclusively run by their counterparts. The predominant business development activities among the successful startups were finding the product/market fit, focusing on a business-to-business (B2B) model, leveraging advisors, becoming international, and building strong customer relationships.</p> <p>The results indicate that there seems to be a similar type of business development activities among successful technology startups, according to the data collected from the sample firms. Furthermore, the results incite to claim that there could be a connection between certain business development activities and the fact of success in the startup context. Consequently, this research could be used as a first step for investigating further, in order to find whether there could be a methodology for creating successful technology startups by executing those business development activities which are more likely to help the startup to succeed.</p>			
Keywords:	successful technology startup, business development activities, new venture, startup success		
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Chapter 1

Introduction

In this chapter I will describe the background and motivation to perform this study. Afterwards, I will introduce the research problem to be tackled by the study, followed by the objectives of the research. Finally, I present the scope for the research and the structure of the rest of this thesis.

1.1 Background

I believe technology entrepreneurship is the key to economic development. New technology ventures can have positive effects on employment and could rejuvenate industries with disruptive technologies. Given the world economic situation originated in 2008 and still going on as of 2015, I wanted to create a study which technology entrepreneurship could benefit from, thus having a real impact on the economy.

I wrote this thesis as an independent research project with the interest of finding out the behavior and operations behind the so-called technology startups. The overall aim of the project was to increase the understanding, for entrepreneurs, of why and how some Finnish technology startups are able to become successful and why they present better performance than their

counterparts.

Entrepreneurship is a broadly studied field, however it lacks the engineering aspect of doing things systematically (Peña et al., 2010). Business success is often attributed to luck and circumstantial matters (Hafer et al., 2008). However, after experimenting by myself as an entrepreneur, I believe that there could be a systematic way of carrying out business development activities in startups, in order to minimize the possibility of risk and increasing the chances of business success.

According to the World Economic Forum's report about Global Entrepreneurship and Successful Growth Strategies (2011), the highest effect on business success is actually decided early on, when a company is created. Up on creation, a company has to position itself in different fronts, including, but not limited to, entering the market, customer segmentation, defining the value proposition, leveraging the distribution channels and managing its customer relationships (Foster et al., 2011).

Business research has often demonstrated that there is not a fully proved formula for business success, yet I believe that using a well-defined and systematic process, it could be possible to maximize the chances of success and minimize risks. My main motivation comes from the Customer Development Model introduced by Steve G. Blank in 2007, which aims at creating a systematic and iterative way of co-designing and co-implementing businesses alongside with future customers (Blank, 2007). One of the most important potential outcomes of this thesis work could be the possibility to find a set of business development activities to enhance the chances of business success in startups. Such a set of activities could eventually be used as a business reference for technology startups to increase their chances of success.

In this thesis, I will examine and describe the business development activities that have been used in Finnish technology companies during their startup

phase. The research will be based on both successful startups as well as their counterparts, or so-called underdeveloped startups, which are not successful although still running companies. I conducted this research as a qualitative study of multiple company cases.

1.2 Research Problem

This thesis aims at understanding the main business development activities carried out in the startup phase of technology firms and how those activities could be related to startup success. The underlying research problem is to find whether there is a set of common business development activities among successful technology startups. This problem can be approached only after defining the meaning of startup success.

The main research question can be better understood according to three basic research sub-questions:

- RQ1: What is a successful technology startup?
- RQ2: What are the main business development activities among technology startups?
- RQ3: What are the most common business development activities among successful technology startups?

At a higher level, the research problem that this thesis attempts to tackle is what are the business development activities carried out upon company creation, and to find out whether there is a common set of such activities for creating technology startups with a higher chance of success. Figure 1.1 represents the research problem and the original motivation for this research.

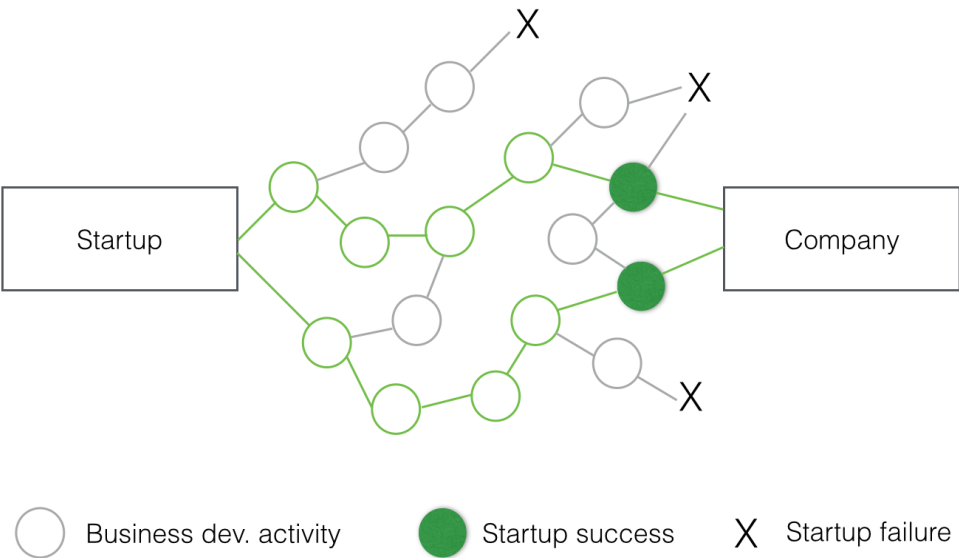


Figure 1.1: The concept of success path in startups.

Figure 1.1 represents the life cycle of a technology startup, from creation to stabilization. The research problem is based on the suspicion that there could be different “paths” consisting of different business development activities that, when executed during the startup phase, could lead the startup to become successful. Similarly, there must be different paths of business development activities which do not lead the startup to success. Startup success is represented with a green-filled circle in figure 1.1. Additionally, startup failure is indicated with an X, and refers to the fact that the execution of certain business development activities may lead the startup to failure. The concept of startup success and its relation with company stabilization were discovered while performing literature review research, and they are described in section 3.3.

1.3 Scope

The scope of this study encompasses technology companies in Finland. The objects of study across such startups are the framing of their business development activities within the startup phase, the criteria for considering business success during the startup phase period, and the possible business theories supporting the existence of such business development activities and their use in the startup phase of a company.

This thesis focuses on Finnish technology firms that, according to the provided theory content in the literature review, have passed from startup to stable company, therefore having achieved some degree of business success in their startup phase. This includes Finnish technology firms that have become stable according to their profitability and business performance.

This research is focused on the concept of new ventures and their key business development activities. The fields of strategic management and formal business processes have been avoided, since they deal with decisions and actions in self-sufficient running companies (Meyer et al., 2002). However, entrepreneurship research is concerned with the creation of growth ventures (Meyer et al., 2002), which is fundamental to the nature of this research. The concept of start-up company, which Steve G. Blank defines as a temporary organization that is looking for a working business model, is used across this thesis to emphasize the fact that corporate strategy is not relevant to this study (Blank, 2012). The relevant part of this research are the early-stage business development activities that a new venture carries out towards achieving profitability and stability.

1.4 Structure of the Thesis

The rest of this thesis is structured as follows. Chapter 2 describes the research design and explains how the research was carried out methodologically speaking. The literature review was selected using a partially systematic research procedure and the *reference snowballing* technique. The data sample selection, its collection and the filtering criteria are explained in Chapter 2, as well as a brief depict at how data analysis procedures have been used.

Chapter 3 offers an overall view at the current theoretical landscape in the startup field. Including a list of the main business development activities often performed in technology startups, and which theories exist to provide enough reasoned principles to support startup success definition. In other words, Chapter 3 attempts to define the necessary criteria for calling a technology startup successful, and tries to identify the main business development activities carried out in such startups.

Chapter 4 introduces an overview of the most relevant results from the firm cases that were studied during the research, presenting their company characteristics, current status towards stabilization and business development activities. Afterwards, Chapter 5 brings together the analysis and discussion of the results and intends to show any common business development activities or patterns among successful startups, and attempts to answer each research question according to the results obtained. Finally, Chapter 6 includes a summary of the major implications of this study for further research, as well as the most important practical implications for creating technology startups.

Chapter 2

Research Design

2.1 Literature Review Research

2.1.1 Purpose

During this thesis, I conducted a literature review research to answer the research questions RQ1 and RQ2:

- RQ1: What is a successful technology startup?
- RQ2: What are the main business development activities among technology startups?

Rigorous and thorough systematic literature review (SLR) requires significant resources to be performed (Autio & Schildt, 2010). Thus, the literature review research I conducted was slightly less rigorous than pure SLR. I based my literature review research on primary sources, according to the research questions and their main keywords. Subsequently, I applied the technique of “reference snowballing” (Wohlin et al., 2013) to widen the knowledge of the research and enrich the quality of the final sources. The

rationale behind this approach was that, since startup and new ventures' scientific references are scarce, examining a smaller number of highly focused articles with good references and reviews would provide a more proper set of high-quality references, using backtracking from the sources of these primary articles themselves.

2.1.2 Search Process

The search process I used to find the literature review was an iterative process with four phases. The search process is described in figure 2.1.

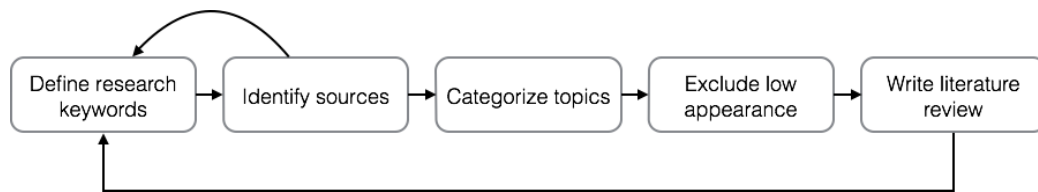


Figure 2.1: The literature review search process.

The *Define research keywords* part consists of a first attempt by analyzing the thesis title and the constitution of the research questions. From these statements, the main keywords that appear to be of high importance to this thesis are:

- startup, success
- technology, startup
- business development, activities

In the *Identify sources* phase, I used an iterative search on selected databases. This iterative process started by entering a few keywords and, depending on the result obtained, filtering with new added keywords until obtaining certainly relevant journal articles. The three main databases accessed were EBSCOhost, ScienceDirect and Google Scholar. The main search query was formulated as follows:

(*“new venture” OR “start-up firm” OR “young firm”*) OR (*“activities” OR “formation” OR “business development” OR “process”*) AND
(*“performance” OR “success”*) AND (*“technology”*)

The method for ordering these research steps follows a pattern for doing systematic literature review suggested by Kitchenham (Kitchenham, 2004). The main search query was achieved after eight different iterations. First, I performed a clean search about startup business success that resulted in an unbalanced load of results. Then, each tuned search query served as an input for the next iteration, refining each search to end up with articles mostly focused on startups, their initial business development activities and the performance and results of those activities towards success. The iterative process included the following eight iterations:

1. searched “startup business success” and obtained 51,600 articles
2. added “new venture success”, and obtained 728,000 articles
3. realized that “new venture” is much more used than “startup”, so I adapted the search terms
4. added “young firm”, and obtained 814,300 articles
5. added “activities”, “development”, “formation” and “process” and obtained 146,193 articles

6. added “performance” and “technology”, and obtained 858 articles
7. analyzed 858 articles by title and their 1-liners, and obtained 172 articles saved
8. read those 172 articles’ abstracts, and obtained 31 articles selected as final (according to the criteria from sections 2.1.3 and 2.1.4)

The *Categorize topics* phase was used to distribute the articles in groups, according to their core coverage. The two main groups I was able to create from repeated searches were: *startup success/performance* and *startup processes/key activities*. The first group would contain the sources talking about business success in the startup context, its definition and measurement. The second group would contain the articles describing the key business development activities in technology startups. This division was implicit and only the articles with the highest rank for inclusion criteria (addressing the research questions in a direct manner) were considered as core articles, for containing the richest knowledge about the topic presented in the research questions. There were exactly nine core articles out of the total 51 relevant sources for this research, including 31 journal articles, 11 books and nine sources of other type.

In the *Exclude low appearance* part, I excluded those sources that contained notably a lower amount of statements related to the main research topics or only contained statements from one SLR. The purpose for this exclusion was to keep the literature review focused on the most common business development activities among technology startups. Additionally, I considered irrelevant the companies’ executive summaries, do-it-yourself books and non-scientific books.

The final part of writing the literature review for the thesis served as a

feedback point for refining the initial research questions and performing an incremental search when needed. Furthermore, the poor identification of sources for a set of given keywords could be also an indicator that the research questions should be rethought or simply that they keywords were not properly extracted from the research questions.

2.1.3 Inclusion and Exclusion Criteria

To limit the literature review to sources that were relevant in the context of the research problem, the results of the search were filtered by using an inclusion and exclusion criteria. The main drivers for source search were, in order of priority, the title of the thesis, the main research question, and the keywords from the research questions. If it was obvious that a source did not fulfill the inclusion criteria, the source was excluded. If it was unclear based on the title and main research question whether the study met the inclusion criteria, the contents of the abstract were examined to determine whether the study met the inclusion criteria or not.

The following inclusion criteria were used to select more accurate results:

1. The source was focused on technology startups (new technology ventures) as a whole, not on larger firms or companies, such as enterprises or wealthy companies.
2. The source contained an SLR of empirical research of technology startups' business processes and/or activities.
3. The source was relevant in the context of new technology ventures, business development activities in early-stage companies and new venture creation activities in general.
4. The source was written in English and the paper was available in digital format.

5. The source met the quality criteria defined in section 2.1.4.

The following exclusion criteria were used to filter out the results:

1. The source covered strategy, processes and performance in established enterprises, not being considered a startup or new venture anymore.
2. The sources with topics about Key Performance Indicators (KPIs), which typically relate to large companies and enterprise, were excluded, since they are used in the company stabilization phase, not in the startup phase.
3. The sources that talked about highly strategic processes were excluded, since long-term strategy and formal processes are used in well-established companies. However, the word “process” could still be employed in articles referring to startups’ business development activities.

As stated in the inclusion criteria, studies that were not relevant for new technology ventures, early-stage business development activities and company creation were not included. However, it should be noted that SLRs containing studies related to small- and medium-size enterprises (SMEs) which had just transitioned to stable company could be included, if the main focus of the source was on how the company moved from the startup phase to the stability phase.

2.1.4 Quality Criteria

The purpose of the quality criteria was to exclude sources that did not appear to provide a sufficient scientific contribution. After determining that a source

met the inclusion criteria, I then evaluated the quality of the source based on the following quality criteria:

1. The source was a traditional scientific paper, not a set of presentation slides or a corporate whitepaper.
2. The systematic review of the source was done in a way that made it possible to identify the inclusion and exclusion criteria, research databases and searches performed.

Due to the nature of this thesis, there is another set of non scientific, yet relevant sources that needed to be reviewed in order to provide enough mainstream data to compare with the classic papers. Selected books about modern entrepreneurship and new venture creation in a pragmatic way were selected to add contrast to the scientific sources review, mainly for discussion purposes.

2.2 Empirical Research

2.2.1 Purpose

The empirical study of this thesis consisted of a case study of six Finnish technology companies that had passed the startup phase, according to the definitions in section 3.2. The consideration of “stable company” was selected after learning from the literature review that success in the startup context is often determined by how stable a company is, in terms of team, product and sales. The purpose of the empirical study about such technology companies was to answer RQ2 and RQ3:

- RQ2: What are the main business development activities among technology startups?

- RQ3: What are the most common business development activities among successful technology startups?

The list of interviewed companies is depicted in Chapter 4, where there is a brief description of the company and its business context. Each company case is explained at an introductory level, to situate the reader in the perspective of each company, their business context, their early-stage business development activities, a short analysis of their possible startup strategy and why they are relevant to this research.

2.2.2 Analysis Process

I used a four-stage process to analyze the interviews, with an iterative approach where the data extracted from an interview served as an input of improvement for the next interview. This process is briefly depicted in figure 2.2.

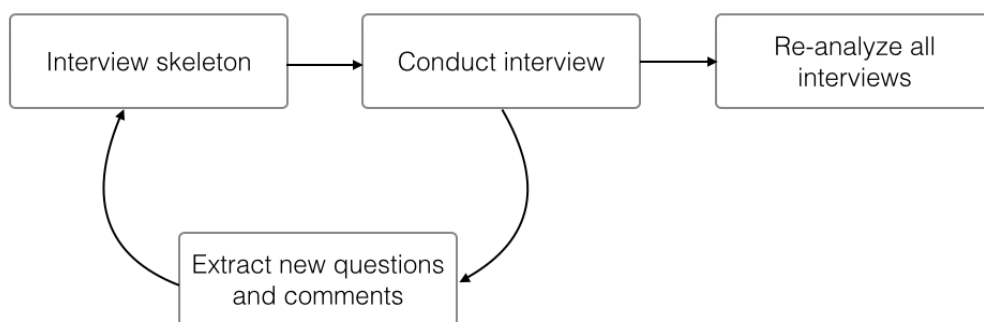


Figure 2.2: Four-stage empirical analysis process.

In the first state, an initial interview skeleton was defined. That is, a set of initial questions which were going to be asked to the interviewee. These questions also served as the basis for creating an open discussion and opening to more adaptive questions, depending on the company's concrete case and the interviewee's answers. After conducting the interview and having extracted the answers to both fixed questions and improvised questions, the interview skeleton was revised. The main purpose of such revision was to ensure that a more robust interview skeleton was prepared for the next interview, so that new questions would always appear, thus providing a more accurate research interview after each iteration.

Finally, after having iteratively collected each interview's answers, a final review process was carried out. This final revision allowed for double-checking each interview with the latest interview skeleton (after having integrated all feedback from each interview), with the purpose of assuring the homogeneity of quality across interview results. In case of having found partially answered questions or not proper data in any of the previous interviews, two measures were taken:

1. the interview was analyzed through, in order to find a more complete answer to the latest questions
2. a second contact (email or phone call) was made with the interviewee to ask for extended answers to the missing questions

Subsequently, all the data from the analysis process was listed and compared with the statements from the literature review (Chapter 3), in order to find out what were the main commonalities and differences between researchers, practitioners and actual companies. The results, which are presented in Chapter 4, are analyzed and discussed in Chapter 5, and the implications of

such findings are exposed in Chapter 6.

2.2.3 Interviews

Over ten pre-interviews were performed over email, however only seven companies were finally available for an in-depth face-to-face interview. One of the interviewed companies was not valid for the research, since the amount of data that was available (including revenue, profit and team size) represented only two years of operations, which was not sufficient for the requirements of this study. Therefore, the total amount of study case firms presented in the results of this thesis, in Chapter 4, is six.

All the interviews were carried out on face-to-face basis or, under the impossibility to physically meet, over video-conference. This allowed for introducing the questions in a customized way, depending on the interviewee's style and company's business context. The list of companies was composed of Finnish technology companies that had passed the startup phase, based on the criteria from 3.2.1. The common criteria for selecting the appropriate candidate companies were:

- Finnish technology company
- the company had been running for at least 3 years
- the company had its own product(s) or service(s)
- the company is, by no means, a consulting or outsourcing company
- the company has revenue and is no longer considered a startup
- the company is, by no means, a large enterprise (less than 100 employees, based just in one country, less than 10M turnover)
- the company provided full answers to all the questions

The interviewees selected from the chosen companies were always people on the top governance level, being the majority of them CEOs, or otherwise part of the founding team. This allowed to receive the maximum amount of knowledge about the business development activities performed by the company at the time of being a startup. Each company was interviewed twice. The first interview was a short questionnaire over the phone or via email, whereas the second interview was an in-depth discussion about the story of the creation of the company.

The preferred method for interviewing the firms was to hold a private discussion behind closed doors, with only the researcher and the interviewee present. The purpose for ensuring the privacy of the interview sessions was to allow the interviewees to express their opinions freely. The interviews were recorded to reduce the possibility of the researcher incorrectly recalling what was said and thus distorting the data. The language of all interviews was always English. In several occasions, the interviewee had a tight schedule and preferred to have a video-conference session.

The interviews were semi-structured, in order to bring flexibility to the discussion and gathering data from story telling. I used a set of prepared questions, grouped by different categories, which tried to answer each different research question (RQ2 and RQ3). The initial set of questions for the semi-structured interview is listed in Appendix A. I anticipated that specially the early-stage strategy issues might be a sensitive subject for some interviewees, since this data is often considered as precious business secrets that companies do not want to reveal to anyone. Therefore, allowing flexibility and adaptive interview questions enriched the quality of the input from the interviewees.

The skeleton for the semi-structured interview was slightly updated after

each session, making the research interactions more adaptive to every case. The final set of questions for the semi-structured interview, after having performed all interviews is listed in Appendix B.

Chapter 3

Literature Review

3.1 Studies Included

The existing literature referring to business creation, management and success can be divided into two main categories for the sake of validity of this research. On one hand there is the classic entrepreneurship literature (mostly accepted as a scientific source of information), with definitions, processes and well-proved cases covering company governance, which date from 1910 until the early 2000s (Liu et al., 2010). On the other hand, there is the pragmatic viewpoint offered by applied theories from real entrepreneurs who have spent their life building successful companies.

Another necessary division of literature sources is the differentiation between sources that tackle the definitions of startup, the sources that talk about business development activities in startups and, finally, the sources that intend to define business success within the scope of a startup. From this division, I selected those articles which directly address the topics of technology startups and their key business development activities, trying to look after those activities which tend to enhance business performance and bring the so-called startup success. In many cases, nevertheless, startup success was seen as company survival, and hence such sources covered the

topic of business survival and avoidance of failure in the startup phase.

The purpose of this chapter is, first, to properly define what the concept of “technology startup” refers to. Subsequently, this chapter aims at explaining how startup success is measured, in section 3.3. Finally, section 3.4 attempts to combine the concepts of “technology startup” and “startup success” in order to find out what is the definition of successful technology startup.

3.2 Technology Startups

Startup configuration research is still very vague, since there is scarce literature to support startup science properly (Harns, et al., 2007). Some of the most accepted theories and definitions about startups actually come from the work of practitioners (pragmatic entrepreneurs), who have learned and tested their own methods and theories by doing.

“A startup is a temporary organization designed to search for a repeatable and scalable business model.” This is the definition of *startup*, the common short for start-up company, introduced by Steve G. Blank in 2012, in his work *The Startup Owner’s Manual* (Blank, 2012, 2-18). Following this definition, a technology startup could be defined as a start-up company that is created to provide goods or services in a technological field, be it Information Technology (software), biotechnology, nuclear power, or anything related to machinery, automatizing or computer-aided engineering.

This definition of startup is the pragmatic definition that has been formed in the past ten years from entrepreneurs and entrepreneurship professors, such as Steve G. Blank (2007) and Alex Osterwalder (2009). However, the scientific world still lacks the sufficiency of evidence and solid literature to back up this new definition. In the scientific and classic business research

field, a startup is just the premature phase of a company, in which the organization is looking for enough business traction to start optimizing resources (Matthijs et al., 2010).

These two definitions, from practitioners and researchers, present commonalities, such as the seek of a principle to make the business stable. In the classic definition, the things to look for are customers, sufficient cash-flow and an opportunity to exploit the organization's existing resources in a relatively optimized manner (Matthijs et al., 2010). Whereas, in the pragmatic definition, the quest is to find a repeatable business model that brings sustainable sales (Blank, 2007, 18-28). The key question that remains open is whether these two different statements do in fact mean the same thing, although at different organizational levels.

The next two sections cover the concept of "technology startup", as well as collecting the most common business development activities run by those technology startups.

3.2.1 Life Cycle of a Startup

Most of the business literature agrees on the fact that a company's life cycle is composed of four major steps, including the startup phase, the stabilization phase, a predefined period of growth and an indefinite period of sustainability. According to Crowne, the startup is the first fundamental pillar of the company creation process (Crowne, 2000), where the initial team pursues the discovery of a business model that works, meaning that it sells and scales with relatively low difficulty (Blank, 2007).

Crowne defines the boundaries for the life cycle of a startup so that the startup period is comprehended between the very first actions of a sole entrepreneur with a vision and the moment when the company reaches sta-

bilization (Crowne, 2000). Stabilization begins when the product is stable enough to be commissioned for new customers without causing any overhead in product development and the it has been shipped to a number of customers (Crowne, 2000). This fits in the customer development model proposed by Steve Blank, where the ultimate goal of a startup is to find a scalable and repeatable business model (Blank, 2007).

Paul Graham (2012) states that a startup company is created with the main objective of growing and becoming a company (Graham, 2012). Thus, most companies which are created with an already-set target of not growing should not be considered startups (Edwin et al., 2010). Graham's definition of startup also aligns with Blank's description of startup (Graham, 2012). For example, a barbershop is not opened with the goal of finding a scalable business model. Instead, the barber already knows the business model, the market size (i.e., number of neighbors to visit the barbershop) and, thus, the business is already working on an immutable business model from day one. Therefore, both Paul Graham's and Blank's definitions of startup (Blank, 2013), although explained from different points of view, perfectly apply on practical examples of newly created companies.

The life cycle of a startup is depicted in figure 3.1. According to Crowne, a startup reaches company stabilization when the product is sold repeatedly without altering the company's structure nor operations (Crowne, 2000). Additionally, there is a transition phase between startup and stable company, which is critical to the startup, in order to grow in customer base and mass production (Blank, 2007).

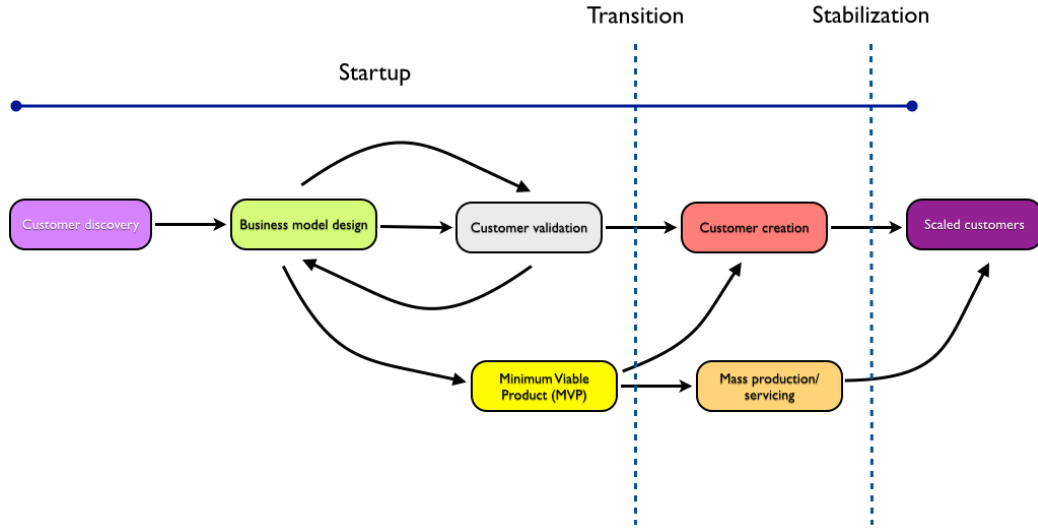


Figure 3.1: Startup phase within the company life cycle.
(Crowne, 2000)

From the representation of the startup life cycle in figure 3.1, after a startup goes beyond the transition phase, it can have three different ends. First, a startup can end by becoming a stable growth company, which is the most typical case that all companies pursue when being founded (Headd, 2000). Second, a startup can end by becoming acquired by another organization. The third type of startup end is survival, where the startup becomes an unstable company that struggles for surviving although no profitability nor growth have been achieved (Headd, 2000).

3.2.2 Business Development Activities in Technology Startups

The literature defines the startup creation as a process itself, in which the necessary resources are accumulated in an ordered manner (Edwin et al., 2010). According to Zoltan, a startup is called an organization exactly because its activities are “organized” in a certain manner (Acs et al., 2010), involving coordination, routines and structures (Aldrich et al., 2006). Without such

creation activities, there would not be organization (Gartner, 1985).

As important as it is to differentiate between regular small businesses and actual startups (Graham, 2012), it is also central to this thesis to specify how technology startups actually differ from other startups. Technology startups have two main characteristics that make them structurally different from the rest of the startups. Technology startups own technology patents, and they dedicate a large part of their resources to research and development (R&D) (Kelley et al., 2001). Technology patents are used to protect the startup's intellectual property. Research and development, on the other hand, is the activity of pursuing technology innovation through investigations and applied research (Åstebro, 2004).

Patents and R&D are the two main properties which make technology startups' different from other startups. Patent filling and disputing, including technology law knowledge, is part of the product development and testing, before a company can even ship its first sale (Kelley et al., 2001). Additionally, research and development makes the technology startups unique as in they require capital for to research and development activities (Åstebro, 2004).

Kakati (2003) assures that startups follow their own customized strategy, which means a set of chosen activities in a certain order (Kakati, 2003). The set of activities and the order of execution is rather specific to the startup's team preferences. However, there are certain commonalities to the selection of such activities and their order in the sequence of execution (Edwin et al., 2010).

New technology ventures have a special set of resources they must attain, and therefore they must also present different activities from the rest of startups that empowers them to attain such technology-specific resources (Ruokolainen, 2008). For example, a technology patent requires from certain technology, cultural and law research activities, which are specific to the

patents themselves.

Technology startup authors such as L. Miller (2008) present different organized paths for creating a technology startup, yet they focus on the official part of founding an actual firm, without researching about business development. For instance, the “Lifecycle of a Technology Startup” is a technology startup founding manual that covers legal issues, founding the board of directors, or filling out official forms for the government (Miller, 2008, 1-179).

This is where practitioners such as Steve G. Blank (2010) or Eric Ries (2011) play an important role in the entrepreneurship field. Steve G. Blank (2010) presents a customer development framework, which consists of a specific business development sequence comprehending four major steps (Blank, 2007, Ries, 2011). This process is depicted in figure 3.2.

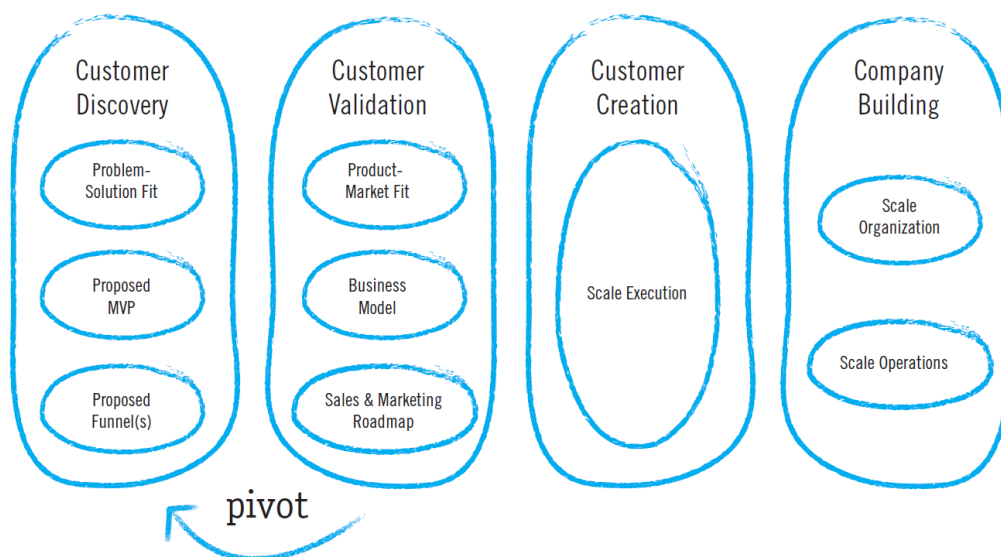


Figure 3.2: Startup creation and customer development processes.

Figure 3.2 depicts the customer development model proposed by Steve Blank

(2010) and how different sub-processes align with the startup creation process. These processes can be divided into business development activities. Table 3.1 lists a summary of the most common business development activities among new technology startups. Each activity has been found throughout the references used in the Literature Review and their frequency has been counted on the number of appearances made in each of the sources, altogether. The list is sorted by the frequency of appearance of each activity, from the most repeated one to the least repeated one.

Activity	Description	Appearance
Team building	Finding co-founders, hiring first employees.	41
Finding product/market fit	Learning what is the right product for the selected market(s).	30
Business planning	Writing a business plan and following it.	28
Performing sales	Direct sales (e.g., cold-calling).	25
Incorporating	Performing the actual paperwork to register the company officially.	23
Making payments easy	Creating an easy way of getting revenue from customers.	18
Naming	Naming the company, web domain, product name.	15
Setting goals	Defining objectives on different terms (short-term, long-term).	15
Product development	Applying knowledge to create a product through research and development.	15
Project management	Dividing work in to projects and tasks.	13
Developing first prototype	Creating a draft product that imitates the functionality of the final product.	13
Marketing	Advertising, finding the right audience, media channels, promotion.	11
Licensing	Purchasing or leveraging components from other organizations.	10
Assigning responsibilities	Deciding who is the right person for what.	10
Financing	Managing income, fund raising, expenses and how capital is captured/spent by the company.	10
Contacting advisors	Pitching and discussing with investors about financing.	10
Strong customer relationships	Taking care of customers, from pre-deal discussion to account management.	10
Intellectual Property Registering (IPR)	Registering intellectual property and filling technology patents.	8
Establishing location	Finding the right places for having physical presence.	8
Community management	Engaging customers and interacting over social media, forums, communities.	8
Analyzing competitors	Performing market research, finding competitors and how the company compares to them.	8
Generating idea	Creating the first idea to solve a problem, to base the product on.	5
Analyzing metrics	Measuring customer acquisition, retention and performance indicators.	3

Table 3.1: The 23 most common activities among technology startups.

The study exposed in Table 3.1 presents the 23 most common business development activities among technology startups, ordered by the ratio of appearance in the literature sources listed in Appendix C, which contains 42 journal articles, 14 books and 11 sources of other type. According to the literature review and the additional sources in Appendix C, team building seems to be the most widely spread business development activity run by technology startups, followed by finding the right product/market fit.

3.3 Startup Success

Success is generally defined by the capability of achieving a set of predefined goals (Dunkelberg et al., 2010). As simple as this definition may sound, it becomes rather complex when thinking of a company as a group of stakeholders. In other words, the original goals of the entrepreneur, when founding the company, will most likely be different from the goals of the investors, and different from the employees, etcetera (Atherton, 2007). In consequence, the question to whether a startup is successful or not can have different valid answers, depending on who is being asked (Dunkelberg et al., 2010, Crowne, 2000).

According to this definition, success could not be regarded as synonymous of optimal performance, since this would represent a rather elusive concept (Romanelli, 1989). Instead, success can be viewed as the attainment of certain predefined objectives that can satisfy stakeholder aspirations (Beaver, 2003). Section 3.2.1, explains that a startup is a phase inside the company creation timeline that has a beginning and an end (Blank, 2007). When the startup phase reaches its end, three things can happen: 1) the company becomes stable and continues to grow (Headd, 2002); 2) the startup makes an exit; or 3) the startup strives for survival (Headd, 2000). Only after the

startup end it should be possible to evaluate the overall startup phase and attempt to diagnose whether a startup, now at a company stage, has been successful or not (Levy, 2012).

A new venture becomes a stable company, and it is therefore not considered a startup any more, when it demonstrates that it can scale and make repeatable sales without altering the product/market fit (Prasad, 2006). Consequently, the startup phase must end with the beginning of business stabilization, where the company is considered a solid running business (Freese et al., 1990), there are no signs of product nor team volatility, there are production processes and jobs descriptions, and there is a stable cash flow with confident predictability (Stolk, 2011). Profitability, or the capability to reach profitability in a proximate future, is one of the measures to claim that a company has reached stability and most likely will be able to allow for standardization and process optimization (Bounds, 2013).

Therefore, from a theoretical perspective, there are indications that a startup becomes successful when, at the end of the startup phase, it continues to grow into a stable company through profitability, or performs an exit within the strategic goals of its entrepreneurs and investors. In other words, a startup can be considered successful as soon as it proves that it can scale its business model to a virtually uncountable number of customers willing to take that product or service delivered by the company (Mankin, 2007, Ulrich and Barnay, 1984). Hence, a successful startup can be characterized by a set of properties. These properties are presented in table 3.2.

Property	Description
Repeatable business model	Multiple customers buy in using the same business model across each customer.
Profitability	The company has reached or will soon reach profitability, without the need of changing the product nor business model dramatically.
Sustained revenue	Predictable (growing) revenue for coming year(s) without altering the company structure, product, nor business model.

Table 3.2: The three properties which describe a successful startup.

According to the properties presented in table 3.2, a successful startup must have multiple customers who purchase a product using a similar business model (Blank, 2007). The startup must be profitable or otherwise reaching profitability in the near future (Freaser et al., 1990). And finally, a successful startup must have growing revenue and therefore predictable sustained sales (Stolk, 2011), without having to alter the core team, product nor business model (Crowne, 2000).

3.4 Definition of Successful Technology Startup

The definition of startup success explains why startups focus on carrying out business development activities to achieve the goal of sustained sales. The reasoning behind this is that a paying customer confirms two important facts for the success of a technology startup: 1) the product is valid for someone (it solves a problem); and 2) the business model is valid for someone (customers are willing to pay for such solution) (Blank, 2007, 17-30).

From the list of most common activities carried out by technology startups, in Table 3.1, it can be found that there are six activities which have a much higher appearance than the rest. These top six activities are summarized in Table 3.3, from the most repeated activity (highest appearance ratio in references) to the least repeated activity (lowest appearance ratio in references).

Activity	Appearance
Team building	25% (12%)
Finding product/market fit	18% (9%)
Business planning	17% (8%)
Performing sales	15% (7%)
Incorporating	14% (7%)
Making payments easy	11% (5%)

Table 3.3: Most common business development activities among technology startups.

The first percentage in the “Appearance” column denotes the overall appearance among the six most common activities (a weighted sum of these six activities), whereas the second percentage (in brackets) depicts the appearance ratio of such activity within a group of the 23 most common technology startup activities (see Table 3.1).

After performing these key activities, depending on the financial results of the first years, it is possible to predict the ratio of failure and success of a technology startup, depending if revenue and profit growths are positive or negative (Laitinen, 1992). Some of the remarks from these founding activities are that forming the team has one of the biggest impacts on new venture

success (Teal et al., 2003).

The creation of new organizations requires the harnessing of resources (Scott, 1987, 159-160). Two specific resources for technology startups are the accounting of patents and technology disruption. Technology patents are proved to offer more viability to technology ventures (Kelley et al., 2001). Technology disruption gives quick competitive advantage to startups and helps them compete with well-established corporations (Raynor, 2011).

Another considerable factor for technology startup creation that could be considered as relevant to the company creation process and startup success are startup accelerators. Startup accelerators provide mentoring and networking resources to the startups, to speed up the process of company creation and sales achievement. However, startup accelerators do not necessarily affect on the startup's success (Rotger et al., 2012).

Based on the study presented in this chapter, a successful technology startup could be defined as a stable technology company, which has reached (or will soon reach) profitability and can forecast sustained sales with enough predictability, due to growing revenues. Technology startups tend to carry out certain business development activities with a higher frequency, such as team building, finding the product/market fit, following a business plan, executing sales, incorporating and making payments easy for customers. Chapter 4 attempts to empirically research which of the most common business development activities are present in successful technology startups and which are present in non-successful (or otherwise underdeveloped) technology startups.

Chapter 4

Results

This chapter includes six study cases of Finnish technology startups, which have reached a level of stability at which they can be analyzed as to be either stable companies (successful startups) or non-stable companies (underdeveloped startups). For each case, there is an explanation of whether the company fulfills the “successful startup” criteria or falls under the non-successful “underdeveloped startup” category. Additionally, there is a graphical illustration of the company’s growth trajectory for the past five years, in terms of profit and revenue growth. The data presented in such illustrations has been obtained from the Finnish National Database of Organizations (Suomen Yritysrekisteri).

In order to investigate the predominance of business development activities in technology startups, each case firm is also described in terms of its business development activities using a list of the most prominent activities carried out during the past five years. Each case firm’s business development activities are presented in a list ordered by chronological order, from older to newer. Such list helps to provide an overview of the overall timeline of business development activities in the company during its startup phase. The business development activities that do not appear within the literature review (i.e., table 3.1) are marked accordingly with an asterisk.

Regarding the business development activities carried out by each case firm, it is important to denote that each list represents those activities which the case firm put more emphasis to, during the startup business development phase. As a matter of fact, the majority of case firms have directly or indirectly touched most of the business development activities presented in table 3.1. However, this chapter presents those activities which the case firms highly focused on.

4.1 Successful Startups

4.1.1 Company A

Company A is an embedded software company founded in 2009. Their main product is a software component which makes smart devices interconnect more easily, including smart TVs, connected cars, mobile phones, and more. Their business model is purely based on business to business (B2B) sales, mainly to original equipment manufacturers (OEMs).

Company A is considered a successful startup because it is a profitable company, and it can forecast sustained revenues in a relatively predictable manner. Additionally, the company's revenue and profit have both a tendency to positive growth. Company A's profit and revenue growth overview is depicted in figure 4.1.



Figure 4.1: Company A's profit and revenue growth.

According to figure 4.1, the company revenue's average growth is close to 100%, that is almost 2x, per year. The company achieved profitability already at the end of 2009, and has remained profitable ever since. Both revenues and net profit have a positive growth year after year.

Company A reported their main business development activities during the startup phase and what helped them achieved their current status. The list of the such prominent business development activities, reported by the company's top management during the interviews, is exposed in table 4.1, in chronological order of execution.

Activity	Description
Finding product/market fit	Before incorporation, Company A spent several years researching a product that would fit the current market.
Community management	Leveraged open-source product to create a community of users and build trust internationally.
Business planning	Wrote and followed a business plan, with growth objectives, during the first three years.
Internationalization*	Focused on reaching international customers in the community and provide technical support worldwide.
B2B*	Worked only with international business customers.
Strong customer relationships	Worked only with international business customers and focus on delivering extensive customer support.
IPR	Patented every software innovation while it was being developed.
Making payments easy	Created an automated product delivery system which allowed customers to purchase the product in 2 clicks.
Product re-investment*	Invested revenue margins into new ideas, research and product development.

Table 4.1: Business development activities carried out by Company A.

From the business development activities in table 4.1, Company A's top man-

agement confirmed that the three activities that helped the most in growth were community management, internationalization and strong customer relationships. Following the data from the interviews with Company A, there is an indication that the leveraging of an open-source product helped the company in reaching international customers faster and building trust among new potential customers.

Additionally, Company A's strategy aimed at making purchases for their customers as easy as possible which, in Company A's top management's own words, "eliminated the time and necessity for the customer to find a new software supplier". During 2013 and 2014, Company A's strategy was focused on re-investing margins into new ideas and product development, in order to expand the current markets, and keep the continuous growth rate.

4.1.2 Company B

Company B is a Web software company founded in 2000, whose current operations regarding the Web software product started in 2009. Their main product is an open source Web application framework for creating rich Internet applications. Company B's main business model is to offer on-the-top (OTT) proprietary components and technical support for their open source components distributed world wide.

Company B is considered a successful startup because it is a profitable company, and it can forecast sustained revenues in a relatively predictable manner. Additionally, the company's revenue and profit have both a tendency to positive growth in the next years. Company B's profit and revenue growth overview is depicted in figure 4.2.

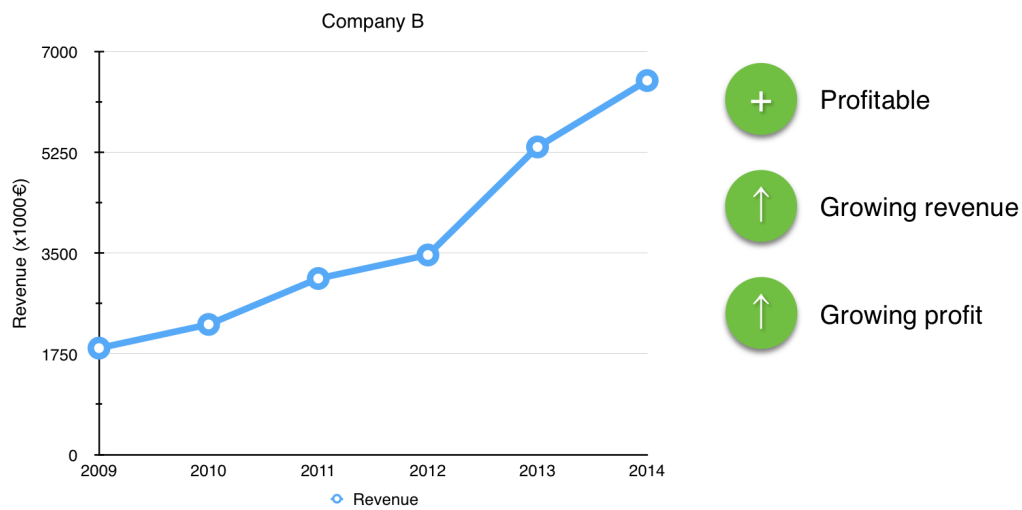


Figure 4.2: Company B's profit and revenue growth.

According to figure 4.2, the company revenue's average growth is about 50%. This growth was closer to 30-40% during the first three years, ramping up after the year 2012. Similarly as in Company A's case, Company B achieved profitability already at the end of 2009, and has remained profitable until now. Moreover, both revenue and net profit have a positive growth year after year.

Company B's main business development activities during the startup phase are listed in table 4.2, which includes the most dominant business development activities the firm focused on, in chronological order of execution.

Activity	Description
Finding product/market fit	Company B spent over five years to find a product that would solve someone's need.
Community management	Leveraged open-source product to create a community of users and build trust internationally.
Contacting advisors	Discussed with advisors and investors on how to leverage the existing prototype and community.
B2B*	Focused on business customers who needed expert support for the open source product and performed "upselling" of on-the-top proprietary components.
Strong customer relationships	Worked only with international business customers to channel all efforts into a full customer support and experience.
Internationalization*	Focused on reaching international customers in the community and provide technical support worldwide.
Analyzing metrics	Measured every business development action and their return on asset (ROA), in order to steer future strategic decisions.

Table 4.2: Business development activities carried out by Company B.

Somewhat similar to Company A's business development, Company B focused on finding a product that would fit the market and then created a community through an open source offering. Furthermore, Company B leveraged advisors to plan a strategy of growth, which led into the creation of added value services, such as expert technical support and on-the-top proprietary offerings around the open source product. According to the interviewees' data from Company B, the activity that helped the most in

growth was building a community around the open source product, because it helped them delivering a marketing message and building international recognition.

4.1.3 Company C

Company C is a software company founded in 2009. Their main product is a software platform which recognizes documents and divides them into smaller parts, which can be then more easily processed (e.g., translated). Company C's business model is based on business to business (B2B) sales, customizing work for each project.

Company C is considered a successful startup because it is a profitable company, and it can forecast sustained revenues in a relatively predictable manner. Additionally, the company's revenue and profit have both a tendency to positive growth. Company C's profit and revenue growth overview is shown in figure 4.3.

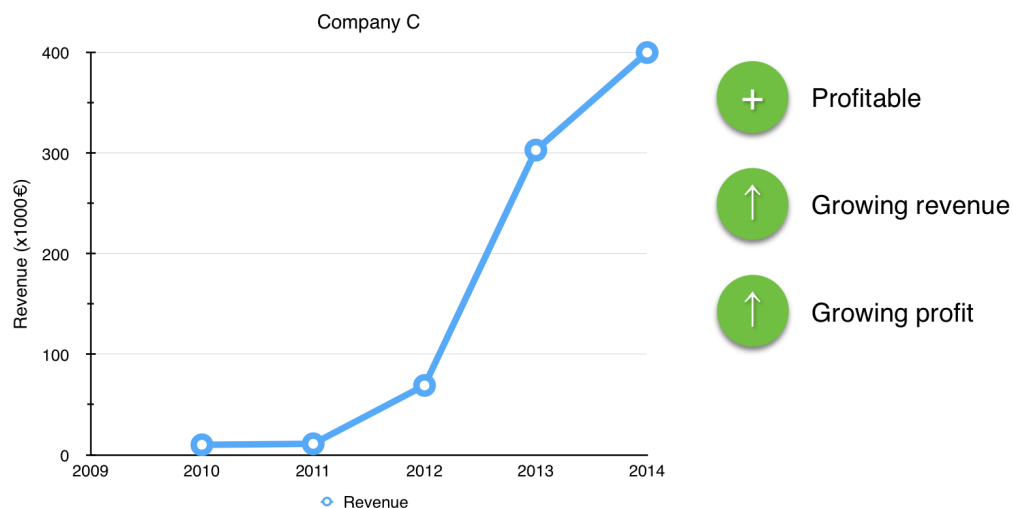


Figure 4.3: Company C's profit and revenue growth.

According to figure 4.3, the company revenue's average growth seems relatively irregular from year to year. According to Company C's given information during the interviews, the injection of capital appreciated in the year 2012 comes from private fund raising. Furthermore, Company C starts to make an increased volume of revenue from customers from 2013 onwards. Both revenue and net profit have a positive growth year after year.

Company C's main business development activities during the startup phase are listed in table 4.3, including the most dominant business development activities the firm focused on, in chronological order of execution.

Activity	Description
Finding product/market fit	Company C spent over two years testing different ideas and suffered a major idea shift (pivot) in 2011.
Contacting advisors	Constantly validated ideas and prototypes with advisors and investors, taking into account their advice for growth.
Financing	Company C leveraged contacts and advisors to raise private funding and develop faster.
B2B*	Focused on larger-scale projects for business customers which, albeit taking more effort to capture revenue, gave company C a higher revenue per project with a positive impact into the cashflow.
Strong customer relationships	Worked closely with business customers to keep them satisfied and ensure word-of-mouth marketing spread over.

Table 4.3: Business development activities carried out by Company C.

Company C used an iterative model in the beginning. The firm generated the first ideas and prototypes and continuously discussed with advisors to validate the concept. Eventually, investors funded the company with the last prototype and the company started to grow. Focusing on business customers is justified by Company C because of the larger income to the cashflow. According to Company C's data from the interviews, the activity that helped the company the most was to constantly validate the idea with advisors and investors, and being flexible enough to change the product according to the actual needs of the market. Thus, product/market fit seems to be perceived by Company C's management as the main business development activity for startup growth.

4.1.4 Company D

Company D is a health technology company founded in 2006. Their main product is a health software platform for managing patient health data. Company D's business model is currently shifting focus from consumers to business customers (B2B), specializing on serving clinics and health institutions.

Company D is considered a successful startup because, albeit not having achieved profitability, it can forecast sustained revenues for the coming years with enough predictability. Furthermore, Company D's revenues have kept growing since 2010 and profit margins are also increasing year after year. Company D's profit and revenue growth overview is shown in figure 4.4.

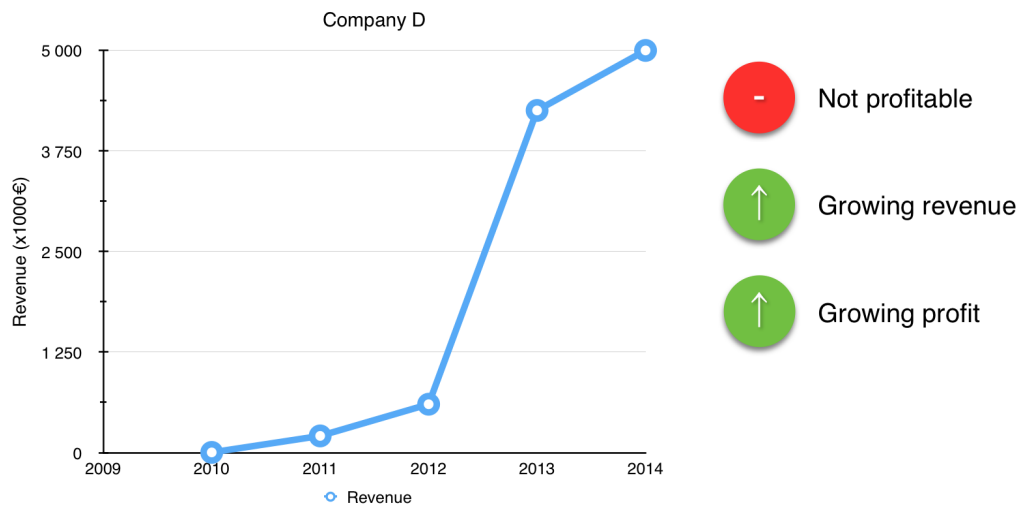


Figure 4.4: Company D's profit and revenue growth.

As depicted in figure 4.4, the company revenue's growth has been relatively slow until year 2012, where there was a large private investment round. This round of private capital translated into negative profits due to the necessity to pay back to investors, according to the data gathered from Company D's interviews. However, after 2013, revenues are generated organically, that is by sales income. According to the data from the Finnish National Database of Organizations (Suomen Yritysrekisteri), Company D's profit growth has been growing so far, which makes the company likely to keep growing in the future.

Company D's main business development activities during the startup phase are listed in table 4.4, including the most dominant business development activities the firm focused on, in chronological order of execution.

Activity	Description
Contacting advisors	Constantly involved in investor events and used advisors before company creation.
IPR	Patented every hardware and software developed by the company.
Finding product/market fit	Spent over six years developing a hardware component to realize that a software platform would be more beneficial for the current market situation.
Financing	Leveraged network of investors and advisors to raise private funding and grow faster.
Internationalization*	Focused on reaching international customers, due to the limitations in the domestic market.
Analyzing metrics	Measured every business development action and their return on asset (ROA), in order to steer future strategic decisions.
B2B*	Expanded focus onto business customers, who can leverage the health software platform.

Table 4.4: Business development activities carried out by Company D.

Company D leveraged advisors and a network of investors from the beginning. The original focus was on creating a glucose meter to sell to consumers. Based on this model, the company spent several years refining the product and learning from the market. After a large round of private investment in 2011, the company started to focus on international customers and, specially, business customers. Their main target has shifted from consumer health-monitoring devices to a health platform for business customers (e.g., clinics). According to Company D's interviews, the activity that helped the company the most in becoming successful was financing, since health

is a capital-intensive industry and they would have not succeeded without monetary support.

4.2 Underdeveloped Startups

4.2.1 Company E

Company E is a software company founded in 2006. Their main product is an e-commerce software platform for retailers. Company D's business model consists of selling components to partners, who will deliver those to online shop platforms for retailers.

Company E is considered an underdeveloped startup because, albeit having achieved profitability, it has lost the capability to forecast sustained revenues for the coming years with enough predictability. Company D's revenues have been declining since 2010, except for the fiscal year between 2013 and 2014. Additionally, profit growth has been constantly declining, and the company's interviewees reported that the personnel has been reduced after 2010. Company E's profit and revenue growth overview is shown in figure 4.5.

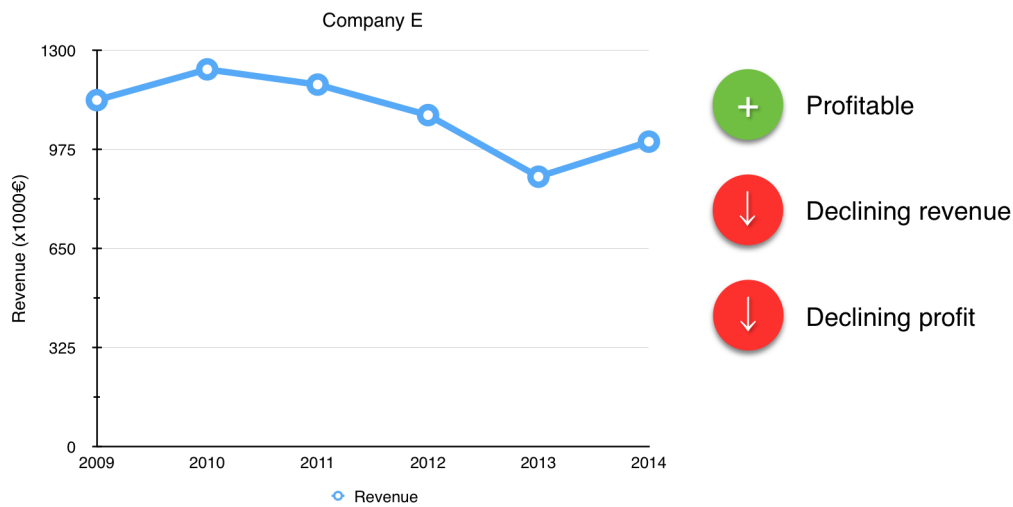


Figure 4.5: Company E's profit and revenue growth.

According to figure 4.5, the company revenue's growth has been negative after 2010. The explanation for profitability is that, after the beginning of the recession in 2011, Company E started to save in costs, e.g., by reducing the size of the team. According to the data collected from Company E's interviews, the majority of revenue is bound to several customers who pay on project basis, which also explains the slight increase of revenue during 2013, which is related to a specific deal for a custom project.

Company E's main business development activities during the startup phase are listed in table 4.5, including the most dominant business development activities the firm focused on, in chronological order of execution.

Activity	Description
Consultancy*	Spent the first years doing consultancy projects to get initial cashflow to invest in own product.
Strategic partnerships*	Made agreement with major players in the domestic market to push own product.
Domestic sales*	Focused on selling to domestic customers through partnerships.
Saving costs*	Reduced the size of the team and minimized costs.

Table 4.5: Business development activities carried out by Company E.

Company E's main business development activities focused on consultancy projects for other companies in Finland. Consequently, Company E was able to achieve the initial cashflow with the revenue from the consulting projects. At the same time, Company E made long-term contracts with some of the larger customers, as a strategic partnership, in order to have a constant flow of projects and therefore revenue. Company E's main focus has been on domestic customers, that is only inside Finland.

According to Company E's data from the interviews, consultancy and partnerships helped the company to attain cashflow and therefore invest in their own product. However, according to the data from figure 4.5, the main business development activities carried out by Company E were not sufficient to sustain growth, reach company stabilization and therefore achieve startup success.

4.2.2 Company F

Company F is a mobile software company founded in 2007. Their main product is a network sharing application to enable the users to share their

Internet connection from their smartphone to other devices. Company F's business model is a business to business to customer model (B2B2C), which means that the final product was delivered through a partner, who pre-installed the application in phones that were going to retailers.

Company F is considered an underdeveloped startup because it is not a profitable company and both revenue and profit growth are declining. Exceptionally, Company F reached temporary profitability during 2011 and 2012, due to a deal with a major company in the mobile industry. However, all revenues came from this one deal, which made the company depend on its partner. After 2012, the partner stumbled in the market and Company F's revenues decreased dramatically, thus leading to costs savings and team reduction. Company F's profit and revenue growth overview is shown in figure 4.6.

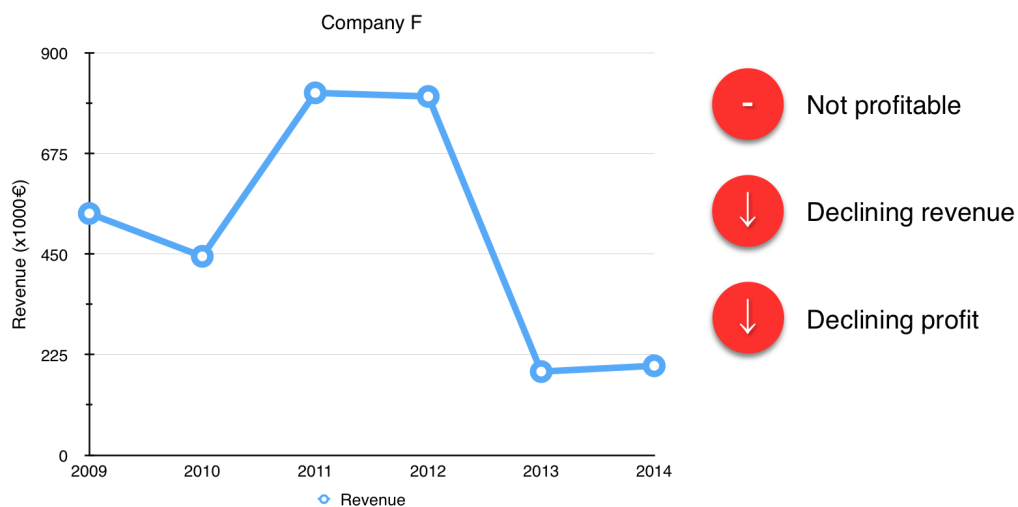


Figure 4.6: Company F's profit and revenue growth.

According to figure 4.6, the company revenue's growth has been relatively irregular with a slight sustainability between 2010 and 2012. This is due to the fact that Company F exploited a large deal with a partner to sell their software through the partner to the consumers. Up on deal termination,

Company F's revenue declined to its lowest point in 2013. According to the data collected from Company F's interviews, the firm prioritized saving costs over other activities, in order to survive.

Company F's main business development activities during the startup phase are listed in table 4.6, including the most dominant business development activities the firm focused on, in chronological order of execution.

Activity	Description
Community management	Created a community for users to download mobile applications and read news about smartphones.
Subcontractors*	Paid subcontractors to develop the actual product, kept the team of founders to run the pure business activities.
IPR	Patented their network sharing software innovation.
Strategic partnerships*	Made agreement with one major player in the smartphone industry, to push own product through a business to business to customer model (B2B2C).
Saving costs*	Reduced the size of the team and minimized costs.

Table 4.6: Business development activities carried out by Company F.

At first, Company F's main focus was on creating a community of mobile users who would read news and download applications from the firm's website. Subsequently, Company F outsourced product development to a subcontractor and created a product that was later patented. This product was then sold through a phone manufacturing company that pre-installed

Company F's software on their phones. This strategic partnership implied exclusivity, according to Company F's interviews' data, and, albeit bringing positive cashflow between 2011 and 2012, it presented a fundamental growth problem: Company F was bounded to one large-scale partner. In 2013, Company F's partner stumbled in the mobile industry and Company F could not retain revenues coming from the partnership any more.

In consequence, Company F had to enter a cost-saving mode and reduce to team size to the minimum, in order to survive. According to Company F's interviewee, community management was the most beneficial business development activity for the company, since it helped it reach a large number of users and build trust within the smartphone community at that time.

Chapter 5

Discussion

5.1 Summary of the Results

5.1.1 RQ1: What is a successful technology startup?

Based on the literature review analyzed throughout section 3.4, a successful technology startup could be defined as a stable technology company which has reached (or will soon reach) profitability and can forecast sustained sales with enough predictability, due to growing revenues.

The results documented in Chapter 4 present four cases of firms considered successful startups, based on the definition from section 3.4. The sign for company stability is the ability to predict sustained sales based on current accumulated revenue growth (Stolk, 2011). In the case of stable companies, the growth curves depicted in figures 4.1, 4.2, 4.3 and 4.4 present a graph whose pattern can be predicted with relative accuracy.

In the case of stable companies, with positive revenue growth and positive profit growth, it could be predicted that growth will continue, and hence the sustained sales forecast. On the contrary, firms such as Company E, whose

revenue and profit growth are declining, are unlikely to present sustained sales. Furthermore, firms such as Company F, which present a fluctuating growth and have declining revenues and profit, are likely to be considered unstable, due to the uncertainty of the growth in the neighboring measured data points. Non-profitable companies with declining or fluctuating growth are a sign of unstable companies or, in other words, underdeveloped startups.

5.1.2 RQ2: What are the main business development activities among technology startups?

The list of business development activities presented in table 3.1 is a collection of the most common business development activities carried out by technology startups, according to the literature review of this thesis. Throughout the empirical research, there were found 18 business development activities that were the most dominant among all the studied case firms. Out of these 18 business development activities, seven were more frequent than the rest. These seven most frequent business development activities are listed in table 5.1.

Activity	Description	Appearance
Finding product/market fit	Learning what is the right product for the selected market(s).	4
B2B*	Sales focused on business customers (selling to other organizations, not directly to consumers).	4
Community management	Engaging customers and interacting over social media, forums, communities.	3
Contacting advisors	Pitching and discussing with investors about financing.	3
Internationalization*	Focused on reaching international customers outside of the domestic market (i.e., outside of Finland).	3
Intellectual Property Registering (IPR)	Registering intellectual property and filling technology patents.	3
Strong customer relationships	Taking care of customers, from pre-deal discussion to account management.	3

Table 5.1: Most common business development activities among Finnish technology startups.

The business development activities that do not appear in the literature review (i.e., table 3.1) are marked accordingly with an asterisk. The business development activities that are intrinsically necessary for making the company exist and generating revenue, such as incorporation and performing sales, have been excluded from the listings in Chapter 4 and table 5.1, for the sake of simplicity.

According to the empirical part of the study, 8 out of 18 business development activities carried out by the startups do not appear in the literature review. Such result could indicate that technology startups might tend to customize their business development activities, not necessarily matching the ones presented in the literature review, in order to adapt to the specific market conditions. Presumably, such customizations might vary from startup to startup, depending on the context and market conditions.

5.1.3 RQ3: What are the most common business development activities among successful technology startups?

Figure 5.1 shows a synthesized listing of the most common business development activities present in all the six case firms which were part of this thesis research. The list consists of the 18 most dominant business development activities, ordered from the most frequent one to the least frequent one. Each column represents one of the case firms and a “check” indicates that the company carried out a given business development activity during the startup phase.

Additionally, figure 5.1 shows two colorings which aim at helping the reader to visualize fundamental information to the findings. The area surrounded by a green frame represents the appearance of business development activities in successful startups. On the contrary, the area surrounded by a red frame represents the business development activities in underdeveloped startups. The cells in green background indicate business development activities which are exclusively present in successful startups, whereas the cells in red background indicate business development activities which are exclusively present in underdeveloped startups.

Business development activity (by frequency of appearance)	Case firms					
	A	B	C	D	E	F
Finding product/market fit	✓	✓	✓	✓		
B2B*	✓	✓	✓	✓		
Community management	✓	✓				✓
Contacting advisors		✓	✓	✓		
Internationalization*	✓	✓		✓		
IPR	✓			✓		✓
Strong customer relationships	✓	✓	✓			
Financing			✓	✓		
Strategic partnerships*					✓	✓
Analyzing metrics		✓		✓		
Saving costs*					✓	✓
Business plan	✓					
Making payments easy	✓					
Product re-investment*	✓					
Consultancy*					✓	
Domestic sales*					✓	
Subcontractors*						✓

Figure 5.1: Dominant business development activities among Finnish technology startups.

According to the research results exposed in figure 5.1, there seem to be cer-

tain business development activities that are often repeated across successful Finnish technology startups, and which are not present in their counterparts. Additionally, there seem to be certain business development activities which are most typically present in underdeveloped Finnish technology startups, but not in the successful ones.

All of the successful case firms spent a considerable amount of time and resources finding their product/market fit. That is, these companies spent numerous efforts on understanding the market, and how to bring a product that would be valuable among potential customers. Additionally, all the successful case firms opted for a business-to-business sales model, which means that the main revenues came from selling to other companies and organizations, but not directly to the consumer. Among the sample firms within this study, these two business development activities seem to be fully exclusive to successful technology startups.

Other predominant business development activities among the majority of the successful case firms are contacting advisors, selling internationally (i.e., not being locked to the Finnish domestic market) and building strong relationships with their customers.

5.2 Reliability and Validity

Throughout the following four sections, I examine the quality of this study by the criteria of construct validity, internal validity, reliability and generalizability. For determining the criteria of this analysis, I relied on sources that have adapted the criteria to fit qualitative research and more concretely case studies, such as Gibbert et al., 2008 or Yin, 1994. For each criterion, I explain what were the concrete research actions I used.

5.2.1 Construct Validity

I address validity in terms of construct validity and internal validity. Construct validity is the experimental demonstration that a test is measuring the construct which it claims to be measuring (Brown, 1996). In other words, it is concerned with whether the research really measures what it is intended to measure. The construct validity of a test is demonstrated by an accumulation of evidence, for instance by performing repeated tests on a same construct with the goal of achieving identical results for a given test case.

The constructs are the statuses of each case firm, regarding startup success. In order to increase construct validity for each case, I contrasted the interviewees' information from each firm to the public data of the firm, using the Finnish National Database of Organizations (Suomen Yritysrekisteri). In addition to this, I cross-interviewed firms about other participant firms. In other words, I discussed one company's information both with this company's own representative as well as with a different company's representative who knew about the first company. In most cases, the information given by the company itself was somewhat incomplete, however a more coherent story could be re-documented thanks to the information provided by an external observer (i.e., another firm's representative who knew the first company). These procedures increased the confidence in the interpretations made regarding the studied constructs.

5.2.2 Internal Validity

Internal validity is the approximate truth about inferences regarding cause-effect or causal relationships. Thus, internal validity is only relevant in studies that try to establish a causal relationship. It is not relevant in most observational or descriptive studies, for instance. Internal validity is determined by the strength of the causal relationships between variables and

results (Yin, 1994, p.37).

The research process for the six case firms has been oriented towards finding as many commonalities as possible, and then trying to find a direct relationship between the business development activities and the startup success. Each of the business development activities are typically part of a much broader picture, including strategy, business processes, market conditions, etcetera. Therefore, it seems rather difficult to establish a direct relation between the execution of single, isolated, business development activities and the actual achievement of startup success. Instead, business development activities should be seen within the business process frame, as well as all other external factors and market conditions that could make a single business development activity have a direct effect on success or not. Since the number of external factors and market conditions may be vast, this further analysis was regrettably out of the scope of this thesis.

5.2.3 Reliability

The reliability of a study is the degree to which an assessment procedure produces consistent results (Cozby, 2001, Cronbach, 1971). That is, a reliable study can be performed in multiple occasions, using different procedures, deriving into the same major results over every repeated occasion. This research improves the quality and increases the transparency of the study by describing in detail the analysis process from the sample selection criteria to data collection and documentation (Chapters 2 and 4).

Chapter 4 does not contain all the information provided by the interviewees, for scope and space limitations. However I included the most relevant pieces of data which allowed me to conceive consistent results about the commonalities regarding the business development activities across startups. In addition to this, and in order to improve reliability, I balanced the type of

information included in each case firm by including a similar text structure when describing each company, why it is successful or not, and what business development activities do actually matter for the research.

5.2.4 Generalizability

Generalizability is the extrapolation, or extension, of the research findings and conclusions from a study conducted on a sample population to a larger population. The dependability of this extension is statistically probable, yet not absolute. Since proper generalizability requires data on large populations, this thesis research, which is based on quantitative research, does not provide a proper foundation for wide generalizability (Barnes et al., 2012).

In qualitative research and especially in case studies, statistical generalization is not possible but, instead, case studies rely on analytical generalization. Analytical generalization is not generalization to some defined population that has been sampled, but instead to a theory of the phenomenon built from the cases studied during the research (Yin, 1994, p.37). In spite of the improvements through analytical generalizability, the reduced amount of sample points in this research makes it difficult to draw strong conclusions that could be generalized to a larger sample population, out of this research.

This study consists of six case firms, which shall be sufficient as a basis for analytical generalization. According to Eisenhardt (1989), a cross-case analysis must involve at least four cases in order to provide a relevant basis for analytical generalization. Consequently, I selected the six case firms based on the technique of theoretical sampling (Eisenhardt, 1989). Leveraging the criteria exposed in Chapter 2, all the case firms were located in the Finnish technology industry, they represented product and service-based business models (as opposite to consulting), a similarity in age and, additionally, a notorious difference in growth performance, sufficient to distinguish from well

performing companies from underdeveloped companies.

On one hand, choosing companies with similarities in age, field of business and core competences, helped to increase the relevance of external validity and extrapolation of results for this specific company profile (slightly over 5-year-old startup, less than €5 Million in revenue and own technology product developed in Finland). On the other hand, introducing a separation between successful startups, based on revenue and team growth, and underdeveloped startups, increased the soundness of generalizability of the findings, making it possible to highlight common patterns among successful startups and strengthen differences from underdeveloped startups.

Chapter 6

Conclusions

6.1 Summary of the Research

This research examined the most common business development activities carried out by technology startups. The purpose of this study was to find out whether there is a set of common business development activities across successful technology startups. The main research question was formulated as follows: *“What business development activities are most common among successful technology startups?”*

This research was conducted as a qualitative study using the methodology of theory building from selected study cases. The sample consisted of six Finnish technology firms, which were interviewed twice, totaling 12 interviews altogether. The first interviews were an initial survey over email or phone, whereas the second interview was carried out as a face-to-face meeting. Each company was also cross-interviewed about the rest of the sample firms, to obtain a different, external, angle to the history of each company.

6.2 Theoretical Implications

Throughout this thesis, I intended to present the common business development activities among successful Finnish technology startups. First and foremost, the results of this study must be considered within the scope of this research, including the limitations given by the limited amount of sample data points, and the restrictions concerning internal validity and generalizability.

The results of this thesis indicate that, within the Finnish technology startups selected for the study, there seems to be certain business development activities which are more frequent than others. Additionally, this study shows that certain business development activities appeared exclusively among the Finnish technology startups which were considered successful, whereas other activities were exclusive only to those sample firms which were considered underdeveloped.

From the findings of this study, it could be noted that there seems to be certain business development activities which are mostly characteristic of successful technology startups. By extension, and with a more extensive study with a greater population, it could be questioned whether successful technology startups always tend to carry out the same type of business development activities or not (Cochran, 1983). Thus, this thesis leaves room for research in the field of startup creation, growth and success.

Additionally, the current body of research is limited to technology startups, especially those focused on software products. This brings an opportunity to investigate, using similar research methodologies to the ones in this thesis, the existence of common business development activities among successful startups in general, not just those based on technology. This could offer the possibility to gain a wider understanding about the outcomes of business development activities in startups, independently from their industry field.

Interestingly, the business development activities discovered during the literature review research seem to loosely resemble the ones found in the empirical research. More specifically, the activity of “finding product/market fit” seems to be dominant both in the literature review and the empirical research, however other business development activities are rather customized by the startup or do not appear in the literature review at all. This could be due to the fact that literature review is scattered internationally, with references to companies across the globe, whereas the empirical research is concretely focused on the Finnish market. This aspect of the research could be improve, in terms of reliability, by looking into specific Finnish literature review of this kind which, at the moment of writing this thesis, was relatively scarce.

Finally, I would like to provide a suggestion in relation to the research methodology. One of the weaknesses of this study was the lack of enough sample points. Using a larger sample of case firms would help other researchers to draw more solid conclusions of the implications of business development activities in the startup phase towards success (Lei et al., 2007). One possibility would be to include a larger sample population by increasing the geographical region of study, e.g., expand from Finland to Europe. Another possibility for capturing a larger sample population while keeping the same geographical region could be the loosening of the selection criteria. However, a looser set of pre-selection criteria, while bringing more population to the study, could affect the validity and reliability of the findings (Lei et al., 2007).

6.3 Practical Implications

The findings of this research have several practical implications for entrepreneurs who are starting (or thinking of starting) a technology company in Finland. According to the results of this study, and taking into consideration the scope and data sample limitations of this research, Finnish entrepreneurs might prefer to spend more time and efforts on finding the right product/market

fit. Additionally, potential Finnish entrepreneurs could look into business-to-business sales models which, according to this study, seem to be present among all successful technology startups in Finland.

In addition to this, the results of this study seem to indicate that Finnish entrepreneurs might have a higher chance of creating a successful technology startup by attaining an international customer portfolio, contacting advisors in the early stage to help developing the business, and building a strong relationship with their customers. Alternatively, according to the results regarding underdeveloped startups, Finnish entrepreneur might want to be careful when opting for choosing a strategic partner to co-develop their business. However, saving costs seems to be more of a consequence to underdevelopment rather than a deliberate business development activity. Yet, Finnish entrepreneurs might want to be careful when deciding to save in costs, instead of investing in growth.

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Appendix A

Original Interview Template

** The questions in this document are mainly for guidance purposes, this is not a fixed survey, but rather the basis for a semistructured and open interview.*

*** All the information gathered through these questions and the execution of this interview will be, upon request, completely anonymized before this thesis's publication.*

A.1 Company and Background

- 1.1 Could you introduce yourself?
- 1.2 What is your company about?
- 1.3 What is your current role in this company?
- 1.4 When was the company started?
- 1.5 Have you been in this position from the beginning of the company?
Can you give a rough estimate of your revenue growth (yearly) ?
- 1.6 What about team growth?

- 1.7 Have you made any acquisitions?

A.2 Startup Phase

- 2.1 What was the original aim of the company?
- 2.2 From the beginning which ideas was the company working on?
- 2.3 Which ideas were dismissed and how did you get to the current (working) idea?

A.3 Operations

- 3.1 Did you have any strategic processes in mind at the time of founding the company?
- 3.2 How (and when) did you realize the product/market fit for your product/service?
- 3.3 Did you write (and follow) a business plan? Develop the answer.
- 3.4 What kind of business development processes did you implement as a startup?
- 3.5 Did you consider sales and marketing part of the business development process?
- 3.6 Did you use any customer development model?
- 3.7 How are your cofounders?
- 3.8 When did you incorporate? And why was it necessary at that point?
- 3.9 What was your policy when you started hiring people into the company?

- 3.10 Could you please give a rate of 1 (not important), 2 (good to have) or 3 (critical for success) to the following startup components? *Idea, team, advisors, shareholders' agreement, business plan, incorporation, domain name, product/market fit, capital/finance, IP ownership, licenses, location, metrics, first prototype, hiring, marketing, sales.*

A.4 Goals, Performance and Strategy Roadmap

- 4.1 Did you use any framework for business development management?
- 4.2 Do you know what are Key Performance Indicators (KPI)? Did you use any?
- 4.3 Did you develop your product/service through customer value co-creation, or any other customer development technique?
- 4.4 How did you achieve your first paying customer?
- 4.5 How did you know that the first sale (and business model) were repeatable?
- 4.6 When did you know that your business model is scalable? How did you know?

A.5 Success

- 5.1 How do you define business success?
- 5.2 What was the original goal(s) when you set up the company?
- 5.3 Have you achieved the original goal(s) of your (then) startup?

- 5.4 Do you consider your startup successful?
- 5.5 How did you (or could you) recognize when your startup became successful?

Thank you for your time. You will be notified when the research results are published within the School of Science at Aalto University.

— Claudio M. Camacho, MSc Candidate at Aalto University.

Appendix B

Final Interview Template (After All Interviews' Iterations)

** The questions in this document are mainly for guidance purposes, this is not a fixed survey, but rather the basis for a semistructured and open interview.*

*** All the information gathered through these questions and the execution of this interview will be, upon request, completely anonymized before this thesis's publication.*

B.1 Company and Background

- 1.1 Could you introduce yourself?
- 1.2 What is your company about?
- 1.3 What is your current role in this company?
- 1.4 When was the company started?
- 1.5 What was your role at the time of founding the company?

APPENDIX B. FINAL INTERVIEW TEMPLATE (AFTER ALL INTERVIEWS' ITERATIONS)

- 1.6 Estimated yearly growth?
- 1.7 What about team growth?
- 1.8 Have you made any acquisitions?

B.2 Startup Phase

- 2.1 What was the original aim of the company (shareholders' goals)?
- 2.2 What was the original idea at the time of founding the company?
- 2.3 Which ideas were dismissed and how did you get to the current (working) idea?

B.3 Operations

- 3.1 How (and when) did you realize the product/market fit for your product/service?
- 3.2 Did you follow a business plan?
- 3.3 How did you sell your product? What kind of sales activities did you have?
- 3.4 How did you meet your cofounders?
- 3.5 How did you know that these cofounders were the best ones for this type of company?
- 3.6 When did you incorporate? And why was it necessary at that point?
- 3.7 What was your policy when you started hiring people into the company?
- 3.8 Did you plan how customers were going to pay you (accept payments)?

APPENDIX B. FINAL INTERVIEW TEMPLATE (AFTER ALL INTERVIEWS' ITERATIONS)

- 3.9 Out of all activities, what do you think that helped you growing the company the most?
- 3.10 Could you please give a rate of 1 (not important), 2 (good to have) or 3 (critical for success) to the following startup components? *Idea, team, advisors, shareholders' agreement, business plan, objectives, planning, paperwork/incorporation, domain/company name, projects, assigning responsibilities, product/market fit, competitors, capital/finance, IP ownership, patents, licenses, location/market, metrics, social media, customer relationships, first prototype, hiring, marketing, payments, sales.*

B.4 Goals, Performance and Strategy Roadmap

- 4.1 How did you measure where are you at each stage of the startup?
- 4.2 How did you decide what things to do and what not to do?
- 4.3 Could you briefly mention what was the chronological order of events before you got your first customer?

B.5 Success

- 5.1 What was the original goal(s) when you set up the company?
- 5.2 Have you achieved the original goal(s) of your (then) startup?
- 5.3 How did you (or could you) recognize when your startup became successful?

APPENDIX B. FINAL INTERVIEW TEMPLATE (AFTER ALL INTERVIEWS' ITERATIONS)

Thank you for your time. You will be notified when the research results are published within the School of Science at Aalto University.

— Claudio M. Camacho, MSc Candidate at Aalto University.

Appendix C

Extended References

This list contains all the references included in the text of this thesis, as well as all the references used across the whole study, such as the count of appearance of business development activities in Table 3.1.

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