

# From depths to new bloom: Transforming the paradigm of failure recovery through the lessons learned from lean start-up entrepreneurs

Entrepreneurship

Master's thesis

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2015

From depths to new bloom: Transforming the  
paradigm of failure recovery through the lessons  
learned from lean start-up entrepreneurs

Management Science  
Master's thesis  
Olli Pölönen  
2015

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AALTO UNIVERSITY SCHOOL OF BUSINESS

**Degree:** Master's Degree

**Degree Programme:** Entrepreneurship

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ABSTRACT

May 14, 2015

**Number of pages:** 77

**Title of the thesis:** From depths to new bloom: Transforming the paradigm of failure recovery through the lessons learned from lean start-up entrepreneurs

**Purpose:** Entrepreneurial success - and factors contributing to it – has been studied and benchmarked extensively through multiple articles and case studies. However, also entrepreneurial failure, as a natural sibling to the success phenomenon, has been taken under more intensive inspection during the past years. The purpose of this thesis was to first explore, and then shed light through data on how the choice of lean start-up method will affect the entrepreneurs' recovery from failure. With the main research question set on, "How lean start-up entrepreneurs recover from business failure – and what factors contribute to that?", this research adds unique value on our understanding on the complex phenomenon of failure recovery. It contributes to the existing failure literature by addressing a research gap on the recovery process and recovery rationales through the eyes of a lean start-up entrepreneur.

**Research Design:** This research gap was addressed through a qualitative multi case study research with eight entrepreneur interviews, each from Finnish high technology start-ups, whom had encountered a business failure and had practiced lean start-up principles. The nature of the research was inductive, allowing the dynamic relationships to emerge from the narratives – the data – of the informants.

**Findings and Contributions:** There existed no previous studies on the connection between lean start-up method and the failure recovery. This study gave novel information on how exceptionally well lean start-up entrepreneurs recover from business failures, how they manage to cope with the negative feelings through rational sense making, learn from the mistakes and continue on entrepreneurial ventures.

**Keywords:** Entrepreneurship, Business failure, Failure recovery, Lean start-up, Qualitative study.

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## 1 INTRODUCTION

### *1.1. Background*

Those who have not yet encountered large-scale failures in life should encourage themselves to take more risks. Often when successful people are asked what is the secret for their success, the answer is that they took risks and failed over and over again, just to finally to achieve something that was considered to be impossible. Failing, in virtually everything, is very uncomfortable and most people are painfully aware of that. However, failures can be even more devastating in context of failing as an entrepreneur, because other people's lives are somewhat dependent on the venture outcome as well. In most cases, failure causes losing wealth but can cause also lead to severe mental suffering (Shepherd, 2008), loss of networks and – in the most drastic of the cases – even to loss of friendships (Cope, 2011).

Yet, according to statistics, most start-up entrepreneurs will fail. The failure rate, even amongst venture-backed start-ups, is around 75% to be accurate (Ghosh, 2011), meaning that three out of four start-ups don't end up as was initially desired. With these facts on the table and after several generations of entrepreneurs, the probabilities state that there should be very few entrepreneurs left out there. Still, many say that today is the best time ever to start your own venture. Now, that is a dilemma. The Darwin's law of natural selection does not seem to apply, at least directly, with entrepreneurs.

Since the numbers are not in alignment with the observable reality, we obviously do not understand nearly as much about entrepreneurship as we believe we do. This thesis will focus into a tiny, intact corner of that vast study area in quest to answer whether the underlying philosophy of operating the venture, lean start-up, would significantly alter the entrepreneurs' recovery from business failure.

Nevertheless the business failure has been studied, it's not exactly known why some entrepreneurs are able to withstand it better, recover the failure more comprehensively and move on with their life faster. Whereas, some will never start a new venture again because the stress of failure causes them to become overly sensitive towards failure or even scared of it (Cope, 2011). This thesis cannot answer that important question either, but it will aim at shedding light how the choice of lean start-up method will affect the entrepreneurs' recovery from failure.

In his book *The Lean Start-up* (2011) Eric Ries argued that utilizing lean start-up method drastically improves the likelihood of early start-up success. However, Blank (2013), another central character for lean start-up development, hurried to state that this claim of lean start-up increasing the opportunities to succeed is still too early to declare. Yet, continuing, that lean start-up is, however, certainly going to decrease the amount of start-up failures – eventually. Following this, and also due to the success the lean start-ups have achieved, business schools have started to teach lean start-up techniques in order to reduce the failure rate amongst entrepreneurs.

Where Blank ends his own thesis, is where this thesis gets started. This research aims to discover if lean entrepreneurs had taken a more positive approach towards failure because of the lean start-up method itself - and if with that mindset ongoing, they were given tools to withstand the failure. Unlike Blank, this thesis will not try to understand if lean entrepreneurs failed less compared to their peer groups – but just simply learn how they recovered from failures – and what that might contribute to the existing knowledge on failure recovery. What if the entrepreneurs were mentally better prepared for failure just because the lean start-up method highlights a rational approach and therefore approves failure as a natural outcome of a venture? Furthermore, lean start-up emphasizes that failure is not definite, and often even gives credit for failed entrepreneurs because of the unique experience they have managed to obtain.

In addition, lean start-up also recommends you to fail faster by urging the entrepreneur to get customer feedback on every point of the venture. Even when it might feel very uncomfortable as the product is not ready. The less you build at once, the better. That same logic applies with committed money as well; lean entrepreneur wants to generate maximum return with minimum investment and the whole evaluation of what to do next is done based on the effort-reward relation. Could it be therefore possible that since the failures are occurring more frequently, and they are minor in size, that the entrepreneurs are more rational towards the potential outcome of the business? This could naturally affect the failure recovery as well.

Feeling less emotionally attached, losing less money, and taking a rational approach towards the venture could lead to understanding that failure is not ultimate,



and therefore the financial-emotional balancing of failure would occur already during the running of the venture (Shepherd, 2011).

However, as stated before, failure is a complex concept and it can have versatile outcomes on people. This thesis aims to discover how lean entrepreneurs recovered from failures and look whether the results vary drastically from the current knowledge we have obtained from the existing literature and research. The study is limited into Finland, since the interviews will be conducted in Finland amongst Finnish start-up entrepreneurs. That needs to be clarified because the earlier research on the field indicates that culture and surrounding entrepreneurship ecosystem also alters the recovery (Cardon et al, 2011). Since the attitude towards failure may rely on the environment and the surroundings of the entrepreneur, we cannot exclude that information and consider that the outcomes can be perfectly replicated in different kind of entrepreneurial ecosystems. Hence, feelings commonly related to failure such as stigma, shame and grief are partially connected to the ecosystem itself. However, the thesis also does not deny that it would be possible to replicate the reached results repeatedly, in various locations.

## ***1.2. Research Problem and Gap***

Through previous studies on entrepreneurial failure, we have learned how the perspective alters the view on rationales behind the failure (Mantere et al, 2013), how the learning from failure varies by role and commitment to the venture (Ucbasaran et al, 2010; Yamakawa et al 2013) and also on the individual ways of recovering from the failure. Especially widely, existing literature has been reaching to understand the individual recovery and aftermath of failure (Cope 2004; Shepherd et al 2009). The topic has been studied through social, personality and financial context, through the role in the venture and current commitment to it. Some studies have even gone as far as to research the recovery through environment and cultural perspectives (Cantner et al 2011, Cardon et al 2011).

Nevertheless, unlike in literature related to business success, the studies have not focused on researching the failure in relation to the entrepreneurs' mindset and the general operational "method" the start-up has operated with. The culture and the central

processes of winning companies are often studied and benchmarked — why would we not do the same with failed companies to understand more? Lean start-up is definitely a mindset, but it is also a process to run the venture – and as we will learn from this thesis, also a process to recover and move on from failures.

During the thesis period, I have not been able to encounter a single scientific article that would have studied the failure recovery of the entrepreneur who had utilized lean start-up in the venturing. Lean start-up method is based on experimentation, and understanding the connection between this hypothesis-driven approach and failure recovery is currently non-existent. This creates a research gap on in our understanding of the failure, as we cannot assume that some entrepreneurs fail well and others bad just because of certain type of economic setups (e.g. wealth, social security network), personal characteristics and capabilities or because of cultural reasons. Even though rationales behind failures – and failure recoveries are versatile and often the reasons can be interdependent, we can still increase our understanding of failure on specific, narrow areas by looking at the matter in-depth.

This thesis seeks to understand failure better by adding a new in-depth angle on the research by looking at the effects on the recovery by the chosen mindset and methodology in the venture. And that mindset and methodology is lean start-up. Lean start-up is a methodology to run a venture, surely, but especially it is a mindset (Blank, 2013). Eventually, this same mindset (lean) is also the mindset that affects the recovery on the event of a business failure. Hence, we deepen our understanding of failure recovery of “lean entrepreneurs”. It is very relevant addition to the existing literature because it should help us to realize that entrepreneurs do not recover from failure semi-randomly and based only on their nature and economic environment. The goal is to explore and find evidence that the lean start-up method underneath will alter the entrepreneurs’ perspectives on failures – therefore allowing them to make sense of the failure, learn from it, and later on start a new business after failure. The research is conducted through interviews with entrepreneurs whom are recognized to have followed the core elements of lean start-up, often also denoted as experimentation approach, in their venture building.

### ***1.3. Research Questions***

The goal of this thesis is to contribute to the knowledge of failure recovery in the field of entrepreneurship. The limitations of it will be similar to the existing knowledge we currently have in failure literature; we can only credibly observe the recovery of the entrepreneur from one standpoint at a time. Even though it would be tempting to study a more vague viewpoint at one, it is clear that the phenomenon would be too complex to handle at once. The interdependent matters are difficult, if not impossible to generalize and therefore the bias of thinking that some single rationale would explain failure recovery is very early to declare. Hence, this thesis will solely research how the lean start-up entrepreneur recovers from failure – and eventually suggest justifications why things might stand as they do.

The main research question is:

***How lean start-up entrepreneurs recover from business failure – and what factors contribute to that?***

The thesis seeks to validate a set of proposed themes emerging from the existing literature and the interview data. Due to that, the following, potentially interdependent assisting research questions were posed and analyzed.

*Lean start-up method holds a positive reservation for failure*

*Lean entrepreneurs will consider they have obtained learning from the failure*

*Lean entrepreneur can capitalize the failure better because he has a rational approach towards it*

*Lean entrepreneurs don't get stigmatized of failures*

*Lean entrepreneur will take responsibility over the rationales behind his failures and not blame misfortunes of it.*

*Lean entrepreneur is likely to establish a new venture after failing previously.*

#### **1.4. Methodology**

The study methodology is a qualitative study conducted with interviews in multi-case study form with current and former Finnish high-tech entrepreneurs who qualify to have credible knowledge over the principles of running a company lean – and recognize to have done it in their ventures that ended up in a failure. Key strength of the case studies is the opportunity and likelihood of finding something novel (Eisenhardt, 1989). Accordingly, the research also did not want to close out of the chance of being initially all wrong with the base assumptions and the case study approach gave an opportunity to recognize this and adjust, instead of reinforcing an invalid theory by force to fit the subject. The epistemology of the study is interpretative.

The research questions are formed from the existing literature on failure and lean start-up. Furthermore, the research leaves space for new themes to emerge from the narratives of the entrepreneurs in order to add to the existing understanding on failure. This was important since the study itself focused on understanding questions such how and why lean start-up entrepreneurs recover from failures.

The interviews utilize interview guide in order to ensure all the important aspects are covered. However, the guide leaves space to let the conversation flow naturally and go in-depth in order to let new data emerge from the narratives. The data is then transcribed, analyzed and extracted in forms of narratives from the entrepreneurs themselves. Furthermore, interdependent matters are considered carefully in the results and conclusion chapters.

#### **1.5. Expected Contributions**

Especially important factor for the motivation and inspiration for this thesis was the desire to find out a linkage between utilizing lean start-up methodology and recovering from business failure. Therefore, we needed to answer the question ‘How lean entrepreneurs recover from failure’. That is also where the primary, and most essential research question is directed.

Since the recovery itself is not enough for us to understand why it occurred in the first place, the thesis wants to further investigate the relation between the lean start-up methods utilization's supposedly positively-colored attitude towards failure. The hypothesis is that the positive – yet rational - expectation management and attitude will also increase the probability of recovering well. In case we are able to establish a clear link between the positive attitude towards failure in the LSM (Lean Startup Method) and the recovery from entrepreneurial failure, it should be definitely taken into account by policymakers and education designers in their efforts to foster the entrepreneurial ecosystem of an ecosystem – or even on national level.

Hence, the thesis will argue that several matters contribute to the failure recovery of the lean entrepreneurs, and those matters are connected with the lean start-up method itself. Lean entrepreneur recover well because they will 1) lose less wealth when failing and will not 2) blame external factors such as general misfortunes over their failures. This goes into the very core of the lean start-up method where the entrepreneur must admit that the start-up is not viable until all – or at least the most essential - customers have proved the entrepreneurs hypotheses to be valid. Therefore, the entrepreneur is responsible for discovering a functional business model during his search. In case she fails, the blame should be put on the management of the venture and not external reasoning. This thesis claims that responsibility over the outcome of the venture is essential for the sensemaking process of the failure, and therefore allows to 3) recover and learn from the failure experience. In future, sensemaking through taking responsibility also, 4) enables the entrepreneur to start another venture or continue a career in entrepreneurial function such as corporate venturing. This is possible because the mindset of the entrepreneur and also the lean entrepreneurs' network is approving towards failure which prevents 5) the entrepreneur to experience shame and stigma. Already Shepherd et al (2009) recognized that if the entrepreneur cannot cope with the negative feelings related to the venture failure, it could prevent his learning from it completely.

These arguments, united, form a powerful framework to explain why lean entrepreneurs recover well from failures.

## 2 LITERATURE REVIEW

### ***2.1. The Relevance and Focus of the Study***

Much of the entrepreneurial research has circulated around the formula of success and trying to find a wisdom stone for it. However, many academics, especially in recent years, have started to study the other end of the entrepreneurial spectrum, failure, more comprehensively. The common driver has been the belief that by understanding the failure better, we might be able to avoid repeating some general mistakes, thus leading to better success rates. Furthermore, the academics have understood that entrepreneurs who have encountered a business failure could become an important asset in building successful businesses tomorrow due to the unique experience they have obtained (Shepherd 2003, Ucbasaran et al 2010)

One of the cornerstones for whole entrepreneurship research is Schumpeter's work in the 1930's. He recognized the entrepreneur seeks opportunities for profit. He introduces "new combinations" of resources or innovations to reach this goal. New entrepreneurial combinations destroy the current equilibrium in the economy and lead to a process of development, which changes, and regenerates the equilibrium state previously existing (Schumpeter, 1934). This thought is very important in the sense that the equilibrium could not be displaced without someone succeeding – and many failing during the constant transformation. In his terminology, this is called creative destruction. Hence, perhaps without even recognizing it, Schumpeter already shed light on the unstoppable force of failures, and their vital role in the development of the economy.

Just during the previous ten years, failure has been studied through many angles. As an example, the emotions the entrepreneur needs to deal with through owner-managers' efforts on balancing the emotional-financial recovery (Shepherd 2008, Ucbasaran et al 2012), social context such as losing individual friendships and networks (Cope, 2001), and even emotion of loss of independence (Jenkins et al, 2014). Cantner et al (2011) went as far as trying to find a linkage between the entrepreneur's personality traits and failure rates.

In addition, researchers have studied failure from sperspective and commitment to the venture. Yamakawa et al (2013) studied if sequential entrepreneurs' were more

positive towards failures, whereas Ucbasaran et al (2012) argued that portfolio entrepreneurs were indeed able to capitalize more learning from failures because of their emotional distance to the venture. Furthermore, the perspective on occurred events and rationales for failure were found to depend on the perspective, level of commitment and role of the person in the venture (Mantere et al, 2013). Therefore indicating the rationale for failure reasoning was whether subjective truth depending to whom it might concern.

Outside this, failure has been researched through the state point of view, discovering that failure-enabling culture can indeed lead to economic growth (Olaison et Sorensen, 2014), and that fair failures with no economic fraud, should be therefore celebrated and state should just focus to create an environment to recover from failure quickly. Also, Cardon et al (2011) researched the rationales of failures claimed by entrepreneurs from different geographical areas. They discovered that entrepreneurs were more likely to blame external circumstances – misfortunes - on failures in areas where the culture was not positive towards failure, whilst they were more likely to admit their own mistakes caused the failure in areas where the entrepreneurial culture was more developed. In their earlier study, Cardon and McGrath (2003) learned that people tend to attribute their own failures to external causes, however see other's failures to be caused due to internal causes. Hence, people tend to victimize themselves to circumstances rather than carrying responsibility over the failures.

Even more than the existing failure research, existing literature and research on lean start-up is very narrow. Lean Start-up is a very new wave in the business world and still largely about to reach it's full potential and impact in the coming years. Even though lean start-up has been recognized widely amongst entrepreneurs, researchers have remained fairly ignorant towards it to date. The central characters of lean start-up have argued that the method increases your chances of success and also decreases the rate of failures. (Ries, 2011, Blank, 2013) Today there exists no evidence or even research proving these arguments to be truthful, however not the opposite either.

Therefore, this thesis aims to link these two important entrepreneurial themes with each other. To be more specific, the goal will be to link the recovery from entrepreneurial failure together with lean start-up method. It was important to discover

and capture the most important research on both themes in order to argue credibly on the connection of lean start-up methodology and business failure. In addition, it was important to study the existing literature to ensure that the angle of the study was unique in the field of entrepreneurial failure recovery, and the thesis would therefore contribute to the existing debates in this research domain.

## ***2.2. Introduction to Lean Start-up and Lean Entrepreneur***

To understand what Lean startup really is, we need to drill down to the essence of it. For decades, it has been considered that launching a product or service is a “hit or miss business”, where the idea either works or not - and forecasting the results would be, if not impossible, at least extremely difficult. The ignition point of the venture would be a business plan, which was seen as critical for the venture outcome, and later on it would be difficult to steer the business outcome. This was the base case, however recognizing that a world-class team increases the likelihood of success versus a novice team. Thus, lean start-up method changes these assumptions drastically. Lean start-up method is a set of techniques, tools - and most importantly - a mindset that aims at increasing the entrepreneur’s probability of success (Blank, 2013).

The starting point of lean startup is the fallacy of the perfect business plan. The dominant theory of entrepreneurship for decades was to figure out a perfect business plan which answers all the challenges of business, such as size of the opportunity, the customer problem, the solution for that problem and even the future revenues and earned profits. The general assumption was that it was possible to figure out all the unknowns beforehand. The business plan was often written before even building a prototype, or meeting the first customer. The problem of this thinking pattern is that most of the times the entrepreneur does not get the assumptions correct without significant customer feedback. It is very difficult to forecast future in general and it’s at least equally difficult to do so with a start-up. Therefore, the path leads to a highly likely failure, where the entrepreneur has to learn it through the hard way the product was not wanted by the customer – and due to learning this lesson only very late in the venture process - the failure leads also to significant losses of money and time (Ries 2011, Blank 2013).



According to Eric Ries and Steve Blank (2011, 2013), the key to success is actually failing as often as possible and doing it as quickly as possible, however in small quantities. Because the more the entrepreneur can fail, the more often she can learn what the customer did not want. In other words, the entrepreneur is able to prove an existing business model hypothesis wrong – creating an opportunity for a new one to arise. In addition to learning what the customer didn't want, the entrepreneur will also increase her awareness of the customer wishes. Hypothesis-driven approach remains in the center of lean start-up throughout the process. Sometimes it's possible to learn that the whole customer segment was wrong in the first place. Therefore, learning fast gives more possibilities for modifying the business and increases the likelihood of finding something that works. In common language this method could be described to be experimentation-driven, rather than execution-driven.

Lean start-up is characterized with three important notions. First, business plans rarely survive the contact with real customers. What this means is that doesn't matter how well the entrepreneur prepares the business plan, it is nearly impossible to get the customer needs rights by bare intuition. Secondly, five-year plans are non-rational. Current economic environment changes so rapidly, that five-year plans to forecast complete unknowns is "waste of time". Third, Blank (2013) goes to emphasize that start-ups are not smaller versions of larger companies. Start-ups are in search of a business model, whilst corporations are executing a business model. Therefore, they shouldn't be built and judged through similar kind of framework and set of assumptions.

### *2.2.1 Elements of Lean Start-up*

Lean Start-up is a serious attempt to minimize the amount and magnitude of business failures, nevertheless recognizing that sometimes failure is imminent. Still, even a failure can be absorbed as a learning experience, whilst minimizing the financial losses. The earlier you start interacting and learning from your customers, the earlier you know whether the plan you are implementing is actually performing. Ultimately, this saves you money, time and resources (Blank 2013). There is no scientific evidence

that lean start-up would lead to better success rates for start-ups. Still, that is what both Blank and Ries eventually are striving prove in the long run.

A majority of lean start-ups start by filling a business model canvas. The Canvas consists of central hypothesis the business is facing with its customers, partners, value creation, channels resources and activities. The starting point is that the entrepreneur does not know whether the plan will work or not – that is why each of these “hypotheses” needs to be validated. Only through validating each and every assumption of the business model canvas, the entrepreneur can discover a functioning business model (Ries, 2011, Blank 2013). Business model canvas remains a central element throughout the whole lean start-up lifespan, and it could be figuratively described to be “the business plan” of the lean start-up. The key difference to the traditional business plan is that lean canvas starts with the assumption of not knowing something, whereas the traditional business plans assumes the unknowns can be all figured out. In addition, it’s essential to update your lean start-up canvas frequently because it simply reveals the start-up is advancing and learning. Traditional business plans instead are more static type.

Hypothesis-driven approach is central element in lean start-up. Like mentioned before, each and every hypothesis of the entrepreneur needs to be validated. Only this way the entrepreneur can obtain “validated learning” (Blank, 2013). Ries (2011) describes the learning curve as another very important dimension of start-ups. He argues, that the faster the team is able to learn – the more likely it will reach success. Blank (2013) calls this hypothesis-testing process “Customer Development”. Customer development’s emphasis is on nimbleness, speed and “getting out of the building” which is the term Blank uses to urge the entrepreneurs to go and meet customers early on instead of developing the product based solely on their intuition and current knowledge.

Through fast learning the entrepreneur can iterate the business model canvas – and sometimes when things simply don’t work out at all, make a “pivot” (Blank, 2013). In general, the business model canvas is iterated, one hypothesis at time. However, pivot is a term used to describe the moment when the entrepreneur abandons the whole business model canvas, and draws a new one to start from the beginning.

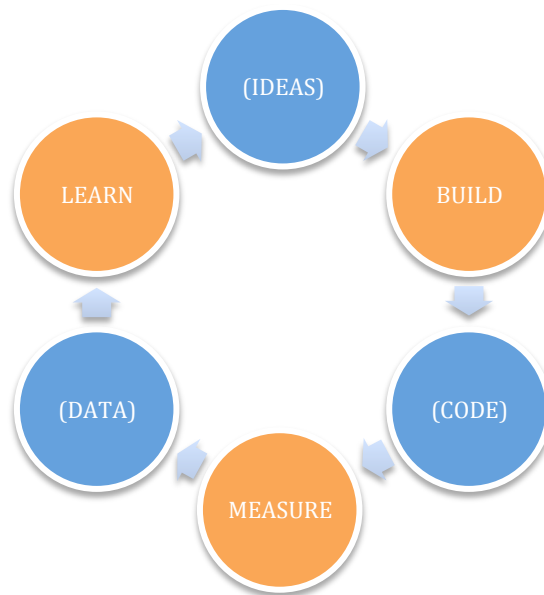
The maximization of speed is done by iterative process where you always build a minimum viable product (MVP) in order to test the new hypothesis quickly with customers, partners or stakeholders. A good minimum viable product is one where you build only the essential to validate a single hypothesis (Ries, 2011, Blank, 2013). The concept of minimum viable product connects to the very essence and central philosophy of Lean Startup. Throughout the whole Lean Startup process, the entrepreneur creates hypotheses that are then experimented with customers. Minimum viable product is important to hypothesis testing, because heavy product launches consume time and resources. Through building only the absolute minimum required, the entrepreneur is able to maximize his learning curve without losing valuable time (Ries, 2011).

Business model canvas, customer development and discovery, speed and concept of minimum viable product all connect to a customer-focused product development. This process is called agile development, originating from software industry. Agile development works hand-in-hand with the customer development where neither of the process dominates one another (Blank, 2013).

Besides the components, lean start-up is build around the concept of “build-measure-learn”, where the development work of the company starts over and over again after talking with customers and using metrics to understand their behavior. Build-measure-learn model is connected with everything that happens in a lean start-up (Ries 2011).

*“The problem with entrepreneurship is we are often working really hard producing high quality products that no one wants.”– Eric Ries*

**Figure 1 Lean start-up process**



### *2.2.2 Lean Start-up is eating the World*

Lean startup method has shaken the world of entrepreneurship since its inception in 2003. The concept was introduced and incrementally developed by Steven Blank and Eric Ries. Steve Blank wrote his first book on customer development, the Four Steps To Epiphany in 2004. However, first time lean start-up became really mainstream through Eric Ries' blog posts which were initially just describing the methods he followed in his role as CTO in his technology venture, IMGU. However, the success the methodology brought to IMGU, led Ries to understand the concept needed to be taken out there to the world. Lean start-up received both strong approval and disapproval in the first place – something that tends to happen for radical ideas. For an entrepreneur, causing of mixed reactions is more of a rule than an exception. The radical ideas are the ones that disrupt the current beliefs and therefore create strong emotions.

Still, the lean start-up method has not gone totally mainstream. According to Blank (2013) we are still to learn the full impact lean start-up will create in world as the movement advanced. He continues by explaining that lean start-up method is somewhat in similar position where Big Data was five years ago – for most it's just a buzzword that doesn't mean anything yet.

The adaptation of lean startup has been very aggressive and entrepreneurs in almost every corner of the world are now practicing it. Still, academic research on lean startup is nearly non-existent and it hasn't been widely even recognized as a new mega trend of entrepreneurship – something that would be worth serious researching. This, even though, the opportunity recognition and utilization is very centric in the entrepreneurship theory (and Venkataraman, 2000). This makes lean start-up a very ideal subject to study.

Today, Lean Start-up method is being taught in more than 25 universities, including my own, Aalto University. In addition, you can find events such as Startup Weekend and Lean start-up gatherings in almost all major cities in the world. However, maybe the most convincing demonstration of the power of Lean Startup method has been its adaptation by large corporations such as Intuit, General Electric and Qualcomm. These corporations have been in need of finding new ways to innovate, and lean startup has offered them a platform of continuing to remain in the cutting edge of the development (Blank, 2013).

### ***2.3. The Definition of Entrepreneurial Failure***

The most common definition of business failure is bankruptcy. For example Zacharakis, Meyer and DeCastro (1999) have defined failure in their studies as a moment of insolvency or bankruptcy. Business failure, often denoted as entrepreneurial failure in the context of small businesses, occurs in simple terms when a business is closed down due to reasons related to the venture itself. Therefore, failure is not always a synonym to business closure, which can derive its reasons from things such as retirement, pursuit of other activities or going after more lucrative business opportunities (Headd, 2003). However, failure can be specified more accurately. According to Shepherd et al (2003, 2009) a failure happens when there is either a steep fall in revenues or a rise in expenses of such magnitude that the business cannot any longer continue to operate under the current management. In addition, the current management is unable to attract new financing for the business, therefore either the business needs to be shut down or the current management changed.

Another way to define a failure is when the business passes a point of no return and failure is inevitable, or at least extremely likely (Ohlson, 1980). Business failure can be also defined as a termination of business that has fallen short of its original goals – therefore failing to satisfy the goals set by stakeholders (Gabrielsson & Politis, 2009).

Nevertheless, the moment of failure is not always that straightforward. Sometimes the entrepreneur not decides to continue the business nevertheless its situation would be hopeless (Shepherd et al 2009). At this point the business typically requires the owner-manager (entrepreneur) to diminish his personal salvageable personal equity – or even, in extreme cases – to invest additional funds to the company to avoid insolvency. However, even though the owner-manager would postpone the event of closing down the business the moment it does not change the moment of realization of the failure (Shepherd et al 2009).

Obviously, nevertheless there are also rhetoric differences on viewing entrepreneurial failure, it can be disclosed that the concept of failure is still not completely clarified and distinguished to all public. Therefore, during this dissertation, in order to avoid wrong interpretations on the work, failure will be viewed as the moment when the business faces 1) a moment when it simply cannot continue to operate under the current management, because the management was either unable or incompetent to raise further financing for business – and/or – reach necessary business objectives to continue to strive the business forward. Or a moment where 2) the business needs to drastically change its direction (pivot) where it abandons everything – or nearly everything – it has built to date.

### *2.3.1 Failure: a Burden or Learning Experience?*

It is no wonder that failure, and failed entrepreneurs have received more recognition amongst the academics within the past years. Success is discussed in our society on daily basis and failure is at least equally natural phenomenon when operating in the field of entrepreneurship. Failure is psychologically speaking exciting topic, because it can have both devastating consequences on some whilst for others a business failure is an enlightening moment (Cope, 2011). The reasons why entrepreneurs recover from failure differently are many-folded. It is not yet absolutely certain why some

entrepreneurs recover from failure both in faster time and more comprehensively. However, it is considered the reasons behind the recovery – or non-recovery – are most importantly financial and emotional recovery (Shepherd 2003, Shepherd et al 2009), social damage caused to personal and professional networks (Cope, 2011), loss of self-esteem (Jenkins et al, 2014; Cope, 2011) but also the feeling of losing one's independence (Jenkins et al, 2014).

In addition, the perception of failure as an experience is connected to the commitment to the current venture. First-time and sequential entrepreneurs are likely to capitalize less learning from failure than portfolio entrepreneurs, currently attached to multiple ventures (Ucbasaran et al, 2010). This is because portfolio entrepreneurs are more likely to adopt an experimental approach to the ventures and emotionally distance themselves better than entrepreneurs who are committed to a single venture (Ucbasaran et al, 2010). Hybrid (portfolio) entrepreneurs are also less likely to face loss of self-esteem after a business failure (Jenkins et al 2014), and therefore suffer less grief. Sometimes the previous ventures will give no benefits to future ventures at all. If there is enough time in between the subsequent ventures, it is possible the learning experience from the failure has vanished already before starting another venture because “the benefits of venturing are temporary” (Parker, 2011). Gabrielsson and Politis (2009) found in their research a strong correlation with learning from failures when the rationale behind it was a bankruptcy, rather than something more personal – for example emotional matters. When the failure was due to bankruptcy, the circumstances enabled a fruitful starting point for learning and hence utilizing what had been learnt in the future venturing.

Furthermore, the perception on failure varies according to the geographical location where it happens. There exists a strong correlation to a more positive perception on failure in areas where essential entrepreneurship culture and resources, such as venture capital, is better available (Cardon et al, 2011).

Finally, lean start-up takes a different kind of approach towards failure compared with existing conception. Whereas failure is considered a negative outcome for the venture in the traditional view on entrepreneurship, in lean startup methodology the failure is considered as an excellent learning opportunity (Ries, 2011). The view on

failure is drastically more positive than on the failure literature in general, because failure is not considered to be ultimate, but an important learning milestone for an entrepreneur. Often failed entrepreneurs are even considered as “veterans” who can either acquire financing for a new venture or get hired to good positions because of the unique experience they have obtained (Blank, 2004: Blank 2013)

### *2.3.2 Failure can be a Learning Experience*

Even though failure has been lately considered as more natural phenomena of entrepreneurship, it hasn't always been that way. Speaking in historic terms, business failure has held an extremely negative reserve and it has been mostly considered through the object of financial terms. It is no wonder the negative bias towards failure has been so strong, as nearly all business failures cause financial losses (Cope 2011; Jenkins et al, 2014; Cardon et al, 2011). Therefore, considering failure purely from financial perspective, at least in the short-term, it is indeed almost always a very negative phenomenon.

However, recently more and more scholars have started to observe the connection between failure and entrepreneurial learning. Many have thought that failure offers a unique chance to learn things that cannot be learned under any other circumstances. Therefore it can be considered, that subject to right type of circumstances, entrepreneurial failure is an excellent opportunity for a type of learning that cannot be simulated in any other way (Shepherd 2003: Shepherd et al 2009, Blank 2013).

The view of Shepherd is strongly supported in lean start-up literature, however the common nominator for those good, educating failures in lean startup method is the methodology itself. Whereas Shepherd instead has in his own research focused to distinguish the emotions - and the emotional recovery of good failures. What this viewpoint leaves out is that we don't really know how were the attitudes towards failure of these entrepreneurs beforehand. And this is essential, because lean startup method directs the entrepreneur towards rational decision-making and sense making. The experimentation-driven (hypothesis-driven) approach contains in its core the doubt that the business model might not be viable, and at the end of the day, only the customer can



judge it. Start-ups are risky endeavors, experiments that are in seek of a viable business model that they will either find or ultimately fail (Blank, 2013).

Therefore, this thesis will attempt to argue that the recovery from failure cannot be judged only through the sentiment of the failed entrepreneur because it would omit the important feature of the chosen methodology of the entrepreneur. Further, the thesis will make a bold statement that the decision to follow lean start-up methodology equals not only the process of running the venture, but also the mentality of the entrepreneur, the owner-manager. And because the chosen process will influence the mentality and viewpoint towards failure, an entrepreneur who follows experimentation approach (LSM) will recover more comprehensively from failures.

Despite some researchers have found evidence that failure can be learning experience, many academics have also raised questions on whether embracing the failure is wise at all (Parker, 2011). Therefore, the speculation goes on about whether learning from failures is only beneficial for some, as it it's simultaneously devastating to others. Due to the debate between the benefits of failure, the academics have argued the usefulness of its through many means Shepherd (2003, Shepherd et al 2009) and also through it essentially being a fundamental source of learning (Cope, 2011, Blank 2013).

### *2.3.3 The Negative Aspects of Failure*

Failure influences and potentially damages the entrepreneur on six significant areas of life. The influenced ones are financial, emotional, psychological, social, professional and entrepreneurial areas (Cope, 2011) but sometimes the damage can be even physical (Singh et al, 2007). These areas are mostly interconnected, one affecting another, making failure a complex phenomenon. In addition, the amount of grief the entrepreneur needs to go through affects the learning opportunities from failure. According to Shepherd et al (2009) in case the entrepreneur cannot cope with the feelings in a rational manner, it might be that the negative overall judgment of the situation can difficult – or even completely deny the opportunity to learn from the failure.

The financial harm is most generic of these all, occurring nearly always on the moment of failure. However, it's the emotional burden that is the heaviest to overcome (Cope, 2011). This is especially true when the business is central to the entrepreneur's identity. In this case the entrepreneur – often denoted as owner-manager by Shepherd – could not separate his own personal identity from the business failure which makes the recovery of it a heavier process. According to him, the fact the failure seems more personal makes it more severe (Shepherd et al, 2009).

The effects of failure in individual's capability of future risk-taking – or adversity - are a complex matter. According to Cope (2011) a failure might lead the entrepreneur to become overly sensitive and scared of the failure, leading her to avoid risk taking too much in the future. Nevertheless, like argued before, some people are simply better at overcoming and handling the emotions and other and are able to recover faster (Shepherd, 2003; Shepherd 2011) whilst in some cases, it might be actually better to fail once since this will increase the likeliness to succeed in the future (Yamakawa et al, 2013) and help to avoid over-optimism bias when starting up your next venture (Ucbasaran et al, 2010).

During their research in 2014, Byrne & Shepherd found out that three emotional states emerged in entrepreneur's narratives following a business failure; 1) Low negative emotions and low positive emotions, 2) high negative emotions and low positive emotions and 3) low negative emotions and high positive emotions. In addition, the research found out that positive feelings have an essential role in clarifying the business failure, however only together with the negative emotions. Indeed, entrepreneurs who had high negative feelings at first, followed by high positive emotions later on, resulted in cognitive process leading to sense making. Therefore, being overly resilient and positive on the failure, reported actually least sense making on their failures.

In addition, failed entrepreneurs are identified of suffering of the “stigma of failure” which has even lead to feelings of humiliation or remorse (Cope, 2011). However, the amount of stigma the entrepreneur experiences, varies according to geographic location (Yamakawa, 2013; (Cardon et al, 2011). Therefore, the stigma the entrepreneur faces after failure is strongly connected with internal factors such as her

character and previous experiences. In addition, however, it's also connected on external factors such as the culture around her, and the fundamental view on failure by her current and past networks.

However, an entrepreneur who has followed the lean startup method should not be stigmatized of the failure because the method embraces failure. Failing well leads to learning which is important, unique learning experience. We don't necessarily even have to look down to the emotional aspects of the entrepreneur's recovery in case the rational sense making through lean startup framework allows the entrepreneur to bounce back immediately or at least nearly immediately.

#### *2.3.4 Balancing the Emotional and Financial Costs of Failure*

One of the more interesting recent failure publishes was the one from Shepherd et al. on balancing the emotional and financial costs of failure. According to them (2009) failures can be mentally extremely heavy to overcome. He suggests that that the only reason of delaying failure is not that the owner-manager, entrepreneur, would be biased. He suggests the reason is emotional costs related to the business failure. The greater the amount of emotional costs in the failure, the longer it will take the owner-manager to recover from the failure – and these costs need to be balanced with the financial costs of failure (Shepherd 2009). He calls the model anticipatory grieving – a time when the owner-manager realizes the venture is going to fail, however she spends that time already to grief in order to recover from it faster.

There exists significant variance in the deal of grief the entrepreneurs face after failure (Jenkins et al, 2014). The level of grief the entrepreneur experiments is a combination of financial and emotional (losing something important) loss. This is very contrary to the previously existing idea where it was thought that the entrepreneur should shut down the business immediately when he realizes the business will fail – and salvage all the equity she can (Shepherd et al, 2009).

However, the recovery period is also connected to the grieving time. In their statistical research on entrepreneurs who had recently filed for bankruptcy, Jenkins at al, (2014) found further evidence for this thesis. It appears, the larger the loss of self-esteem and financial loss, the longer the grieving period. When the owner-manager has

a medium-term grieving period for the business loss, meaning she goes through anticipatory grieving, she is more likely to overcome the failure quicker. Therefore, against the common principles, through distancing herself from the business failure and thus preparing herself for more time, the overall balance of emotional and financial costs of the failure can appear easier to overcome. However, the effect of balancing the emotional-financial costs of failure diminishes if the business is central to the owner-manager's identity (Shepherd et al, 2009).

### *2.3.5 Rationales behind failures explained through narratives*

Nevertheless the reasons behind failures have been studied; there exists no universal, common reasons for them. The causes why companies fail – and why entrepreneurs fail – are versatile. When entrepreneurs are asked to describe the failures, the narratives around it are even more versatile. Failures and entrepreneurship are natural siblings – therefore storytelling is not only important for active entrepreneurs but also when coping with failure. Nevertheless, the possibility of failure is a central character to entrepreneurship, just as much as success; failure narratives have received far less attention than tales of glory and success. Yet failures represent a vast, important and mostly undiscovered domain in the field of entrepreneurship research (Mantere et al, 2013). Narratives are used to analyze the rationales behind the failed entrepreneurs but also the recoveries from them.

Cardon et al (2011) implemented the first known research around the narratives of entrepreneurial failure. The study was quantitative and the data set was based in US. The data set consisted of 389 failed entrepreneurs. The study demonstrated that 47% of entrepreneurs were blaming misfortunes for their failure, whilst 49% said the reasons were simply due to committing a mistake – or many. The remaining 4% had mixed reasoning, stating that both misfortunes and mistakes had an equal or nearly equal importance on the outcome.

Entrepreneurs who felt that the reason behind their failure had been a misfortune (47% of total) blamed mostly market forces over it. 40% stated market forces as the single most important driver behind their failure. In addition, funding (29%), internal

financing problems (14%), timing (8%) and unrealistic external expectations (7%) were named as reasons for the failure.

Instead entrepreneurs who attributed mistakes as the rationale behind their failures, mostly named Business plan/model (45%) as the most important reason. After that, mismanagement (32%) was followed by unrealistic internal expectations (11%), Hubris – in other words over-arrogance (5%), and internal financial reasons (mostly overly aggressive money expenditure (4%).

In this thesis, we are expected to see whether lean entrepreneurs are less likely to blame external misfortunes over their failures and take more responsibility over it. Since the single most important hypothesis to validate is to find a paying customer (Blank 2013), it would be extremely difficult for a lean entrepreneur address the market conditions as a reason for misfortune. Although, one could argue that establishing an otherwise viable venture, however failing in market timing could be a rational misfortune also for an entrepreneur who follows experimentation approach.

Looking from the perspective of lean start-up method, the amount of entrepreneurs blaming a bad business plan or model for the failure is high, due to the fact that one of the basic principles of the lean start-up is to get rid of the fallacy of perfect business plan (Blank, 2013). The important difference between a start-up and an established corporation is that start-ups are searching for a viable business model, whereas corporations are executing one (Blank, 2013). Therefore, it would be surprising if the entrepreneurs that utilize lean start-up principles would name a bad business plan rather than mismanaging the venture or having unrealistic expectations over it as the rationale for their failure.

Another interesting outcome of the study was that the rationales behind the failures are seen different within surrounding of different kind of entrepreneurial ecosystem. The East coast of United States has been considered a more conservative environment for business venturing compared to the more liberal west coast. In their study, Cardon et al (2011) were able to find evidence to support this hypothesis; the east coast entrepreneurs were drastically more likely to blame misfortunes over their failures compared the their peers on west coast. West coast entrepreneurs instead were most likely to say the rationale behind their failure was committed mistakes. The finding is

extremely interesting, considering especially how drastic the difference between the two coasts was. This could have an interesting connection with the fact that Silicon Valley is located in the west coast, and therefore technology start-ups are located there. Since it is the technology start-ups that apply lean start-up, it could be also one enabling reason for sensemaking – and therefore taking responsibility over failed ventures.

Due to what has been said, there are also obviously some external factors that affect the entrepreneurs' views on failure. It is not based solely on his personal characteristics. Mantere et al (2013) decided to study not only the entrepreneurs' narratives on the failure, but also to take a look at the closest stakeholders in order to understand better the rationales behind the failure. In their quantitative article, they interviewed – in addition to entrepreneurs – also the employees and hired executives and media. Each individual on separate categories was interviewed around same failure and their answers were then categorized and compared to one another.

In their study, they distinguished the rationales of failure to two categories: Intra-organizational and extra-organizational reasons.

There is a drastic difference on how the entrepreneurs, hired executives and employees rationalized the reasons behind the failure. The social construction of entrepreneurial failure is driven by the cognitive and emotional needs of stakeholders - aiming at maintaining a positive self-esteem in order to recover from the failure. The failure rationales of the stakeholders vary greatly from the ones derived by the media and other sources. Therefore, stakeholders connected with business failures cope with disappointment, grief and potential stigma by developing various narrative accounts. Thus, instead of aiming to find the most accurate and more thoroughly rationalized explanation for the events, the narrative, which is often a very limited view on the failure, allow the individuals to cope the disappointment better and continue their careers and lives. Partially this is because of the difficulty to handle the events, but also on the other hand, because the events are surrounded with complexity (Mantere et al, 2013).

### *2.3.6 Big-Five Personality traits as drivers for failure*

Like discussed in the previous chapter, there are obviously entrepreneurs who want to put blame more on the external factors – and others who are willing to see mistakes rather than misfortunes behind failures. Cantner et al (2011) examined specifically entrepreneurs' five big personality traits in relation with failure and exit, in highly innovative industries. The studied personality traits were conscientiousness, extraversion, agreeableness, openness and neuroticism. The study consisted of a data set sized 423 entrepreneurs in Germany.

In this research, emerged a connection with agreeableness and business failure. At all times since the ignition of the firms, agreeable entrepreneurs have lower probabilities at failing (Cantner et al, 2011). The finding is important as it indicates that certain type of behavior, agreeableness, is a real driver for avoiding business failures. However, the relation between discontinuance and agreeableness will decrease over the time, and be statistically diminished after time passed.

Neuroticism for example had no correlation with exit rate; neither did the findings support real relationship with entrepreneurial failure. Openness, instead, had a slightly significant relation to exit hazard. Yet the data supported no connection between entrepreneurial failure rates – meaning it either didn't decrease or increase the probabilities for this, nevertheless stated that the matter needs further researching. In addition, also extraversion demonstrated similar kind of results. There was no clear connection between failure rate and extraversion, yet the correlation between the decrease exit rate and extraversion was statistically significant. The rationale for openness – together with higher rate of exiting could be in relation with tendency to go after new challenges more frequently (Cantner et al, 2011). Instead the extraverted entrepreneurs are likely to expect higher expected rewards from uncertain situations, which might complex things out. Nevertheless, like mentioned before, the matters would need further attention in future research, despite the mentioned findings being in alignment with the previous literature.

Moreover, just as agreeable entrepreneurs were less likely to fail during the whole life cycle of a company, there's also a connection with higher failure rate and conscientious entrepreneurs. The driver for this is the characteristic adjustments of

conscientious entrepreneurs that counteract flexibility, adaptability and creativity. Because the study was conducted over entrepreneurs in highly innovative industries, the connection could exist because of significant amount of uncertainty related to running a venture there. Therefore the finding could be related only to sample specific matters (Cantner et al, 2011).

### *2.3.7 The Importance of Failure-Enabling Culture*

Failure-enabled culture can be seen as a two-folded matter; firstly, an organization-level matter and secondly as a state-level matter. The impact of failure-enabled culture has been researched on both contexts – and also very recently.

Organizations differ drastically in their perception on failure. They either embrace or punish on failures (McGrath, 1999). Due to this the organization members are likely to be affected by the organization culture on approaching failure, and also be influenced by it in moments of trying to learn from failures. Due to the fact that punishing failure can create negative emotions, some organizations have driven a culture that normalizes failures when running projects. When the negative feelings around a failure are diminished, the organization members will face failures with less severe emotions (Shepherd et al, 2011)

Entrepreneurship has been promoted as a crucial, driving force for economic growth since the early 1990's. The general belief has been that the more successful entrepreneurs the society has, the more growth it will enjoy (Olaison et Sorensen, 2014). As years have advanced, and the understanding towards the importance of entrepreneurs has evolved, decision-makers and scholars have become more and more interested also on business failure and failed entrepreneurs. The debate has been mostly circulating around the fact whether failure is beneficial from the state point of view or not. Failure is an essential part of the entrepreneurial policy-making because if a country manager to embrace failure rather than neglect it, it is possible to improve the success/failure ratio (Olaison et Sorensen, 2014).

Most of the academic research on the area is done from the entrepreneur or venture point of view, in other words, on microeconomic perspective. Some feel that failure can decrease feelings of over-optimism and therefore improve the opportunity to



succeed – or at least hold the potential for success – with the next new venture (Cope, 2011). On the other hand, failure can have devastating effects on failed entrepreneurs' emotional and financial balance (Shepherd, 2009) might cause loss of self-esteem (Jenkins et al, 2014) and also loss of important social contacts and networks - sometimes even causing divorces (Cope, 2011).

However, from macroeconomics perspective there is deeper means with failure research. Like Olaison et al (2014) noticed. A failure-embracing culture could lead to improved success/failure ratio on a national level. They stated: “The good and honest failure is a productive failure”. This means that if there is no fraud or other dishonesty connected with the failure, the failure should be embraced and celebrated, because it is an important stepping-stone towards a more productive venture – at least from the nation point of view. These entrepreneurs will eventually become successful or at least preserve the potential to do so (Olaison et Sorensen, 2014). Therefore, the amount of new failures would eventually also feed the amount of successes, meaning that every venture is worth pursuing from the macroeconomic perspective. These findings are in alignment with Canter et al (2010) and Blank (2013) findings.

Also Blank emphasized the importance of new ventures for the economy. Due to the fact that existing industries are rapidly losing jobs that will never return, new start-ups need to lead the employment growth of the 21<sup>st</sup> century. Nevertheless he focuses on stating the lean start-up method reduces the failure rate, the philosophy also, importantly for this thesis, has a positively biased attitude towards business failure. Therefore, increased risk-taking will foster the growth of the economy that will eventually disrupt the current economic structures. Something Schumpeter (1934) understood early on. Furthermore, small businesses make up the majority of economy. If the whole universe of small business would embrace lean start-up methodology it would increase both growth and efficiency, having a direct impact on GDP and employment (Blank, 2013).

In addition, other findings show that policy makers should pursue more failure-friendly environment in order to maximize the opportunities for entrepreneurs to recover from failures. These political implications could be nurture the entrepreneurial culture through supportive infrastructure towards failures. The aspects to take into

account should be social, psychological and physiological matters. By taking into account these aspects, governments could enable entrepreneurs who have recently lost their enterprises to cope better with the loss – and also learn more from the experience. Therefore, also more the next venture would more likely reach success (Singh et al, 2007). However, there are also academics that have argued that the benefits of running several ventures in a row are almost non-existent. Even though the entrepreneur would learn something from the previous venture, it has been demonstrated through data sets that the advantage will disappear very rapidly. This means the benefits of facing a failure are temporary and depreciate over time. The longer the entrepreneur has in between the moment of failure and starting up again, the more depreciation will take place (Parker, 2011).

From statistical point of view, the odds of success are excessively discouraging. If failure means liquidating all assets, with investors losing most or all of their investments, the failure rate for start-ups is 30-40%. If failure rate refers to failing to live up to the expectations to return on the invested capital, then failure rate is 70-80%. Yet, if failure rate should be measured by achieving the set projections for the start-up, it would mean that 90-95% of companies fail against initial projections (Ghosh, 2011)

## 3 METHODOLOGY

### **3.1. Research Method**

#### *3.1.1 Overview*

The main research questions, “How lean start-up entrepreneurs recover from business failure – and what factors contribute to that?” and the assisting themes will be addressed through qualitative multiple case study. The epistemology of the study is interpretative, and the approach can be described to be inductive meaning the approach comes from bottom to top. Additionally, the supporting themes of the research were formed beforehand, however they were formed flexible enough for going back and forth according to the research needs during the development.

The unit of analysis of the study are a group of former and/or current entrepreneurs who define themselves as followers of hypothesis-testing driven business building – lean start-up - and have encountered at least one business failure during their career. Since the nature of their business process cannot be judged beforehand, the common nominator of them all is that they at least claim to have followed the lean principles in one or more of their ventures. Whether the method was being followed in very pragmatic way, or more in an indicative way, is not extremely important to the research outcome. However, the general knowledge of the framework is essential.

The entrepreneurs are nascent Finnish and have been running a business in the Finnish operating environment. The data have been gathered through personal interviews with the respondents by following a semi-structured approach. The more precise interview method will be the general interview guide, where the main topics are covered, however the exact wording and sequence of questions may vary.

The limitations of the study concern especially the small and well narrowed down sample size for the case selection. It is unsure whether the findings can be generalized into a wider population. In addition, the study can only answer the question of whether the entrepreneur who utilized lean methods recovered better from the failure than a peer who did not – however, it can not take into account the potential other rationales behind the recovery, such as the character, wealth, experience of the entrepreneur or even the support and reaction towards the failure from friends, family and the society.

### *3.1.2 Research Design*

The research was carried out through multiple-case study because there were no existing data sets for this type of data due to the novelty of the research domain. Therefore, due to two key reasons multiple-case study was the best approach. First, the type of the main research question was best addressed through case studies. Secondly, in order to carry the research in a validated manner we needed enough interviews to find consistency between the presented themes. A single case study would have not allowed the opportunity to replicate the results in a credible fashion. Each entrepreneur is unique, and also the narratives of one entrepreneur would have not been enough to credibly argue that there exists consistent connection with lean start-up method and failure recovery.

Hence, as we can see, the main research and some of the sub-research questions were focused on finding out “why” and “how” something had happened, rather than “what” or “when” it had happened. According to Yin (1994) and Myers (2013) case studies are preferred option for research when the aim is to discover results for “why” or “how” questions. It’s always easier to lean a case study or field experiment when operating with these questions. In addition, utilizing a case study-based approach would allow this thesis to perhaps uncover something new, unexpected. Because failure is a very complex real life socio-economical phenomenon, case study approach allowed an opportunity to investigate it in a holistic way (Yin, 1994).

To define the matter further, single case study would have not been enough to argue the results in a credible manner. In addition, a good research is something that one can repeat again and again yet receiving similar results. It can be argued that it would have been difficult to repeat the exact results of a single entrepreneur with another entrepreneur. Having various types of cases will assist to evaluate the matter more concretely, despite the personal feelings of the current situation of the entrepreneurs. It was also extremely important they would contain rich information about the matter so the interviews would provide detailed information in relation to the phenomenon (Shaw, 1999). Additionally, qualitative research is especially suitable when the researcher wants to study particular phenomenon in depth, for example through few interviews in an organization (Myers, 2013).

Good qualitative theory, just as any good theory building, yields testable and logically coherent theory. The main strengths of the case study research lie in likely novelty of the research, testability and empirical validity. These three important characters arise from the close linkage with the study and the empirical evidence. Additionally, case study research is considered to be especially suitable for new research areas where existing research is narrow or non-existent (Eisenhardt, 1989).

### *3.1.3 Justification of Research Method*

Key strength of the case studies is the opportunity and likelihood of creating and finding something novel (Eisenhardt, 1989). Accordingly, the research also did not want to close out of the chance of being initially all wrong with the pre-determined themes and the case study approach gave an opportunity to recognize it and adjust the themes instead of reinforcing an invalid theory by force to fit the subject. Therefore, the approach would also allow denying bias in this form. Indeed, Eisenhardt goes on in her paper to argue that theory building actually decreases bias because going backward and forward in the research seemingly prevents freezing the thinking. This helps in formation of a novel theoretical vision (Eisenhardt, 1989).

Case study building gave a solid base on letting the theory to evolve during the research and moving backward and forward in the structure according the needs of the research. It was especially important to be able to get back and redefine the research question during the literature review and analysis stage, therefore enabling improved opportunity for evidence gathering. Also, the case study approach strengths include the chance to test the emergent theory with constructs that can be measured and hypotheses that can be proven false. Finally, the resulting theory is most likely going to be empirically valid. The fact that the theory-building face is so closely tied down to the evidence gathering makes the results consistent with empirical evidence (Eisenhardt, 1989).

The potential weaknesses of theory building are mostly related to the analysis stage. It is possible that the researcher becomes overly confused with the high volume of versatile, rich data. Hence, the results can be complex to interpret because the high velocity of data causes the findings to be overly complex. Sometimes the large amount

of data can also cause the researcher to get lost and confused, causing the research to be too general. On the other hand, the other option is that the researcher gets so deep into the data that it's difficult to form any generalization at all (Eisenhardt, 1989). Especially the small sample sizes can cause it to be difficult to generalize the findings of in-depth qualitative studies (Myers, 2013). Due to these risks, it's important to limit the research questions into a manageable scope, and also to keep the focus of the study clear by ignoring the unessential despite the vast amount of rich data.

Due to the increased quality in the qualitative research, qualitative research has been reaching more popularity amongst business scholars since 1990s (Myers, 2013).

#### *3.1.4 The Underlying Research Philosophy*

Most commonly, research is differentiated being either qualitative or quantitative. Whilst this is seemingly true, this differentiation leaves out an important aspect of the underlying philosophical perception. Therefore, another way to look at the matter is to classify the research according to this base philosophy that guides the assumption and data analysis. The underlying assumptions are also very important from the research credibility point of view. If someone wants to replicate the results of the earlier research, these base assumptions need to be explained thoroughly enough for the person to reach same findings. Therefore, it is essential for both the evaluation and the conducting of the research what these assumptions are (Myers, 2013, 2013).

The most essential base assumption to understand is related to the underlying epistemology that guides the research. The word epistemology is derived from Greek language word "episteme" which freely translated to "knowledge". For any researcher working with qualitative research methods it is essential to understand the grounds of the knowledge. This is specifically important in relation to the scope and knowledge which will be obtained during the research – allowing also to deeper understanding of the limits of their newly obtained knowledge (Myers, 2013).

For this specific study the research was conducted with interpretivist approach. Interpretivism fit the study well because it was the dominant and widely approved form of research in the field of management and business. Therefore, also most academics are very familiar with it (Myers, 2013).

### 3.2. Case Selection

The interviewees are formed of former and current start-up founders that have experienced at least one business failure, and recognize themselves having followed the hypothesis-driven business building in the past venture. In order to avoid survivorship bias, it was important the group was not solely successful entrepreneur in their current or subsequent ventures. In addition, at least some of them must not be currently acting as entrepreneurs in order to discover whether the correlation between the bounce back from ventures and lean start-up really exists. This would help the research uncover the potential linkage between the prospects of starting up another venture despite the past failure, even when the new start-up is not yet imminent.

More precisely, the group of interviewees was formed from Finnish high-tech entrepreneurs because the lean start-up method has not really reached popularity outside tech ventures to date, nevertheless it could obviously have positive impact on other small and medium-sized businesses as well (Blank, 2013). Additionally, the research would be internally and externally more valid through the choice of limiting the group so precisely within the tech entrepreneur selection. Moreover, whether one would want to ever reproduce the results, it would help to limit the case selection carefully.

#### 3.2.1 Research participants

TABLE 1 RESEARCH PARTICIPANTS

<b>Participant</b>	<b>Age</b>	<b>Education</b>	<b>Date interviewed</b>
Antti Vilpponen	34	Masters in Economics	04/03/15
Henri Mehto	29	Masters in Economics	02/03/15
Jani Penttinen	39	University dropout	11/03/15
Kai Lemmetty	31	Bachelors in Information Science	11/03/15
Oki Tåg	32	High School	05/03/15
Paavo Bäckman	39	Bachelors in Information Science	09/03/15
Sami Kuusela	43	University dropout	12/03/15
Ville Simola	30	Masters in Economics	03/03/15

TABLE 2 RESEARCH PARTICIPANTS' VENTURE BACKGROUND

<b>Participant</b>	<b>*Serial entrepreneur?</b>	<b>Ventures</b>
Antti Vilpponen	No	ArcticStartup, Upcloud
Henri Mehto	No	Hyvinvointi-online.fi
Jani Penttinen	No	XIHA, Transfluent
Kai Lemmetty	Yes	Floobs, Gigswiz, Tutor Tigers
Oki Tåg	No	LoudRevolution
Paavo Bäckman	Yes	Mobile Backstage, Backstage Alliance
Sami Kuusela	Yes	Klak, Sofanatics, Hupparihörhö
Ville Simola	No	Kiririnki, Checkmylevel

\*Disclaimer: serial entrepreneurship was defined as how the interviewee felt about it himself

TABLE 3 RESEARCH PARTICIPANTS' CURRENT WORK STATUS

<b>Participant</b>	<b>Operating industry</b>	<b>Current work status</b>
Antti Vilpponen	Software / Cloud Services	Co-owner, CEO
Henri Mehto	Software	Employed with stock incentives
Jani Penttinen	Game Industry / Software	Founder, CEO
Kai Lemmetty	Software	Founder, CEO
Oki Tåg	Software	Employed with stock incentives
Paavo Bäckman	Software	Employed
Sami Kuusela	Software / Consultancy	Founder, CEO
Ville Simola	Health & Sports / Software	Employed with stock incentives

As the tables clearly indicate, despite the entrepreneurs are all from Finnish start-up ecosystem, they share relatively little in common from the perspective of other segmenting matters. The only common segmenting data aside these is that they all recognize lean start-up and most commonly, however not always, operate in the software industry. Instead, educational background, serial entrepreneurship status, current work status, age and exact industry as well as passion vary greatly. This was



important to the reliability of the study, since the focus group needed to be narrowed down specifically, however it could not consist of too similar types of entrepreneurs because otherwise the group itself could be biased. In other words, the research group needed to look to the matter from a bit different perspective in order for this research to establish a credible connection between lean start-up and the failure recovery process. The rationale behind this thinking process is covered more thoroughly in the limitation section of this thesis.

### ***3.3. Data Collection***

#### *3.3.1 Overview*

The interviews were carried out via Skype and face-to-face depending on the location and availability of the respondents. All of the interviews were recorded and decoded afterwards. Face-to-face interviews were recorded with a physical recorder, whereas Skype interviews were recorded with the operating system's recording software. Later on, the interviews were transcribed and analyzed.

Additionally, already during the interviews the research utilized memos to write down thoughts that might become essential later in the research. Memos are useful later on analyzing the data, because it involves the researchers' own thinking and commenting during the research process (Myers, 2013). Memos will be analytic memos that focus on the subject matter and can already contain hunches what the received data might be telling. These memos will help to develop concepts and themes arising from the data (Myers, 2013). Hence, together with the data analysis method, memos will allow to utilize the interview data more thoroughly and more comprehensively.

The interviews were conducted in the author's native tongue, Finnish. Interviewing in Finnish allowed an opportunity to add depth to the conversation and dig deeper to the world of thoughts of the interviewee. In order to have the conversation flowing naturally, Finnish language made more sense and also it allowed both parties to focus on the matter with a relaxed mood. The language choice was also important due to the critical incident view which is covered in the later chapters. Whilst translating the results from Finnish to English it was essential to avoid language bias. However, due to

the nature of lean start-up were most of the keywords are in English this didn't become a major issue at all.

The interview guide, and altogether the format, was developed continuously after each interview. The latter the informant took part to the interview, the richer the data received was.

### *3.3.2 The Interview Guide*

There exist three basic types of interview approaches to collect qualitative data through open-ended interviews. The options are 1) informal conversation interview, 2) the general interview guide approach and 3) the standardized open-ended interview. Each approach has their strengths and weaknesses but for this research, the most suitable method was the general interview guide approach (Patton, 1990).

This was due to the nature of study where it's important to lead the interview to the track on discussing the entrepreneur's past failures and current prospects. The general interview guide follows a pattern of certain issues that are to be explored with every respondent, however not in any specific order. Additionally, the exact structure of these issues and questions is not determined so the wording can vary. In essence, interview guide serves as a checklist for remembering all the essential matters. Therefore, it can be generalized that interview guide is a tool to ensure that the same data can be obtained from every conducted interview. Due to the fact that exact questions are not written in advance, the interviewer needs to adapt the interview in accordance to the context of the interview (Patton, 1990).

Despite the fact that interview guide ensures the covering of all the important aspect, it leaves creative space for the interviewer and the respondent to discuss on other, meaningful topics but more importantly, to go in-depth when the respondent has more insight on suitable domains. Whilst other topics might also emerge during the interviews, the researcher generally avoids on triggering in-depth discussion on matters outside the research scope. Hence, the interview guide approaches the interviews systematically and allows the researcher to conduct the interviews in a fast manner (Patton, 1990).

Besides being quite structured and fast to conduct, the key strength of the interview guide is the obtaining of rich and comprehensive data, whilst keeping the data collection somewhat systematic. This, despite the interview remains fairly conversational. The weakness of interview guide is that the changes wording and sequencing can result in different reactions and responses from different respondents (Patton, 1990). This is a threat to the quality of the whole conducted research. Therefore, during this research the goal is to keep the sequencing and wording changes to the minimum, yet following the interview guide structure in order to analyze the data efficiently and conduct the interviews efficiently.

### *3.3.3 Critical incident Approach*

There exists multiple ways to evaluate and analyze qualitative data during the data gathering process and after it. Nevertheless, this research will apply analytic memos and recording in order to store the data, and additionally coding in order to understand the data comprehensively. Still, since the interview guide only works as a check-up list to go through the most important aspects of the research, it was essential to ensure that all the important themes are covered in relevant depth.

Therefore, the research utilized critical incidents approach to discuss extremely important events more in depth with the respondents. Thus, the critical incidents approach would assist in building understanding of the behavior before and after the failure – which could then lead to new insights related to the events and patterns occurring around the respondent. Altogether, critical incidents approach is very good fit for a positivist research; nevertheless it could be also utilized together with interpretive research (Myers, 2013).

### **3.4. Research Question**

The main research question was naturally directed on the recovery process of the lean entrepreneur in order to understand the phenomenon and contribute to the research gap. The supporting themes emerged from studying the existing failure literature and the lean start-up literature. The themes were proposed early on in the thesis process,

however some of them emerged also from the data. The interdependent matters are analyzed around these themes proposed.

*Research question: How lean start-up entrepreneurs recover from business failure – and what factors contribute to that?*

Supporting themes:

*Lean start-up method holds a positive reservation for failure*

*Lean entrepreneurs will consider they have obtained learning from the failure*

*Lean entrepreneur can capitalize the failure better because he has a rational approach towards it*

*Lean entrepreneurs don't get stigmatized of failures*

*Lean entrepreneur will take responsibility over the rationales behind his failures and not blame misfortunes of it*

*Lean entrepreneur is likely to establish a new venture after failing previously.*

### **3.5. Data Analysis**

Typically in qualitative research the problem is that the researcher ends up with vast amount of rich data (Myers, 2013). Due to that, the researchers risks to lose the focus of the study and get involved into new, interesting ideas emerging from the data. Hence, in order to avoid getting confused with the volume of data, it's important to have a clear plan how the data will be analyzed.

This research will focus to analyze the data from top down. This means that the concepts used for the data analysis are derived mainly from the existing literature on the research domain. Furthermore, the author had earlier argued that there might exist linkage between lean start-up and failure recovery and had established a framework between these concepts to be tested. The research assumes that people in ventures (organizations) know what they have tried to do and can explain their thoughts, intentions and actions. Therefore, the 'informants' give an adequate account to understand their experience (Gioia et al, 2012).

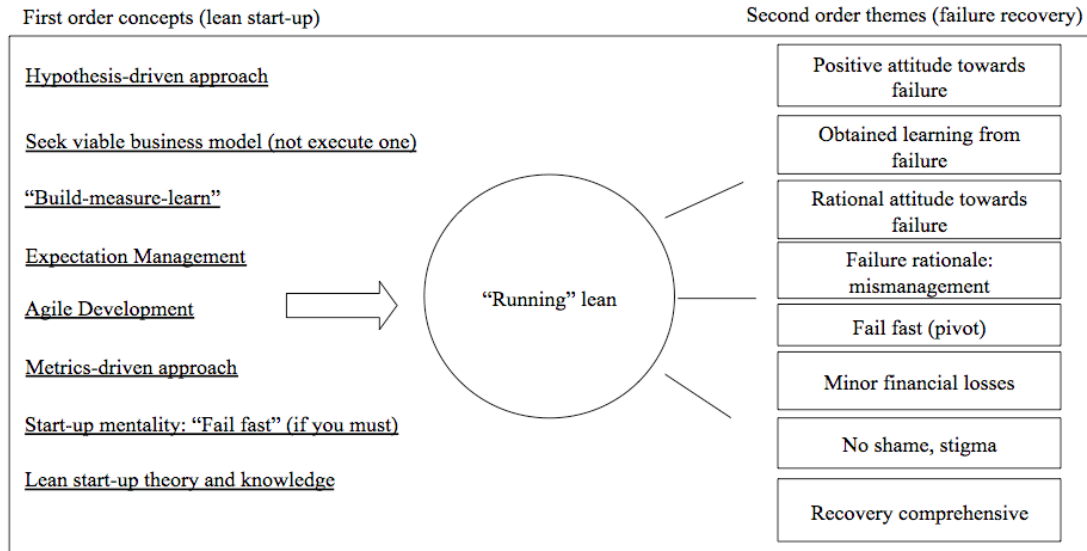
The informants' narratives will tell intellectually – or even emotionally – compelling stories based on transparent evidence. The methodological approach is only valid if it is data-driven and connects with the data structure in a credible way. This research will utilize information quotes to connect the interviewees' thoughts into the developed framework in order to prove through informants' words that there indeed exists a real connection between the data and the framework. This way, the reader can easily see and sense the connection between the concepts and the themes since it is not the researcher who is telling the story, but the informant (Gioia et al, 2012).

The problem with the high volume of data will be solved through building a coding method to code the data after the interviews. Coding is used to describe and summarize the underlying thoughts of the respondents in order to analyze the interviews more comprehensively. Code can either summarize words, sentences, and paragraphs or sometimes even the whole interview transcription. Additionally, codes will help to retrieve, organize and speed up the data analysis (Myers, 2013).

### *3.5.1 Data structure*

Data structure model was built during the interviews and kept in motion throughout the interview process – as well as during the data analysis. The general idea was to credibly connect the concepts of lean start-up into the management of the venture. Once this connection with lean start-up could be discovered from the informant, we could justify also continuing the mentality to connect to the recovery period itself. Since we knew the company operated lean processes, the mindset would go nowhere during the failure either. Failure is a natural part of venturing and therefore connected to the venture operating itself.

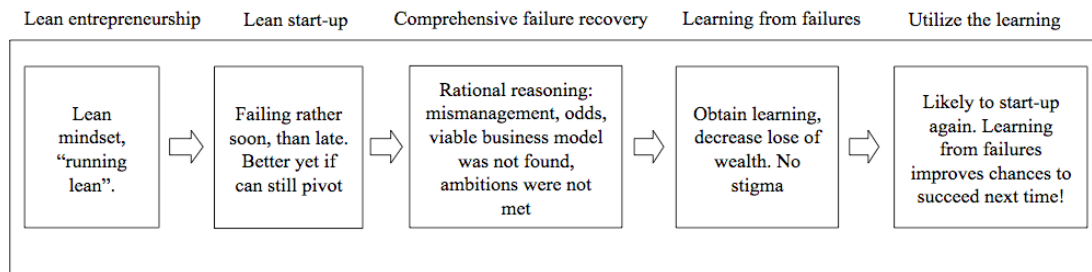
**Figure 2 lean start-up concepts in connection with failure recovery**



The great challenge with the data structure was to avoid bias in the coding phase; nevertheless the structure was kept in motion. The key difficulty in building a qualitative research model such as this is to account for all major emergent concepts, themes and dimensions, but also their dynamic relationships between each other (Gioia et al, 2012). In order to be fair, the research needed to recognize there are different level of commitments to lean start-up amongst different entrepreneurs and ventures. There exist no universal distinguishing between a lean start-up and non-lean start-up. However, there are clear indicators that can reveal the underlying mindset. These underlying concepts are presented in the literature review section and Figure 1. Furthermore, the 'intensiveness of the (lean) mindset of each entrepreneur is also classified in Table 2 and Table 3. Just as a good research must delimit its result implications with certain factors, also it must recognize the complexity of certain contributing attributes in making a credible research.

Nevertheless, the connection between operating a lean start-up and the entrepreneur's lean mindset was built with these concepts and it describes a complex phenomenon in a realistic manner. Yet, we could see that the concepts and themes connected to a real life experience over the narratives of the entrepreneurs. The emerged connection is described below in Figure 2.

**Figure 3 how lean start-up enables learning from failures**



### 3.5.2 Coding the data

The text was coded with themes emerging from the existing literature and the interview data. The initial themes were developed by getting familiar with a wide spectrum of the existing literature and also from the suggested themes by the author. Furthermore, the research gathered a maximum amount of supporting themes around the topic in order to research different kinds of causalities and correlations in the research groups' mind. This was done partially because of the critical incident approach which gave an opportunity to allow the emergence of new themes from the data if it was to happen. However, most of all, it was done this way because nevertheless we would put great effort in developing a data structure, it still presents only static picture of a dynamic phenomenon. The ultimate goal of inductive research is to establish vibrant model that is grounded in the data and can explain the dynamic relationships among the emerging concepts from the informant – the interviewee (Gioia et al, 2012).

The coding of the data was done in Excel by transcribing the relevant parts of the interview fully. However, the transcribing was not done word by word since the conversations included lots of talk around the current matters in life, venturing and emotions all in all and the interviews in general were quite long. Therefore, only parts that consisted of relevant thoughts to this thesis were transcribed. Naturally bias was avoided as far as possible. Hence, also parts that did not support the authors' worldview and thesis argumentation were transcribed, analyzed and reported.

### *3.5.3 Themes for data analysis*

Whenever the subject would talk on these themes, either by choice or due to a question posed, it would be transcribed and analyzed. The rationale for this was the strong connection with the themes posted in this thesis which also fostered the research question – and the research design. The pre-determined themes were established before interviews, however supporting data allowed the researcher to add more themes during the transcribing process. The fear was that the knowledge that was already established and rooted in the previous research could become a delimiting factor in what we could learn today, since our mind would not be open to analyze signals outside the current patterns (Gioia et al., 2012). Therefore, the concepts, themes and dimensions were updated still when the data was analyzed.

The themes for the analysis were: positive failure recovery, rational approach towards failure, learning from failure, entrepreneurship as a career choice post-failure, financial matters and emotions related to the failure, attitude towards the timing of the failure and failure rationale. With failure rationale it was interesting to ponder whether the entrepreneurs would blame misfortunes or mismanagement for the failure. Financial matters were categorized with emotions and de facto feelings related to losing own wealth and investors money. Emotions were categorized with a focus on shame, stigma, grief and status.

### *3.5.4 Constructing models*

The models were built in hierarchical order in a sense that the importance of the study was to initially establish a connection between the entrepreneurs' methods with lean start-up (hypothesis-driven approach etc.). Only after that we could justify researching the failure recovery period through the eyes of the lean start-up framework. If this connection was made, only then we could start to analyze the further concepts and beliefs around the remaining data. Lastly, for example the learning process, emotions and financial side were linked to the main hypothesis in order to map out the causalities between these concepts and the lean start-up to give suggestions interesting topics and areas for future research.



## 4 RESULTS

### *4.1. Overview of Data analysis*

This chapter presents the results of the data analysis. The chapter is divided into sections which each cover a different topic being developed in this thesis. The approach to the analysis was to test the main hypotheses – research questions - first, and then dig deeper into the themes emerging from the data. The inter-related matters such as emotional and financial aspects are also considered since the existing research takes such a strong position in arguing them as key components to failure recovery. The results will be extracted in a similar manner in order to find consistency and understanding of the potential causality between lean startup method and failure recovery.

The results section starts with connecting the lean start-up method and the entrepreneurs. Through the informants own narratives we find a linkage to establish a reliable connection with the entrepreneurs' mindset and the venture – that ultimately failed in one way or another. Furthermore, each of the informants is evaluated as either very pragmatic follower of lean or less pragmatic about it. The more carefully the entrepreneur followed lean practices, the more the connection between the ultimate failure recoveries would have with lean start-up. This was important in order to argue and justify that lean startup method might not be the only contributing factor to the recovery process – however it's existence in the recovery process could not be ignored either.

After that important link is established, we are able to investigate both the failure recovery and the learning from the failure. In order to do that, themes were emerged during the research process and these themes are used to analyze the narratives of the interviewees.

Lastly, in order to understand the complex phenomenon as versatile as possible, the analysis investigates the emotional and financial aspects of the failure within the research group. This connection is made in order to understand some underlying, concrete matters besides the mindset and methodology applied in the venture.

#### ***4.2. Lean start-up and failure recovery***

As the existing literature on failure recovery has defined, in order to be able to cope with failure, and yet further, in order to be able to capitalize it for the sake of better tomorrow, you have to be able to process through the grief, pain and sadness (Shepherd 2008). The single most important quest for the research was to find out whether there exists a connection between the lean startup method applying in a company and failure recovery. Due to this, it was essential to ensure that the principles of lean startup were present in the decision-making, and later on, in the sense making of the interviewed entrepreneur.

The research analyzed three elements related to running the company lean and recovering from failures; First the potential connection between the lean method and recovery of failure, Second, the obtained learning from the failure, And thirdly, the entrepreneur's capability on capitalizing the failure for future business and personal growth.

Altogether nine interviews were conducted, out of which one entrepreneur did not know the principles of lean well enough and did not hold experience of running a lean startup. The interview was therefore not valid for the case. In the remaining research group, all eight interviewed former or current entrepreneurs were familiar with the lean start-up. Some of them had applied it in fairly pure manner, however most were satisfied to have it as a guiding principle in order to make rational decisions with the company. They had all introduced – trough one or many means - themselves to lean start-up authors such as Blank and Ries through blogs, books and videos. Some had more book wisdom on the matters than others.

One interviewee questioned the need for lean start-up as such since he felt it was mostly common sense to run the company lean. However, the data analysis indicated that despite commenting this way the company process and the thinking process of the entrepreneur had adapted a lot from the lean start-up. Therefore the data was suitable for the research.

Entrepreneur A was familiar to lean start-up through several keynotes on the topic and also from blogs. He believed in verifying things quickly in order to find out whether it works or not. He believed it made no sense to have long R&D processes and

just wait until the end to see whether it actually works or not. He used metrics in the operations, however was not overly pragmatic about them. Lean start-up was mostly utilized as a guiding principle for the venture, however it did not dictate the whole company direction by itself – as it might do in the very pure application of lean. “We tried to verify assumptions quickly in order to learn whether the product works or not”

Entrepreneur B admitted that the venture, despite lean being familiar, was mostly ran by gut feeling and instinct. The team and the entrepreneur himself had not familiarized themselves with lean start-up books, however they had read some blogs. Furthermore, they knew on practical level what it meant. They applied lean and agile methods especially in the beginning of the venture. "In practice the quick iteration and others were adapted from lean, however we did not apply it pragmatically enough"

Entrepreneur C described that lean start-up was not followed like a bible but it was present in making rational decisions. The team was smart and interpreting the signals from the market – and lean was a fantastic tool for that. In the venture building process, they went to prototype things quickly in order to get customer feedback. From that feedback would emerge good enough MVP to sell it to a customer and start making initial revenue. “We did not rely on lean start-up like a bible and prepare our whole operational plan around it. However, it was always present in process of running the company through rational means”.

Entrepreneur D built his whole company around the lean start-up method. The hypothesis-driven approach was the in the core of the business and both R&D and business side of the business utilized it. Despite having the lean process in the core of the venture, the wisdom about it was not from books but mostly from practice and network. The company ended up in a bankruptcy after trying to find a viable business model with three large iterations. Just like Blank had described. “You should not be afraid to try new things and fail. Startups are a hit or miss business”.

Entrepreneur E was very familiar with the learn start-ups and had even read some books on it. Furthermore, he had followed several blogs and videos around the phenomenon. The adaptation of lean start-up to the company itself was more “laid back”. The method was the core process of the venture only in the programming, but

not in business. “We took small steps and were hypothesis-driven. Lean is a very rational way to build start-ups”.

Entrepreneur F described to love lean start-up, however admitted also that sometimes the principles of it were not applied enough in the start-up. He continued to say that one of the bigger reasons for the failure was to focus on the wrong things, rather than trying to find the viable business model. Yet, lean start-up thinking was strongly present in his recovery process after the failure. “Our approach was metrics-driven but not enough. Many in the team thought that money could solve the problems – which was naturally a horrendously wrong assumption”.

Entrepreneur G and his co-founders ran the company in quite “lean-like” way. Nevertheless he said a vast majority of that was internally derived and not coming from the lean start-up thinking and wave itself. He stated that they mostly ran lean because it was smart to do so, not that lean start-up itself would be anything so amazing. Yet, he admitted that they were familiar with it and read about it from blogs and other sources – however the adaptation to running the venture remained somewhat difficult to connect. He did however say that generally “lean is a modern way to develop services, including some excellent methods such as metrics and quick customer contact”.

Entrepreneur H had been altered to lean already several years ago in his previous jobs and volunteer jobs. He had seen keynotes, watched videos and read blogs on it. Nevertheless as a vast majority of the interviewed group, he neither had ever read the lean start-up books. He did not run the venture in a very lean way and named it as one of the more important reasons why the company did not work out. Yet, he said that the whole culture the lean had brought to the Nordic market and the thinking process behind it were definitely helping him in the venture running process, and later on, also on the failure recovery process. “We did not run this business with very lean means. However, lean was part of the thinking process and it shaped the way we ran it”.

The interviewees were categorized by the intensity of running a lean start-up into five distinguished categories. The categorizing was based on how the lean start-up methodology modified their thinking and start-up running. Based on the analysis, participants were listed from one to five, where five meant basically the theoretical, absolute way of lean start-up and one was only distantly close to being a lean start-up.

TABLE 4 HOW MUCH THE LEAN ALTERS THE COMPANY PROCESS

<b>Lean Start-up Intensity level</b>	<b>Characteristics</b>
Non-lean	Start-up knows the principles, however does not utilize lean start-up almost at all.
Lean when fits	Lean start-up is applied when it fits the current thinking. It is often forgotten when it interferes with management's "master plans".
Lean, practical	Entrepreneur and team utilizes aspects of lean start-up constantly, however some benefits of the framework are clearly under utilized
Lean, quite pragmatic	Lean start-up is seriously applied and entrepreneur seeks for fast customer contact, early paying customers and tries to prove hypotheses. Company utilizes metrics, however understands that lean cannot solve all problems.
Lean, pragmatic	Lean start-up is the core process of the company. It is the leading process since day one. All company development is run through the lean start-up framework and it dictates all the processes as well as the company direction.

TABLE 5 LEAN PROCESS APPLIED IN THE VENTURE

<b>Entrepreneur</b>	<b>Intensity-level</b>	<b>Example</b>
Entrepreneur A	Lean, quite pragmatic	<i>“We tried to verify assumptions quickly in order to learn whether the product works or not”</i>
Entrepreneur B	Lean when fits	<i>“In practice the quick iteration and others were adapted from lean, however we did not apply it pragmatically enough”</i>
Entrepreneur C	Lean, practical	<i>“We did not rely on lean start-up like a bible and prepare our whole operational plan around it. However, it was always present in process of running the company through rational means”.</i>
Entrepreneur D	Lean, pragmatic	<i>“The whole start-up was based on hypothesis-driven approach. The method was very lean”.</i>
Entrepreneur E	Lean, quite pragmatic	<i>“We took small steps and were hypothesis-driven. Lean is a very rational way to build start-ups”.</i>
Entrepreneur F	Lean, pragmatic	<i>“Our approach was metrics-driven but not enough. Many in the team thought that money could solve the problems – which was naturally a horrendously wrong assumption”</i>
Entrepreneur G	Lean, practical	<i>“Lean is a modern way to develop services, including some excellent methods such as metrics and quick customer contact. However for us this was coming from inside the team, internally derived”.</i>
Entrepreneur H	Lean when fits	<i>“We did not run this business with very lean means. However, lean was part of the thinking process and it shaped the way we ran it”.</i>

#### *4.2.1 The connection between lean start-up method and recovery from failures*

The data from the research is indicating strong connection between comprehensive, rapid failure recoveries when lean start-up was affecting the thinking process of the entrepreneurs (and their ventures), and even more when the companies were fully ran with lean start-up method. Altogether, the attitudes towards failures were surprisingly positive amongst the research group. All of the participants felt that failure is a natural outcome of the venture, however the recovery process and period still varied amongst them.

The research could even establish connection between moving on before the company had even ultimately failed. This was due to the fact that entrepreneurs felt their time could bring value somewhere else - and bring better return for their investment in new challenges. Hence, in some cases, a business pivot or new challenge was seen as a relief. The entrepreneurs rarely faced deep grief and if they did, it passed on quickly when they moved to new challenges or ventures. The general attitude was to encounter failure, in small quantities, as quickly as possible in order to find out whether some business could become viable. Furthermore, the whole start-up ending up in a failure was seen as a very natural outcome as well.

#### *4.2.2 Recovering from failures – the lean way*

The entrepreneur's were also extremely aware of the statistics about ventures ending up in a failure. This further proves that the expectation management and attitude towards failure was based on rational reasoning. The expectation management towards the range of the potential outcomes of the venture, and the rational attitude towards failure are essential for this thesis. This matter will be handled more thoroughly in the following sections and the author will also suggest some reasoning why lean entrepreneurs might be excelling in it.

The results from this research are drastically different from the results within the existing failure literature. The earlier literature has learned that there are several reasons why some recover from failure better than others (Blank 2013, Cope, 2011, Shepherd 2008: 2011 and Jenkins 2014 etc.) And despite failure is a complex phenomenon; it is natural to assume that within the research group, the connecting factor of the

comprehensive recovery of the research group is indeed the lean method. This immediately leads us to think that the previous research on failure recovery has had so diverse results due to the fact that lean start-up entrepreneur's recovery has rarely been in the center of the failure recovery research before. This research group might prove to be much more uniform than we would intuitively consider.

TABLE 6 RECOVERING FROM FAILURES

<b>Entrepreneur</b>	<b>Recovery process and feelings</b>	<b>Example</b>
Entrepreneur A	Optimistic, sense-making	<i>“Despite we failed to meet our goals (there), the thought that great things will come in the future helped me to recover”.</i>
Entrepreneur B	First grief, then sense-making	<i>“Despite the failure really took its toll on me, I was able to get over of it in couple of weeks. Now its past and I got new challenges”.</i>
Entrepreneur C	Rational, optimistic	<i>“We should have failed earlier. The company after (PIVOT) has been our recovery of the failure”.</i>
Entrepreneur D	Rational, optimistic	<i>“I approve this most likely fails. I know the statistics, and I knew them already before lean start-up arrived”</i>
Entrepreneur E	First uncertainty and grief, then sense-making	<i>“In the beginning it was very difficult to manage the uncertainty. Recovery took time. Partially lean start-up helped me to get over of it. However, what really helped was the culture and mindset around start-ups”</i>
Entrepreneur F	Rational, optimistic	<i>“Whenever we failed in small scale it was awesome! It meant we had learned something that the competitors might not know yet.”</i>
Entrepreneur G	Optimistic, proud	<i>“I felt no grief, shame, stigma or whatsoever. What we did was very awesome and we were the best in that small niche in the whole world. I am</i>



Entrepreneur H      Optimistic, sense-making      *proud of us”.*  
*“I should have moved on even earlier.*  
*‘Fail fast’ is being repeated all the*  
*time, everywhere, however it serves a*  
*great point”*

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*“Finally we did something correct (by failing)! The mindset about being fine with failing is extremely important. It helps you to move and not stay still and ponder ‘what is wrong with me’? – Jani Penttinen, CEO and Founder of XIHA*

#### *4.2.3 Learning from failures – the lean way*

The existing literature presumes failure can be an excellent learning experience that cannot be taught in universities, nor stimulated in any other way either. However, in order for this to happen, the circumstances need to be right (Shepherd 2003; Shepherd 2009). Also the lean start-up methodology holds a very positive reserve for the failure – and sometimes entrepreneurs are not even considered proper entrepreneurs before they have experienced a bankruptcy (Blank, 2013).

According to Shepherd (2009) in case the entrepreneur cannot cope with the feelings in a rational manner, it might be that the negative overall judgment of the situation can difficult – or even completely deny the opportunity to learn from the failure. One very important aspect for this thesis was to research the connection between the lean start-up method and the rational attitude towards failure – which would be a natural cause for also obtaining learning from the failure. According to Byrne et Shepherd (2014), the emotional states emerging during and after the failure play a key role in the sense making – the source of the component leading to either learning or not. Hence, extensive negatives feelings and grieving could prevent the learning completely (Shepherd 2008). However, also being too positive on the failure experience would deny the entrepreneur the opportunity to rationalize and learn from the failure. Instead, the best emotional range for learning from failure would be to experience first high negative feelings later on transferred as low positive feelings (Byrne & Shepherd 2014). This is interesting, because obviously nobody starts venture

thinking they would want it to fail – or if they do, then there is something very special in the circumstances.

The data analysis indicated that lean entrepreneurs are able to capitalize learning from failure comprehensively. Despite of early grieving and sometimes already grieving towards the end of the company lifespan – the recovery has been without an exception very ideal. Nobody wants to fail, however if it is to happen, clearly lean methodology fits well to the description of the emotional recovery range by Byrne & Shepherd (2014). The disappointment of failing a start-up is surely large, however since the team and the entrepreneur recognizes since day one that this might ultimately happen, it clearly enables sense making of the failure, thus leading to capitalizing the experience.

TABLE 7 OBTAINING LEARNING FROM FAILURES

<b>Entrepreneur</b>	<b>Obtaining learning from failure</b>
Entrepreneur A	<i>“Failing helps to fine-tune own intuition and self-confidence.”; Once you fail, you also learn to prioritize things”</i>
Entrepreneur B	<i>“It thought me a lot about new businesses and I feel that I will do better in the future because of what was learned (there)”</i>
Entrepreneur C	<i>“Good learning experience: after failing once, you learn to take it more relaxed. The experience, through the mental shift, enables you to think that ‘you can survive anything’ and should not stress with things you cannot immediately solve”</i>
Entrepreneur D	<i>"The learning you obtain from start-ups is probably the most important asset you can get from a start-up. Perhaps even better than money and success. This is often overlooked and undervalued"</i>
Entrepreneur E	<i>“Nothing else could have taught me what the failed venture did. It was unique learning experience, both professionally and also personally (mentally)”</i>
Entrepreneur F	<i>“Whenever we failed in small scale, it was awesome since we learned something that</i>

*competitors might have not realized yet”*

Entrepreneur G

*“Not the failure itself was so great learning experiment, but the whole ride was (and ultimately the failure was part of it)!”*

Entrepreneur H

*“I have learned from failure and the actual failing is a lot like I had understood from the literature and (from seeing previously) other start-ups”.*

#### ***4.3. Post-failure emotional aspects – focus on shame, stigma, status, loss of relationships***

Emotional aspects of the data analysis were partially reported through the sense making and learning from failures, however the matter is so important that it deserves a section where it is taken a closer look. Also, in order to derive more in-depth analysis of the reasons why lean entrepreneurs might recover more comprehensively from the failures, we need to understand the presence of certain factors – but at least equally important for the study, it is to understand the factors (emotions) that are not present. The emotional aspect is vital for the study since it is very much inter-connected to the recovery itself (Cope, 2011, Shepherd 2009)

Altogether the study demonstrated very interesting results. Despite the grieving, irritation and sometimes even pure anger were part of the recovery process early on, the lean entrepreneurs were clearly missing some of the characteristics we have learned to see through the eyes of the existing literature on failure. The following table tells this perhaps better than any wording could.

TABLE 8 SHAME, STIGMA, LOSS STATUS AND RELATIONSHIPS

	Stigma	Shame	Status (loss)	Loss of relationships
A				
B	(1)	1		(1)
C				
D	(1)	(1)		
E		1		1
F				1
G				
H			1	

The author used “1” to indicate when the respondent clearly told these feelings were present and it affected the life. “(1)” instead was used when the informant described that he initially thought there might have existed something like that, but quickly recovered past it. These results vary drastically from the current research. The existing literature has been partially devoted on figuring out these feelings around entrepreneurial failure. Yet, in this research group, they barely even exist!

Yet more interestingly, many respondents felt completely the other way around it. For example with status and loss of friendships, the whole grieving and negative emotions had turned around and the research indicated that instead of feeling sorry for these matters – the informants were instead feeling proud what the team had achieved, proud of what the venture had been and they were today continuing with the same teams (though with new ideas) to conquer the world. Instead of feeling a loss of status, they had gained “just an improved status”. This was a very interesting outcome from the research and it definitely needs further consideration. Actually this simple table could be an essential resource to realize how the lean entrepreneur has adopted the failure culture into herself, and how this culture could help a whole generation of entrepreneurs to learn to avoid the feelings that might prevent learning in moments of failure. Perhaps a start-up is indeed only an entity in seek for a viable business model (Ries 2011, Blank 2013) – and these entrepreneurs have internalized this thought deep into themselves.

#### ***4.4. Post-failure financial aspects – focus on loss of wealth, investor money***

##### ***4.4.1 Loss of personal wealth***

Within the research group, no one had personally lost significant amount of wealth. A vast majority of the businesses were funded either by angel or venture capital investors, whereas some companies were funded purely with cash flow. Out of eight respondents, only two had lost some wealth in the business failure but the sums were relatively minor in size. The clear conclusion for this is that when failing, lean entrepreneurs lose less personal wealth than other entrepreneurs. Now how is that possible?

The answer is manifold. First of all, since the people who run companies lean are mostly operating in the start-up industries, mainly on software and mobile, the ventures tie up less capital than many traditional industries. The general fixed costs are quite small and therefore, the majority of the capital is actually used on personnel costs – strictly related to the general growth of the company.

Secondly, lean start-up entrepreneurs operate mostly in industries where venture capital and other forms of risk financing seek to be. Therefore, out of eight respondents, as many as seven had venture capital and/or business angel financing to back their ventures. Due to this, the need to invest own wealth into running the venture decreased further. However, venture capital financing and angel investments are market-driven forms of financing. Since they are market-driven, they thrive to find the best possible investment return for the committed capital. So what kind of start-ups do they finance? Venture capital applies to find start-ups that have been able to validate one or many of the central business hypotheses in order to be credible in the eyes of the investor.

Now this is where it gets extremely interesting. Without a doubt it is true that lean entrepreneurs operate in industries that tend to run with less upfront investments – and surely it is true to argue that they operate in industry where there are instances to share the risk in form of investor capital. However, what is actually the cause and effect in this case? Does financing seek lean start-ups because they operate in the industry or does the industry attract investors because lean start-ups operate in it?

Since this question is very complex and partially out of the focus of the research, this thesis could not answer it directly. However, we can clearly see that running a lean-startup and losing minimal amount of wealth in the moment of failure are strongly interconnected. However, what is even more interesting – running a lean start-up, losing less wealth in the moment of failures and recovering better might be all connected to each other. Within the dataset we could see a pattern emerging here.

Since lean start-ups try to minimize the waste of time and money through hypothesis-driven approach – and ultimately are seeking to find a viable business model as quickly as possible through these tests – it could be the ultimate tool on saving the investors and owners wealth. With lean start-up you try to first find a viable business model, and start scaling it only after (Ries 2011, Blank 2013). Due to this, the

entrepreneur indeed makes a lot of mistakes, however the mistakes he commits are far cheaper in terms of money and time. Scaling the business prematurely instead leads to losing lots of wealth, since the entrepreneur realizes the venture is not going to succeed very late (Blank 2013).

In the earlier literature, failure has been often considered through the financial lenses, since it almost always includes the component of losing one's personal wealth. However, this research group differed from the past results drastically. The only potential explanation for this is that they ran the companies lean.

*“Lost some money, however lean start-up method prevented from losing greatly.”*

*“No money burned since things were financed with our own cash flow.”*

#### *4.4.2 Loss of investor money*

When the business would encounter a closure or other means of failure, it would typically lose great sums of angel and venture capital investors' money. The respondents had mixed feelings about the loss of investor money. Some felt it was a natural part of the process, whereas some felt it very heavy. The ones who felt miserable about the loss of other's money felt so mostly because they knew the investors personally – and the investors had been there to support them through difficulties.

*“I Felt bad because knew the investor personally. It is still difficult to speak about it (the failure) with him.*

*“I did not have the right mindset. I felt debt towards the investors since they had put money in it, despite they are not - in their field of business - expecting to get all investments back”*

*“Angel investors were always supporting me. Towards them, I felt bad”*

*"I wondered how could I repay them (the money). However, I still see them and we are in good connections."*

One of the ventures operated purely with generated cash flow, and the rest of the informants simply told it was not a big deal to lose investors' money since it is their business to share the risks. To conclude, the loss of investor money in the research group did not offer any new great insights. The results were very scattered and non-consistent. There was no sight of strong correlation to one way or another with lean start-up and losing investor money – neither that this would have been a cause or causality in the recovery process.

## 5 Discussion and Conclusions

### **5.1. Discussion**

This thesis gave an answer to the main research question “How lean start-up entrepreneurs recover from business failure – and what factors contribute to that?” as well as many supporting questions within the main research gap. The thesis explored the recovery process from a new standpoint, where the recovery and learning was researched through the entrepreneurs’ lean mindset and mentality – unlike any research before. Through the data, the answer to the research question was clear: exceptionally well. Lean start-up entrepreneurs were likely to start a subsequent venture, or continue on entrepreneurial ventures in other roles. They were not struck down by the experience.

However, it was only the part of the contributing factors that made it complex to characterize: the reasons vary and are versatile. Yet, a connection with losing less personal wealth, feeling barely no shame, stigma or loss of status, moving on faster with life and continuing to keep entrepreneurship as a viable career choice remained. Hence, the propositions on rationales contributing to the good failure recovery experience were.

Lean start-up method (and entrepreneur) holds positive reservation for failure

Lean start-up is rational: it prevents blaming misfortunes and external factors for failures – leading to recovery process and learning

Lean start-up helps save time and wealth – makes failing cheaper, recovery easier

### **5.2. Contributions to existing literature: Recovering and obtaining learning from failures**

This thesis wanted to add to our understanding “How lean start-up entrepreneurs recover from business failure – and what factors contribute to that?”



Therefore also the contributions of this research are focused around the main research question, yet looking from a more concrete perspective.

The emotional aspects and cognitive learning from failures go hand-in-hand. Without being able to first cope with the feelings and then manage and direct the feelings to positive and rational thinking, the entrepreneur is unable to generate learning from failures (Shepherd 2003, Shepherd et al 2009, Cope 2004).

The research group consisted of eight entrepreneurs who had recovered from one or many business failures in near or more distant past. However, they had all continued to strive for entrepreneurial career either as entrepreneurs, or in roles where they acted in start-ups and were stock incentivized. The failure had been a burden sometimes, however none of them was struck down by it. Quite the contrary most had seen the failure as a lucky event in life which had opened up new possibilities and taken them to where they are now. Some of the existing failure literature has also considered this, however from a slightly different angle. Yamakawa et al (2013) learned that it's actually better to fail once since this will increase the likeliness to succeed in the future. Ucbasaran et al (2012) instead noted that failing might help to avoid over-optimism bias when starting up again.

Furthermore, they all felt they had obtained important learning from the venturing – but also from the ultimate failure. The connection with learning from failure within the informants was strong and consistent. This was indeed a very curious factor as academics are still arguing whether failure can be a learning experience or not (Blank 2013, Cope 2004), and moreover, when and why failure is a learning experience for those that it is one (Shepherd 2003, Shepherd et al 2009, Cardon and McGrath 2003, Cardon 2011, Cantner et al 2011). I will suggest three themes rising from the data why this is possible in my opinion.

### *5.2.1 Lean start-ups reservation for failure*

First, lean entrepreneurship holds a positive reservation for failure. This is because the whole method is based on the idea that the start-up is not a business until it finds a viable business model (Ries 2011, Blank 2013). Hence, the entrepreneur and the whole team with him are painfully aware that the start-up might never find a working

business model. Whole start-up is a unit who operates a risky endeavor where the universal range of outcomes is very wide – however the most likely scenario is bankruptcy. That sets a certain standard of expectations – and therefore handles the expectation management side that might cause to overestimate the odds. This in turn enables the team to have a risk-friendlier mindset that ultimately also helps them to cognitive recovery on the moment of failure.

According to Cope (2004), failed entrepreneurs are identified of suffering of the ‘stigma of failure’ which has even lead to feelings of humiliation or remorse. However, the amount of stigma the entrepreneur experiences, varies according to geographic location (Yamakawa, 2013; (Cardon et al, 2011). In this research group, the entrepreneurs rarely felt stigma, shame, loss of friendships and other negative feelings – or even physical conditions (Singh et al, 2007) that would prevent recovery and learning (Cope, 2004). This, I assume, is because of the whole start-up community itself. The community had adopted the positive vibe to entrepreneurship, and that nurtured right, has lead the entrepreneurs to be more realistic towards both the opportunities as well as the downside (failures) (Gabrielsson and Politis, 2009).

According to McGrath (1999) Organizations differ drastically in their perception on failure. They either embrace or punish on failures. Hence, the organization (venture) members are likely to be affected by the organization culture on approaching failure, and also be influenced by it in moments of trying to learn from failures. The lean start-up method is not only a movement and a method. But it’s a culture inside the company (process, mindset, operations) and outside the company (entrepreneurship environment, networks, economy), which embraces failure.

### *5.2.2 Lean start-ups rational approach*

Whilst doing the interviews and later on in the analysis phase it was evident that lean entrepreneurs take responsibility over the failures. Seven out of eight respondents felt that their own – and their teams’ – actions were the primary cause to the failure. Few claimed also that also luck and market timing are attributes that affect and were strongly interdependent to the reasons why the venture ultimately failed. Only in one interview the entrepreneur clearly felt that the rationale behind the failure was

misfortunes as they had failed to grasp a financing round in a critical moment, which then lead the company to a bankruptcy.

Once again, this is very contrary to the current beliefs deriving from the existing literature. Mantere et al (2013, and Cardon et al (2011) had in their studies researched the matter extensively. Entrepreneurs blamed misfortunes as key reason for failure in 47% of the cases in a study done based on 389 failed entrepreneurs in USA (Cardon et al, 2011). What even more interesting, out of those as many as 45% named the key reason to be a bad business plan. The same happened in Mantere et al (2013) study where the results indicated that the informants – depending also on the role they had been in the venture – where far more likely to blame misfortunes than mismanagement as the reason for failure. This thesis of lean entrepreneurs found no one to consider the business plan would be primary, or even a secondary reason for the failure. That is a very interesting finding.

Therefore, this thesis has increased our understanding on the importance of the applied methodology and mindset in the venture as a driver for sensemaking. Sensemaking instead will ultimately lead to recovery and learning (Shepherd 2003, Shepherd et al, 2009). Unlike Cantner et al, 2011) who studied the matter through personality characters as the driver for failure and the recovery from it, we were able to find a pattern of applying lean start-up and recovering the failure better. Not only because of personal characteristics, but because of the applied venture methodology itself.

### *5.2.3 Lean start-up and loss of wealth*

Current research on entrepreneurial failure reckons that business failures mean almost always a loss of wealth (Shepherd 2008). However, Shepherd (2011) studied the matter further and discovered that feeling less emotionally attached, losing less money, and taking a rational approach towards the venture could lead to understanding that failure is not ultimate, and therefore the financial-emotional balancing of failure would occur already during the running of the venture (Shepherd, 2011).

Now this connects with lean start-up in a very fluent way. since the method thrives to build minimum viable products and tests to experiment whether the

hypothesis is correct or not (Blank, 2013). Eventually, this means committing less capital to the development in every development step of the venture – and ultimately it also saves drastic amount of money when things turn out to be wrong.

Out of eight respondents, only two had invested fairly large amounts of own wealth to the ventures. Neither of them however felt the money losses were devastating – once again very contrary to the current beliefs. The rest of the money was either cash flow or investor money. Hence, the thesis discovered an interesting loop between investing own money and wealth into the business – to the applied process – to the recovery process.

We cannot deny the connection with investors operating mostly on the areas of rapid growth and disruptive ideas (start-ups), and the fact that you need invest less your own money into the business. Start-ups are the perfect target for portfolio investing. Are investors in that space for the returns? Surely. However, are returns there because of the experimentation-driven approach? Maybe. And do invest share risks because the owners don't invest so much their own money to the business or because they have discovered some of their initial hypotheses to be correct? We don't know that.

With complex phenomenon like this the matters are always interdependent. However, there is no doubt that saving wealth in the failure has also positive impulse on the entrepreneur's recovery process. Simultaneously, there is no doubt that lean start-up helps the entrepreneur to discover the viability of the idea with less cash than traditional venture development. Hence, whatever is the initial cause and what the causality – lean start-ups fail cheap.

### ***5.3. Implications for further research***

For further research, the author would suggest continuing to study on the emerging concept of the lean entrepreneur in relation to the more comprehensive failure recovery. Both qualitative and quantitative studies would be needed to establish a more reliable connection between the causalities of the interdependent matters.

This thesis investigated how the lean entrepreneurs recover from failures, and due to that, found compelling evidence on factors contributing to that recovery. The results give strong indication that lean entrepreneurs' hold a rational, more positive

reservation for the failure and that lean start-up prevents entrepreneurs to lose significant amounts of wealth. Each of these findings is fairly novel, important and should be studied more comprehensively in the future research.

There is absolutely no doubt that lean start-up method reserves a positive reservation for failure. We simply don't just know what factors outside the study area – the lean startup method - contributed to the research group's positive reservation as well. Therefore, it would be suitable to research at least these propositions in order to understand what parts on the positive recovery are related to the experimentation approach itself, and what might be the weight of other factors related to it.

Proposition 1: How do lean entrepreneurs outside hi-tech industry recover from failures?

Proposition 2: Do lean entrepreneurs contribute less capital to their businesses than entrepreneurs who don't follow lean start-up method, and have extensive grieving periods after failure?

Proposition 3: How do the entrepreneurs, who don't follow lean start-up among the same Finnish hi-tech group, recover from failures?

These three studies would help us to separate the results of this research from other contributing factors into a more clarified answer on what distinguished part of the good failure recovery is caused by the lean start-up method itself – and which factors could enable the entrepreneur to recover well from failure despite not utilizing experimentation approach.

#### ***5.4. Implications for practice***

We have discovered that lean entrepreneurs recover from failures comprehensively, and are likely to make sense of the failure, learn from it, and even establish another venture in the future. Hence, having the also the knowledge that failure-enabling culture can indeed lead to economic growth (Olaison et Sorensen, 2014), the policy-makers should – and I believe they already have – started to encourage people to run their visions ambitiously, trying to solve big problems without

failures. Lean start-up could be a core component for this wave and could assist Finland in getting back to its feet after the difficult economic years.

For example Gabrielsson and Politis (2009) have discovered the same connection with recovery and positive starting attitude, and previous experience with entrepreneurship. Also, Ucbasaran (2010) found a connection with sequential entrepreneurship and learning from failures. Since learn start-up embraces failures, we should focus to enable more lean start-ups getting born through improved university education on entrepreneurship. This instead would lead us to yet more positive circle of environment where failures are also celebrated, which would give the entrepreneur support and resources to recover from failures better and faster (Olaison et Sorensen, 2014). The goal should be an entrepreneurial ecosystem where veteran entrepreneurs, failed or not, are considered as knowledgeable agents who can utilize the unique learning experience to build something magnificent.

### ***5.5. Research limitations***

The limitations of the study were known beforehand already. Nevertheless, during the research, it became even more concrete how difficult it would be to incorporate so vague and complex phenomenon such as ‘failure recovery’ or ‘learning from failure’ in a simplistic way. The reasons why some entrepreneurs recover better from failures than others are so versatile that they cannot be easily put down to narratives – and even less transformed into credible, justified data.

Therefore, the limitations are somewhat similar to the existing failure literature limitations; we can only credibly observe the recovery of the entrepreneur from one standpoint at a time – or at least it would be very complex to look at all the inter-related matters simultaneously. Due to that, quantitative study was not even possible and the study type needed to be qualitative.

Hence, this thesis answered only to the question on “How lean start-up entrepreneurs recover from business failure – and what factors contribute to that?” since it would be impossible to research the whole universe of matters behind the failure recovery at once. The existing literature has already taken many positions related to the study area, and this research contributed to that as one novel part. However, it would be

completely naïve to claim that these entrepreneurs recovered this way only because they had a lean mindset and applied lean start-up in running the company. No, that is not true. However, the results also tell us that lean start-up methods contribution to the recovery cannot be denied either. Quite the contrary, there exists a clear linkage between the method and the comprehensive recovery. That is a key finding this thesis contributes.

Since the clear correlation between lean start-up and failure recovery exists within the research group we could rush to say that it is the sole contributor to it. However correlation does not always mean causality and we need to be careful in declaring the connection without further evidence. Hence, the limitations of the study remain similar to the previous literature. Failure, and failure recovery is just simply too complex phenomenon to be studied extensively and need to be discovered piece by piece, yet every entrepreneurial story is different.

Lastly, since the research group was from Finland and consisted only of start-up entrepreneurs it cannot be guaranteed that the results can be replicated in another study a) with entrepreneurs from other regions, b) with entrepreneurs from different industries.

## **5.6. Conclusion**

This thesis contributed to the knowledge on the lean entrepreneurs recovery process from business failure. The data spoke in a very clear way how lean entrepreneurs coped well with failing, took responsibility over the failures, did not blame misfortunes over their failures, learned from the committed mistakes, and recovered to establish new ventures.

The data established connection on why the failure recovery occurred: first, lean start-up entrepreneurs are rational in their expectation management of the potential universe of outcomes for the venture. This made failure a realistic end-result of the venture, and therefore they are able to capitalize the learning from the experience. That rational approach contributes to our knowledge on how sense making starts from taking responsibility over the events rather than blaming misfortunes about it. Moreover, lean entrepreneurs committed less of their own capital to the ventures and were therefore

able to withstand the financial losses better. Partially this is due to the industries they operate – partially because of the lean start-up method itself. Furthermore, lean entrepreneurs do not get stigmatized over their failures, which prevents feelings of shame, loss of relationships and other negative aspects on failure. Lastly, but equally importantly, lean entrepreneurs operate in a more positive-colored failure environment (hi-tech) that helps them to recover and start a subsequent venture or continue in other entrepreneurial functions.



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